European Commission

# Improving access to and reuse of research results, publications and data for scientific purposes

Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations

Research and Innovation

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# Improving access to and reuse of research results, publications and data for scientific purposes

## *Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations*


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## ABSTRACT

This comprehensive report supports the Action 2 objectives of the European Research Area (ERA) Policy Agenda 2022-2024, which aims at proposing an EU legislative and regulatory framework for copyright and data that is fit for research. The report provides a comprehensive analysis of barriers to the access and reuse of publicly funded research, including scientific publications and data. It assesses existing EU copyright legislation and EU data and digital legislation. It also assesses regulatory frameworks and national initiatives, and identifies potential areas for improvement.

Using a methodological, evidence-based approach, the study includes literature reviews, surveys and interviews with legal experts and stakeholders. The study proposes legislative and non-legislative measures to improve the current EU copyright and data framework and align it with the needs of scientific research and open research data principles.

The report provides a comprehensive overview of the legal environment for research and innovation in the EU and offers valuable insights for policymakers, researchers and organisations involved in the European research landscape.

## EXECUTIVE SUMMARY

This report contributes to the realisation of the objectives as described under **Action 2 of the European Research Area (ERA) Policy Agenda 2022-2024**[1], which aims to *"Propose an EU copyright and data legislative and regulatory framework fit for research".* In this context, the report undertakes a comprehensive **analysis to identify impediments and challenges to the access and reusability of publicly funded research and innovation outcomes, inclusive of scientific publications and data**. This is facilitated through a detailed examination of pertinent stipulations under the existing EU copyright *acquis* as well as the EU data and digital legislation, along with corresponding regulatory frameworks and national initiatives.

Furthermore, the report **proposes a set of both legislative and non-legislative interventions aimed at refining the existing EU copyright and data legislative frameworks**. This is directed towards facilitating their adaptation to better serve the necessities of scientific research and the ethos of open research data within the ERA. The scope of this report is divided into **two main strands: firstly, the EU copyright legislation**, with a specific focus on pivotal directives such as the Information Society Directive, the Copyright in the Digital Single Market Directive, the Software Directive and the Database Directive, in conjunction with the research-related provisions of the Data Act Proposal. **Secondly,** we look at **the EU data and digital legislation** strand, where the report examines key legislative acts including the Open Data Directive, Data Governance Act, Data Act, Digital Services Act, Digital Markets Act, and Artificial Intelligence Act. This analysis is complemented by an exploration of the relevant stipulations for the European Open Science Cloud (EOSC), thereby ensuring a comprehensive assessment of the legislative environment influencing research and innovation within the European Union (EU).

1 https://commission.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf

## Framework for the study

The methodology adheres to a structured, evidence-based design, employing a data triangulation logic to ensure consistent and robust findings. It involves: 1) Evaluating the concrete effects of the EU copyright framework on research through desk research, literature reviews, three surveys, and an extensive interview programme with legal experts and key stakeholders (Task 1). This task lays the groundwork for subsequent tasks and supports the assessment of the estimated advantages and/or benefits. 2) Elaborating on areas that need improvement and potential interventions based on Task 1 outcomes. This includes cross-national legal analyses concerning the Secondary Publication Right (Task 2). 3) Estimating the effects of the proposed potential interventions by assessing the estimated advantages and/or benefits, using data from Tasks 1 and 2 (Task 3). 4) Identifying relevant provisions for researchers, organisations, and infrastructures under EU data and digital legislation (Task 4). 5) Assessing compliance and benefits from EU data and digital legislation for research entities, synthesising findings from Task 4 (Task 5).

## Specific methodological approach to the study

**Literature review:** The literature review carried out under this study was **crucial to understanding the landscape and identifying areas for progress in copyright and EU data and digital legislation**. The literature review on copyright explored the complex interplay between EU copyright, data frameworks and Open Science (OS) policies. It included an analysis of academic evidence on the impact of the EU copyright framework on OS. It also reviewed OS policies within the EU and selected Member States (i.e. Austria, Belgium, France, Germany, Hungary, Ireland, Italy, Lithuania, Malta, The Netherlands, Portugal, Romania and Spain). Additionally, the report conducted a comparative legal study of the EU and national copyright laws of all 27 EU Member States. This comprehensive review underlined the need for EU legislative action to facilitate OS and highlighted differences in national laws that affect EU-wide OS objectives. The literature review on EU data and digital legislation relied primarily on legal databases and authoritative sources to outline the legal landscape and its stages of development, highlighting legal gaps affecting researchers and research organisations and leading to further interviews for in-depth understanding. This review was instrumental in identifying specific areas requiring attention in the evolving context of digital and data legislation.

**Survey Programme:** The survey programme for this study, **targeting researchers, research performing organisations (RPOs) and publishers**, was methodically implemented with tailored strategies for each group to optimise participation and data collection. Researchers were surveyed from 6 October to 6 November 2023, involving 10 000 individuals from Horizon 2020 and Horizon Europe projects, using a balanced stratified sampling method and a pilot survey to ensure equitable representation. Later, the selection was boosted by 4 000 individuals to increase the number of responses. RPOs, which had received funds or indicated an interest in applying for funds from Horizon 2020 and/or Horizon Europe research proposals and/or projects, were approached during the same period through their Legal Entity Appointed Representatives, reaching 4 915 organisations, supported by outreach from groups such as LIBER Europe and Knowledge Rights 21 with a structured schedule to ensure robust participation. Publishers were surveyed from 3 to 30 November 2023, targeting 615 publishers identified through OpenAlex and Apollo.io, focusing on high-level contacts and using tools such as LinkedIn Sales Navigator and additionally disseminated through associations such as the STM Association, the French Publishers Associations and the French Publishers Journal Association (FNPS) to ensure a high response rate.

**Interview programme:** The interview programme for the study was **carefully designed to gather in-depth insights from legal experts on copyright, data and digital legislation**. Aimed at a diverse group of specialists from academia, research organisations, umbrella organisations associated with universities and publishers, as well as policy-related groups, the programme was tailored to each interviewee. This ensured that the discussions were as informative and relevant as possible. For data and digital legislation, the focus was on exploring different legislative frameworks, such as the Data Act and the Digital Services Act, to complement the findings from our literature review.

**Multi-criteria analysis:** The approach to multi-criteria analysis involved a comprehensive assessment across four policy areas, each of which was assessed separately. This technique integrated both positive and negative impacts into a single framework and facilitated the comparison of different options through a combination of qualitative and quantitative data. This approach enhanced transparency in the presentation of key issues and clearly identified potential trade-offs. The criteria included social impacts on science, such as the impact on intellectual property rights (IPR), quality control of research, availability of scientific literature, diversity of research outputs and opportunities for collaboration. Economic impacts were also taken into account, by looking at the impact on sectoral competitiveness and the conduct of business for stakeholders. This structured analysis provided a nuanced understanding of how different policy options might affect different aspects of the scientific and economic landscape.

**Comparative analysis of Green open access publications since 2011:** This methodology was aimed at comparing different sources of information on Green open access in the EU-27 countries from 2011 to 2022. The study team reviewed data from OpenAlex and OpenAIRE Graph and compared it with trends in Open Access to publications outlined in the report "Study on Open Science: Monitoring trends and drivers"[2].

### Analysis of results

**Cross-analysis of the consultation activity results:** Survey responses were segmented to reflect the distinct contexts of researchers in nations with or without Secondary Publication Rights (SPR) regimes. Publishers were categorised by their institutional types and level of revenue. Survey results were complemented with insights from the in-depth interviews.

### Conclusions and recommendations concerning copyright (Chapter 1)

The study proposes a combination of legislative and non-legislative measures to enhance the accessibility and reusability of research outputs. These recommendations aim to reconcile the protection of copyright and related rights with the goals of the ERA, to promote a single, borderless market for research, innovation, and technology across the EU.

#### Policy Options on Secondary Publication Right

The study explored the option of introducing an EU-wide Secondary Publication Right (SPR). The analysis identified several policy choices that would have to be considered when exploring avenues for the introduction of an EU-wide SPR regime:

2 https://research-and-innovation.ec.europa.eu/document/download/a5bd70c0-5cc8-45b0-b3f4-0fa35946b768_en?filename=ec_rtd_open_science_monitor_final-report.pdf

**Policy Option SPR-01** proposes a comprehensive approach to scientific output within the framework of SPRs. This policy option emphasises the desirability of including a broad range of scientific output, including not only articles but also writings and other copyright-protected research results more generally, regardless of the publication outlet. It addresses the limitations of existing SPR regimes in the EU, which predominantly focus on journal articles, with divergent definitions of what constitutes an "article" and a "journal". This **variation among Member States poses challenges to the invocation of SPRs for Open accessibility of scientific output across borders**.

**Policy Option SPR-02** recommends relaxing the public funding requirement for SPRs to a threshold of 50% or less. All existing SPR regimes in the Member States, except the more elastic approach taken in the Netherlands, require at least 50% public funding. In the case of further harmonisation of the SPR, it is important to note that the public funding requirement can substantially limit the effectiveness of the SPR regime. A **restrictive approach may cause problems and imbalances** in the light of current funding arrangements that often involve public-private partnerships. Encouraged by funding schemes that even require substantive contributions of non-academic research partners, research is increasingly conducted in collaboration with the private sector.

**Policy Option SPR-03** suggests expanding the scope of SPR regimes to cover the version of record (VoR) of research outputs rather than limiting it to the author accepted manuscript (AAM) or earlier versions. Member States have adopted varying approaches, with Austria, Belgium, France and Germany primarily focusing on the AAM and the Netherlands being less specific. **The VoR is essential for citation purposes and accurate references to research results in the academic discourse**. Against this background, the research community sees a need to extend SPRs to the VoR. However, it is important to also consider a publisher's commercial interest in controlling access to the final published version. **Publishers indicated that the impact on their business model would be substantial** and made clear statements against the extension of SPR regimes to the VoR.

**Policy Option SPR-04** proposes minimising embargo periods, in the sense of requiring no embargo or only a short period, such as 6 months. From the perspective of the research community, the reduction of embargo periods is an **important policy tool seeking to align SPR regimes more closely with open access goals, reflecting widespread support within the research community for greater and more immediate access to scientific findings**. From the perspective of publishers, however, embargo periods are of particular importance. They limit the **impact of SPR regimes on existing business models and the primary exploitation of research output**.

**Policy Option SPR-05** advocates a broader application of SPRs to allow open access publication covering all types of uses, with no confinement to specific forms of use, such as use for non-commercial purposes. This change addresses the inconsistency across national SPR systems, where countries like Germany, Austria, and France restrict the SPR to non-commercial uses, while others like Belgium and the Netherlands do not specify use purposes. In the evolving landscape of academic publishing and research practices, **collaborations with private partners are increasingly common, making the non-commercial use requirement seem outdated and overly restrictive.**

**Policy Option SPR-06** considers developing umbrella licensing and remuneration schemes as an alternative to SPRs for ensuring long-term open access to research outputs. With regard to this policy option, it is important to note that the survey design did not leave room for specifying individual types of licensing or remuneration regimes. Instead, the survey questions concerning this policy avenue referred generally to "umbrella licensing solutions to make research use possible, such as extended collective licensing or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use)." At this aggregated level, **the survey results only provide general indications and do not allow a more concrete identification of licensing or remuneration regimes that could find support**. Further research seems necessary to obtain more detailed information.

### Policy Options on Copyright and Related Rights (CRR)

**Policy Option CRR-01,** focusing on strengthening open-ended and flexible research exceptions, seeks to enhance the legal framework of EU copyright law in support of scientific research and includes three distinct but related sub-policy options.

- **Policy Option CRR-01.1** concerns the introduction of a fully harmonised, mandatory, and general exemption of scientific research (not confined to specific forms of, or tools for, conducting research) applicable across the Information Society Directive (ISD), Rental and Lending Directive (RLD), Database Directive (DBD), and the Software Directive. This is grounded in the **strong preference demonstrated in the RPO survey, where a significant majority of respondents favoured an open-ended umbrella clause for research use** of copyrighted knowledge resources. On the other hand, results from the publishers' survey present a more divided perspective on Policy Option CRR-01.1, with **a notable portion of (commercial) publishers expressing strong opposition to open-ended research exceptions.** Further research is necessary to understand the view of, and impact on, other rightsholders not covered by the present study.

- **Policy Option CRR-01.2** addresses the challenge of lawful access in scientific research, a critical issue highlighted by the responses to the researchers' survey. The survey revealed that **80% of researchers face significant barriers due to a lack of subscriptions to access copyrighted knowledge resources.** These concerns in the research community, first, **reinforce the importance of considering the introduction of an EU-wide, harmonised SPR regime** that could substantially enhance open access to research output. Second, it would be consistent with legislative developments in the area of EU digital and data legislation to explore whether EU copyright law offers **possibilities for adopting specific access rules when an overwhelming public interest justifies the creation of an additional access avenue** that complements the standard model of subscription-based access. Third, potential problems arising from the requirement of subscription-based access in copyright law could be reduced by **enlarging the territorial scope and circle of beneficiaries of existing subscriptions**. In the case of transnational research consortia, this could mean that a subscription taken by one research partner is regarded as a lawful basis for all consortium partners to obtain access. However, a cautious approach is necessary with regard to all three approaches. The research community may be strongly in favour of these measures. By contrast, publishers, and in particular commercial publishers, have expressed deep concerns.

- **Policy Option CRR-01.3** focused on removing barriers posed by technological protection measures (TPMs) emerging from significant concerns highlighted in both researcher and RPO surveys. The researchers' survey indicates that 59.6% of participants find paywalls and electronic fences a major obstacle in accessing copyrighted online resources, a sentiment echoed by RPOs, with 39.6% reporting frequent access issues due to paywalls. This widespread challenge underscores the **need for effective measures against excessive use of TPMs that impede research.** Article 6(4) of the Information Society Directive (ISD) mandates Member States to ensure that beneficiaries of copyright exceptions, including researchers, can utilise these exceptions even when TPMs are in place. However, this obligation is conditional upon researchers having legal access to the work and is not applicable when resources are available online under contractual agreements. Thus, **TPMs, in conjunction with online contracts, currently have substantial legal backing, often prevailing over research freedom.**

**Policy Option CRR-02** addresses the requirement of use for a "non-commercial purpose" in Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD. This requirement has become a **source of legal uncertainty and appears outdated, especially in light of research practices that increasingly involve collaborations with private partners, often encouraged and even required by European and national research funding schemes.** More concretely, the non-commercial use requirement raises doubts about the applicability of copyright exceptions when a research project includes industry funding or public-private partnerships. Furthermore, the potential commercialisation of research conducted within publicly funded institutions through technology offices and commercialisation divisions poses a risk of legal complications for researchers who initially relied on these exceptions under the assumption of non-commercial use.

**Policy Option CRR-03** focuses on guidance relating to the TDM provisions in Articles 3 and 4 CDSMD to **enhance awareness among the research community and establish a more uniform approach across Member States.** Survey results highlight the beneficial effects of clarifications. The researchers' survey shows that researchers have not yet explored the full potential of the new TDM provisions. Responses indicate that researchers may refrain from using research tools that make it possible to mine texts, images, films and music because they are afraid of copyright infringement.

**Policy Option CRR-04** explores the potential of umbrella licensing solutions and remuneration regimes to enhance access to knowledge resources for research purposes. As also pointed out in the SPR context, the questionnaire design – covering various research-related issues – did not allow for a fine-grained analysis of different licensing or remuneration approaches. Therefore, **the results only reflect general trends and do not allow the identification of specific implementation models**. It is advisable to conduct further research, for instance, in the area of extended collective licensing, to obtain further insights into concrete policy avenues.

The findings of this study should be complemented with further analyses to support future potential policy initiatives. Further research is necessary to assess the impact of the policy options presented in this study, where relevant, on rightsholder groups other than scientific publishers which were not covered in this study. Further analysis is also needed with regard to the economic and social impact of the policy options discussed in this study, including the impact on the role of scientific publishers in the research ecosystem.

## Conclusions and recommendations concerning the Data and Digital Legislation and the European Open Science Cloud (Chapter 2)

Chapter 2 analyses how the research ecosystem, particularly researchers and research organisations, is impacted by the recent adoption of EU data and digital legislation. EU DDL is an emerging field of law underpinned by policy priorities that vary in the regulation of online platforms, access to IoT data, reuse of public sector information, and the regulation of artificial intelligence systems. As such, scientific research is not a focal point in the surveyed legislation.

This growing body of law does, however, impact research. Following the study's instructions, the analysis focuses on the following instruments: the Open Data Directive (ODD), the Data Governance Act (DGA), the Digital Services Act (DSA), the Digital Markets Act (DMA), the Data Act (DA), the Artificial Intelligence Act (AIA), and the European Open Science Cloud (EOSC). The objectives, domains and approaches of these instruments are diverse, sometimes significantly. They introduce new forms of regulatory intervention for a wide variety of digital infrastructures and data transactions. Importantly, the research for this study was conducted when most of these instruments were recently adopted or, in some cases, still pending. Therefore, the practical effects of EU DDL are often difficult to assess, and most of the sources are of a statutory, policy or doctrinal nature. Case law is scarce. EOSC deserves a dedicated approach because it is not a legislative instrument but consists of multiple actions.

Despite these limitations, it was clear that EU DDL has the potential to impact research, research organisations and affiliated researchers in various ways. This impact may be beneficial, as the EU DDL may provide several opportunities for conducting research, but it may also pose challenges to the field of research. In the context of this regulatory environment, the study analyses which legal provisions in EU DDL are relevant to researchers and research organisations and which rights and obligations flow from EU DDL.

Chapter 2 has two interconnected specific objectives: to identify the relevant provisions for researchers and research organisations in the covered legislative instruments and to analyse what opportunities or challenges the instruments bring from a perspective of compliance. Special attention was given to the interplay between instruments and how they may interact or overlap. Chapter 2 concludes with key findings and a set of recommendations.

### Interplay between EU DDL and research

The regulation of research is not the declared objective of the surveyed frameworks. Nevertheless, a noticeable impact on research has emerged in the study. What could be termed a fragmented regulatory approach to research in the DDL shows certain common characteristics, including the use of a similar yet not identical taxonomy, a substantive and functional partial overlap across different regulatory interventions, and the occasional use of identical terms whose meaning plausibly varies across specific instruments depending on their scope.

Accordingly, the study reveals a network of provisions often regulating tangent or even overlapping areas that research organisations operating within the field of EU data and digital legislation must comply with. The common denominator, especially from the point of view of research and research organisations, seems to be that of *regulatory complexity.* This complexity is not a negative element in itself, and it is often justified by the complexity that characterises the underlying economic, technological and social dynamics object of regulation.

However, a complex regulatory environment has higher compliance costs, and these costs tend to disproportionately affect parties with less availability of financial resources, such as researchers and research organisations. From this point of view, it is particularly important to unpack the reported regulatory complexity. As argued, this can be done on various levels and in various moments of the law-making process. The study, in Section 2.9 of Chapter 2, attempts to offer a holistic view of this complexity and, for the identified interplays, proposes either solutions on the conceptual and/or normative level, when possible or alternatively, denounce possible incompatibilities across the surveyed instruments.

### Main opportunities and challenges

Section 2.10 of Chapter 2 is structured according to the two different perspectives that researchers and research organisations commonly occupy vis-à-vis EU data and digital legislation[3]. From the first perspective, researchers and research organisations are considered to be *users* of data and digital technologies, with these assets becoming the input for research activities. An example of this perspective is researchers accessing public sector bodies' documents pursuant to the ODD. Under the second perspective, they are *providers* of (research) data and digital technologies, with these assets becoming the output of the research activities. A fitting example can be found in the potential qualification of digital research repositories as a hosting service under DSA, which triggers certain legal obligations.

The findings on the opportunities and challenges posed by EU data and digital legislation are presented for each of the two perspectives relevant to research activities. While some provisions in the legislation may be useful from the perspective of researchers and research organisations as 'users', they may simultaneously raise challenges when they qualify as 'provider' of (research) data and digital technologies. Below, we offer some examples of the findings of the full study.

**Examples of the findings of the full study**

| **Research Organisations and Researchers as *users* of data and digital technologies** | | **Research Organisations and Researchers as *providers* of data and digital technologies** | |
|---|---|---|---|
| **Opportunities** | **Challenges** | **Opportunities** | **Challenges** |
| Wider availability and reusability of public sector data | Complexity and legal uncertainty in data access and reuse for research purposes | Wider availability of legal and technical resources to enable and foster access, (re)use and sharing of data | Legal uncertainties |
| Wider opportunity to reuse research data (including through infrastructures) | The need to address the interplay of legal frameworks regulating access and reuse of data for different purposes | Recouping costs for provision of data/information | Resources needed for compliance when sharing (research) data |
| More clarity on compensation of costs for data access or sharing obligations | Pressure on academic freedom, increased influence of third parties on research | - | Lack of incentives to register as data altruism organisation |
| Researchers' access to private sector data | - | - | Possible conflicts with academic freedom |

*Source: Compiled by the study team.*

3 See: Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 49.

## Key findings and recommendations

In the final Section of the Study, we identify key findings and ensuing recommendations. We first present a set of instrument-specific findings and recommendations, followed by some overarching ones. Recommendations are addressed to researchers and research organisations, policy- and lawmakers, interpreters and enforcers and the private sector.

## Key findings and recommendations: Instrument-specific

### Open Data Directive

*Recommendations to researchers and research organisations*

**A) Key finding:** Article 10 ODD will have a major impact on RPOs, in particular, the requirement to make publicly funded and publicly available research data reusable. This requirement can generate administrative, financial and compliance costs. It requires adequate capacity and knowledge in RPOs and researchers to manage data in a complex legal environment.

**A1) Recommendation:** Adequate resources must become available to open up research data for reuse. Member States are encouraged to ensure RPOs can invest in legal and technical expertise and resources in order to achieve compliance with the requirements set out in the ODD when making research data reusable.

Recommendations to law- and policymakers

**A) Key finding:** As regards the ODD, it has been set out in this study that several uncertainties revolve around Article 10 ODD, and the (required) reusability of research data remains. Those uncertainties can have serious impacts on RPOs and researchers.

**A1) Recommendation:** Pursuant to Article 18(1) ODD, the Commission will evaluate the ODD next year at the earliest. Paragraph 2 of that provision sums up what factors should be particularly considered in the evaluation. It does not mention the impact of the ODD's new rules on research data. It is advisable that the impact of the research data reuse provisions is taken on board explicitly in the evaluation and that the interplay with other instruments is also considered. This should allow for the design of targeted policies and interventions where necessary to ensure the regulatory framework for research data safeguards the interests of RPOs, researchers and the wider public interest in research.

Member States shall also provide the Commission with information to prepare the evaluation report to be written up by the Commission[4]. It is encouraged that input from various stakeholders, including those active (in public research), be included in this information and subsequently thoroughly considered.

### Data Governance Act

*Recommendations to researchers and research organisations*

**a) Key finding**:
The DGA regulates the reuse of certain categories of protected data (Chapter II), codifies commercial data intermediation services (Chapter III) and provides for registered data altruism organisations (Chapter IV).

4 Article 18(1) ODD.

**a1) Recommendation**:
Ensure there are adequate resources, (legal) expertise and processes in place to ensure that before releasing protected data as open research data (under Article 3 DGA), the protected nature of data is safeguarded.

**a2) Recommendation**:
Put in place processes that ensure researchers and RPOs are aware of the possibilities of seeking access to certain categories of protected data from public sector bodies pursuant to Chapter II of the DGA.

**a3) Recommendation**:
RPOs and researchers engaged in data-sharing activities with private sector actors should seek legal advice about their compliance with Chapter III of the DGA regulating data intermediary services.

*Recommendations to law- and policymakers*

**a) Key finding**:
Considering the DGA, researchers and RPOs face legal uncertainty about the situations in which they are falling within the scope of application of Chapter II of the DGA, not least because the exception for certain RPOs in recital 12 of the DGA is non-binding.

**a1) Recommendation**:
In the next review process for the DGA, address the issue of the scope of application with respect to RPOs. Meanwhile, consider offering official guidance to RPOs and researchers on the application of the DGA.

**b) Key finding**:
Preparing protected data for release and reuse involves the risk of liability for any infringements of third-party rights and interests as guaranteed by, for example, the GDPR, intellectual property rights and contractual confidentiality.

**b1) Recommendation**:
Safeguard the voluntary nature of the extended reuse of protected (research) data at the EU level under Chapter II of DGA in the interest of avoiding administrative burdens for RPOs and researchers and ensuring respect for academic freedom.

**b2) Recommendation**:
Consideration should be given to practical solutions to offset the considerable legal risks that RPOs and researchers would face, which, when they make protected data available for reuse, *unintentionally* infringe upon third parties' rights. For example, Member States' competent bodies could operate the requisite secure processing environments for research data, which contain categories of protected data, thereby assuming liability risks and professionalising the reuse of protected data.

**c) Key finding**:
Data sharing infrastructures are key for open science and open research data and benefit the European Research Area, researchers and RPOs alike.

**c1) Recommendation**:
The EU should (continue to) support data-sharing infrastructures in the area of research and promote the creation and maintenance of data-sharing infrastructures by RPOs and their networks.

**c2) Recommendation**:
With a view to supporting the reuse of protected data as foreseen under the DGA, the EU should (continue to) promote the sharing of knowledge and technical solutions for safe processing environments, including offering Open Source software.

**d) Key finding**:
Concerning Chapter IV of the DGA, researchers and RPOs are cognisant of the benefits of Data Altruism Organisations but they may be less likely to set up and notify as registered Data Altruism Organisations.

**d1) Recommendation**:
Ensure registration processes are efficient for RPOs and researchers and that the added value is made clear; consider additional positive incentives should take-up prove to be low.

**d2) Recommendation**:
Pan-European research would benefit from opening up the European data altruism consent form more broadly for data sharing in the context of scientific research, which adheres to recognised ethical standards for scientific research.

**Digital Services Act**

*Recommendations to law- and policymakers*

**a) Key finding**: Article 40 DSA on research access to the data of VLOPs and VLOSEs – which is specifically addressed to researchers – emerges as the most innovative and potentially generative DSA provision from a data access perspective. However, its concrete impact on researchers and RPOs will depend on how this access mechanism is implemented in practice to inform the operationalisation of the DSA's systemic risks framework. The upcoming Commission delegated act on Article 40 DSA will play a crucial role in this regard, as it will detail the technical conditions for sharing data with vetted researchers. Ultimately, the approach of national regulators (in particular, the Digital Services Coordinators of establishment) in processing and deciding on researchers' access requests under Article 40(4) DSA, and the Commission's enforcement of Article 40(12) DSA on access to publicly available data, will be key in shaping the practice of research access under Article 40.

**a1) Recommendation:** The DSA regulators (the Digital Services Coordinators and the Commission, also in the context of the Board for Digital Services) should prioritise monitoring the concrete implementation of Article 40 DSA across the EU and how it affects broader DSA enforcement goals. In particular, they should regularly engage and facilitate discussions with researchers' and RPOs to identify relevant challenges in using this access mechanism and realising its full potential in the context of the DSA enforcement framework.

**b) Key finding:** The status of RPO-provided services under the DSA requires a case-by-case assessment to determine which DSA obligations might apply to the specific service. In their effort to organise compliance with the DSA, some RPOs (in particular, universities governed by public law) could incur into organisational burdens and financial costs, which might in turn favour the decision to further externalise and opt for services provided by third-parties.

**b1) Recommendation**: The DSA regulators (national Digital Services Coordinators and the Commission, also in the context of the Board for Digital Services) should promote discussion on the status of RPOs-provided services under the DSA, including by engaging with the relevant RPOs organisations, and provide clarifications on their potential obligations under the DSA framework.

**Digital Markets Act**

*Recommendations to law- and policymakers*

**a) Key finding**: The DMA includes a number of transparency provisions that are of potential relevance for researchers and RPOs as they allow for some form of data access. However, a low level of awareness of this legal framework, and possible procedural complexities (in particular, on acquiring the authorisation to access data as third-parties) could limit the potential benefits of these provisions for researchers and RPOs.

**a1) Recommendation**: The Commission, as regulator competent to enforce the DMA, can provide guidance and raise awareness on the transparency provisions under the DMA. These initiatives could increase the potential positive impact of the DMA on researchers and RPOs.

**Data Act**

*Recommendations to researchers and research organisations*

**a) Key finding**: The DA regulates data sharing, including between Internet of Things (IoT) data holders, users and third parties. These provisions may require data holders to share "readily available data" and relevant metadata generated by a connected device or related service with users or with third parties, including relevant sensor data.

**a1) Recommendation**: Ensure (knowledge) resources are in place that allow researchers in their capacity as users of IoT products, to familiarise themselves with the access and portability rights as well as with the connected limitations that can offer them access to IoT data.

**a2) Recommendation**: Ensure knowledge resources and processes are in place that enable researchers seeking access IoT data as third parties, to comply with the DA's requirements, notably as regards their communication with IoT users, the potential limits that data holders may be able to impose on the scope of the data, especially regarding trade secrets, and compensation due to the data holder under Art. 9 DA.

**b) Key finding**: The DA provides a mechanism for business-to-government (B2G) data sharing that can involve data being shared by the relevant governmental bodies with researchers and research organisations. These provisions may require researchers and research organisations to take appropriate measures for the handling of data received from such governmental bodies.

**b1) Recommendation**: In order to benefit from these provision, researchers and research organisations should familiarise themselves with and adopt relevant data handling measures, including via technical infrastructure and/or other best practices such as data management plans, so that governmental bodies are able to share data with them.

*Recommendations to law- and policymakers*

**a) Key finding**: The DA regulates unfair contractual terms unilaterally imposed on another enterprise and provides the Commission with the power to develop model contractual terms and standard contractual clauses. Such unfair contractual terms may also be imposed upon researchers and research organisations that suffer from power asymmetries.

**a1) Recommendation**: In the interest of research, the Commission should monitor the application of the rules on unfair contractual terms as they apply in research contexts, and in developing model contractual terms and standard contractual clauses, should take into account, and potentially directly address, research use cases.

**b) Key finding**: The DA provides mechanisms for the establishment of interoperability, including of data, of data sharing mechanisms and services, of common European data spaces, of data processing services, as well as of smart contracts for executing data sharing agreement. Such interoperability requirements are likely to set a technical benchmark for realising the stipulations of the DA, including in the context of EOSC as a common European data space. The Commission has the power to guide the development of relevant interoperability requirements, including via delegated acts, implemented acts, as well as guidelines.

**b1) Recommendation**: The Commission should ensure that such interoperability requirements are achievable for a wide range of operators, including via supporting measures for their implementation and the positive encouragement of their adoption. The specific role of research organisations, in particular the way in which complex compliance legal and technical requirements could disproportionately affect them, should be taken into consideration in this process.

**b2) Recommendation**: The Commission should ensure that the technical implementation of such interoperability requirements do not run counter to alternative legal and policy objectives, including the facilitation of research access to data in the public interest.

**c) Key finding**: The DA sets the amount of compensation due to data holders by data recipients to the level of marginal cost when the recipient is a research organisation, but leaves open the possibility to other EU or national law to reduce or exclude compensation (Art. 9(6)).

**c1) Recommendation**: National legislators should work to ensure the flexibility offered by Art. 9(6) DA is used to ensure costs for research organisations do not hinder data access.

*Recommendations to interpreters and enforcers*

**a) Key finding**: The DA regulates unfair contractual terms unilaterally imposed on another enterprise. In its current formulation, the DA leaves open the question of whether researchers and research organisations qualify as an “enterprise”, such that they would benefit from the protections afforded by the DA.

**a1) Recommendation**: Courts addressing questions related to unfair contractual terms concerning access to and the use of data or liability and remedies for the breach or the termination of data-related obligations should interpret the scope of these provisions so that the rationale for the adoption of the provisions is appropriately substantiated, including, where relevant, as it applies to researchers and research organisations.

**b) Key finding**: The DA clarifies the role of the *sui generis* database right in the context of IoT data sharing. Some legal uncertainty persists regarding the scope and language of Article 43.

**b1) Recommendation**: Competent authorities and courts addressing questions concerning the *sui generis* database right and IoT data covered by the DA should take due account of the interests at stake, including, where relevant, of researchers as data holders, users and third parties to IoT data sharing schemes. This could be in the direction of an expansive reading of Art. 43 as to include other forms of rights related to copyright.

*Recommendations to the private sector*

**a) Key finding**: The DA mechanism for business-to-government (B2G) data sharing regulates the provision of relevant data to researchers and research organisations. This provides, among other things, that such data can be kept for up to 6 months after the erasure of this data by the requesting governmental body. Where such data contribute to research outputs such as an academic publication in a peer-reviewed scientific journal, such data may therefore not be available long term.

**a1) Recommendation**: Publishers of scientific publications, including journals, should be aware of this legal requirement and support researchers at the various stages of the publication process, for instance, exploring the possibility to offer an alternative secure storage facility for data in agreement with the original data holder.

**Artificial Intelligence Act (proposal)**

*Recommendations to Researchers and Research Organisations*

**A) Key findings**: While research organisations may also be considered providers when they ''put [an AI system] into service … for its [own] use,'', this does not cover AI systems ''specifically developed and *put into service* for the sole purpose of scientific research and development''. Irrespective of the above, once an AI system is commercialised at a later stage of its life cycle, the provider will need the necessary information to comply with the AI Act.

**A1) Recommendation**: Research organisations should strive to develop best practice in terms of transparency and documentation of the developing phases of AI systems – for example, when making available a ''detailed summary'' of the training dataset. This will support future commercial applications of the AI systems.

**A2) Recommendation**: When operating in the context of private/public partnerships for the development of an AI system, research organisations should draw up agreements with the consortium partners to allocate responsibilities and ensure compliance with the obligations under the AI Act.

*Recommendations to law- and policymakers*

**A) Key findings**: Neither the making available of an AI system in the context of non-commercial research (e.g. during testing) nor the making available of ''AI components'' on Open Source licences constitute a placing on the market of an AI system, these very same acts appear to have been exempted by ad hoc provisions in the various versions of the AI Act – (research in AI) Art. 2(5) EP text, Art. 2(7) Council text, and (OS AI) Art. 2(5e).

**A1) Recommendation**: As the text of the AI Act is not yet final, it could be unambiguously clarified that non-commercial research falls beyond the scope of the AI Act.

**A2) Recommendation**: it should be unambiguously clarified that the mere making available of AI components is not within the scope of the AI Act, irrespective of whether they are made available on OS licences or not.

**B) Key findings**: While research organisations acting for research purposes are allowed to freely train AI systems on copyright-protected data under Art. 3 CDSMD, under certain limited conditions they may have to comply with Art. 28b(4)(c) EP text (requiring making available a sufficiently detailed summary of the data used for training). Whereas this provision may generally enhance transparency, it was arguably originally developed in relation to the opt-out mechanisms of Art. 4 CDSMD. To the extent that it also applies to Art. 3 (research organisations), it will add a layer of compliance costs for research organisations that has not yet been tested. The function of Art. 28b(4)(c) is to allow rightsholders to monetise the use of their works, which is not applicable to research organisations precisely by virtue of the exception of Art. 3 CDSMD.

**B1) Recommendation**: For consistency, it could be clarified that Art. 28b(4)(c) AI Act EP text does not apply in cases of Art. 3 CDSMD.

**European Open Science Cloud**

*Recommendations to researchers and research organisations*

**a) Key findings:** Research organisations recognised the DDL and EOSC as a source of opportunities and challenges for the execution of their activities. Among the main challenges, the costs of compliance and legal uncertainty concerning the application of certain rules to specific organisations and practices were highlighted. These challenges pose potential deterrents for researchers and other stakeholders in the research community, as they may hesitate to share data due to concerns about legal compliance. In addition to the legal requirements, additional requirements imposed by research funding organisations, institutions (e.g. universities), and journals have a significant impact on researchers' data sharing.

**a1) Recommendation**: Consider the development of educational and training activities for researchers on how to operationalise existing obligations and mechanisms outlined in EU DDL, EOSC and Copyright Law, facilitating improved understanding and implementation of processes for data access, sharing, and (re)use.

**a2) Recommendation**: Research performing organisations, research funding organisations, and universities should take into consideration all the existing regulations (e.g. national and regional laws) on data (re)use and sharing before issuing new rules on the matter.

*Recommendations to law- and policymakers*

**a) Key findings**: The amount of existing legal sources that regulate research activities and/or activities carried out by researchers and research organisations can overwhelm researchers, create legal uncertainty, and generate compliance costs that may potentially affect the achievement of EOSC and Open Science goals.

**a1) Recommendation**: Development of best practices delineating strategies to navigate synergies between the EOSC, EU Copyright Law, and the DDL concerning obligations and mechanisms for data access and (re)use.

**a2) Recommendation**: New regulatory interventions should provide (i) increased clarity on the impact of said regulation on research activities and (ii) detailed information on the entities falling under the purview of these regulations, recognising the varied sizes and natures of organisations encompassed within the research ecosystem (e.g. universities, repositories).

**Key findings**: Recent procurements related to the EOSC EU Node and Simpl will be particularly relevant to fostering data sharing and interoperability. However, research carried out within this study showed that there is room for further research on some aspects concerning the role of EOSC as the Common European Data Space for Research.

**b1) Recommendation**: Consider the creation of additional funding opportunities to promote further investigation on:

> (i) the implications for researchers and research organisations resulting from the recognition of EOSC as a Common European Data Space;
>
> (ii) the interactions with other Data Spaces and their potential positive impacts on research across various domains; and
>
> (iii) the potential for EOSC to address complex cross-border issues inherent to the borderless nature of research itself.

Together with the existing expertise in technical interoperability and open and FAIR data, these aspects can become potent tools to unlock the full potential of EOSC as a Data Space.

### Overarching key findings and recommendations

**Recommendations to law- and policymakers**

**a) Key finding:** The landscape of EU DDL as relevant to research activities is becoming ever more complex. A lack of consistency can negatively affect compliance with legal obligations and limit the ability of stakeholders to reap benefits.

**a1) Recommendation:** Key terminology and concepts related to scientific research and the actors within the research ecosystem should be consistent across the different legislative interventions. Considering that most instruments have been recently adopted, this could be done at the regularly scheduled revisions of the legislative tools, as well as at the policy and interpretative levels.

**a2) Recommendation:** EU policymakers may consider streamlining the consideration of scientific research in EU legislation and policymaking, such as integrating scientific research in the Better Regulation Toolkit.

**a3) Recommendation:** Consider the introduction of a regular monitoring exercise to identify researchers' and RPOs' ability to reap benefits from the body of EU DDL, and challenges encountered with compliance; in light of the important contribution of scientific research to the attainment of EU objectives, strategies and values.

**b) Key finding:** The variety of specific and often divergent data access and reuse regimes creates a complex regulatory system that risks overburdening researchers and research organisations with compliance costs.

**b1) Recommendation:** Develop further coordination across the surveyed DDL instruments with a view to consolidating some of the most outstanding inconsistencies at the terminological and functional level. This could be done in policy documents or in the scheduled revisions of the DDL instruments.

**b2) Recommendation:** Evaluate the feasibility of developing a coordinated, homogeneous and horizontal set of data access and reuse provisions for scientific research (Business-to-Research, B2R).

**b3) Recommendation:** As an EU core regulatory value, scientific research should be the clear policy and regulatory objective of provisions relating to scientific research, not simply a tool employed to achieve different goals. Examples may be found in Art. 40 DSA or in the B2G provisions of the DA. In both cases, researchers are granted specific access frameworks, but the ultimate goal is not scientific research (it is respectively systemic risk identification and exceptional need), which lead to situations that may frustrate scientific research (e.g. obligations to limit the scope of the research to systemic risk or to erase the data after a certain period of time).

**c) Key finding:** Academic freedom as protected by Article 13 of the EU Charter, is not consistently recognised as a relevant value to be safeguarded as regards aspects of institutional autonomy and the autonomy of individual researchers.

**c1) Recommendation:** Have consistent consideration for safeguarding academic freedom, both at the level of institutional autonomy of RPOs and individual autonomy of researchers. Ensure that EU data and digital law aligns with values that underpin academic freedom, i.e. as regards recognised research methods and practices in the various research community and disciplines and adherence to ethical research standards.

**c2) Recommendation:** EU policymakers may consider streamlining the consideration of scientific research in EU legislation and policymaking, such as integrating scientific research in the Better Regulation Toolkit.

## LIST OF ABBREVIATIONS AND GLOSSARY

| | |
|---|---|
| **AI** | Artificial Intelligence |
| **AI ACT** | Proposed Artificial Intelligence Act |
| **AIA** | Artificial Intelligence Act |
| **Apollo.io** | Sales intelligence platform |
| **AW** | Dutch Author's Act |
| **B2B** | Business-to-Business |
| **B2C** | Business-to-Consumer |
| **B2G** | Business-to-Government |
| **B2R** | Business-to-Research |
| **BC** | Berne Convention for the Protection of Literary and Artistic Works |
| **BMBF** | German Federal Ministry of Education and Research |
| **CC** | Creative Commons (Licensing Schemes) |
| **CDA** | Portuguese Copyright Act |
| **CDE** | Belgian Code of Economic Law |
| **CDSM** | Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market |
| **CDSM Regulations of 2021** | SI No 567 of 2021 European Union (Copyright and Related Rights in the Digital Single Market) Regulations of 2021 (of Ireland) |
| **CESAER** | Conference of European Schools for Advanced Engineering Education and Research |
| **CFR** | Charter of Fundamental Rights of the European Union |
| **ChatGPT** | Chat Generative Pre-Trained Transformer |
| **CHIs** | Cultural Heritage Institutions |
| **CJEU** | Court of Justice of the European Union |
| **CMO** | Collective Management Organisation |
| **CODATA** | Committee on Data of the International Science Council |
| **Covid-19** | Coronavirus disease 2019 |
| **CPI** | French Intellectual Property Act |
| **CRM** | Collective Rights Management Directive |
| **CRRA** | Irish Copyright and Related Rights Act |
| **CzCA** | Czech Act on Copyright and Related Rights to Copyright |
| **DA** | Data Act |
| **DAO** | Data Altruism Organisations |
| **DBD** | Database Directive |
| **DDL** | Data and Digital Legislation |
| **DGA** | Data Governance Act |
| **Diamond (Platinum) open access** | Diamond open access journals are typically free to both authors and readers. They are often run by volunteers or funded by academic institutions or non-profit organisations. These journals do not rely on author fees to cover publication costs |

| | |
|---|---|
| **DMA** | Digital Markets Act |
| **DMP** | Data Management Plan |
| **DORA** | San Francisco Declaration on Research Assessment |
| **DSA** | Digital Services Act |
| **DSM Regulation** | Copyright and Related Rights in the Digital Single Market Regulations of 2021 (of Malta) |
| **E&Ls** | Exceptions and Limitations |
| **E/L** | Exception or Limitation |
| E&L | Exception and Limitation |
| **EC** | European Commission |
| **ECB** | European Central Bank |
| **ECLs** | Extended Collective Licenses |
| **EDIB** | European Data Innovation Board |
| **EOSC** | European Open Science Cloud |
| **EP** | European Parliament |
| **ERA** | European Research Area |
| **ERA Action 2** | European Research Area Policy Agenda Action 2 |
| **ETD** | Electronic Theses and Dissertations |
| **EU** | European Union |
| **EU/EEA** | European Union/European Economic Area |
| **FAIR (Principles)** | Findability, Accessibility, Interoperability, Reusability (Principles) |
| **FRAND** | Fair, Reasonable, and Non-discriminatory |
| **GCA** | Greek Copyright Act |
| **GDPR** | General Data Protection Regulation |
| **GLAM** | Galleries, Libraries, Archives, Museums |
| **Go FAIR** | Global Open FAIR initiative |
| **Gold open access (Publishing)** | In gold open access, research is published in open access journals or platforms that are freely available to readers. The costs of publication are typically covered by author fees, institutional support, or other funding sources. These journals may also be funded by non-profit organisations or academic institutions |
| **Green open access (Self-Archiving)** | In this model, authors or researchers deposit their manuscripts or preprints in institutional or subject-specific repositories, making them freely accessible to the public. These repositories can be managed by universities, research institutions, or discipline-specific communities |
| **H2020** | Horizon 2020 European Union's research and innovation funding programme for 2014-2020 |
| **HEIs** | Higher Education Institutions |

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|---|---|
| **Hybrid open access Journal** | This model combines traditional subscription-based publishing with open access options. Authors can choose to make their individual articles open access in a subscription-based journal by paying an additional fee, while the rest of the journal's content remains behind a paywall |
| **ICT** | Information and Communication Technologies |
| **Info Soc Directive (ISD)** | Information Society Directive |
| **IoT** | Internet of Things |
| **IP** | Intellectual Property |
| **IPR** | Intellectual Property Right |
| **IPRED** | Intellectual Property Rights Enforcement Directive |
| **l.aut** | Italian Copyright and Related Rights Act |
| **LaCA** | Latvian Copyright Act |
| **LEAR** | Legal Entity Appointed Representative |
| **LERU** | League of European Research Universities |
| **LiCA** | Lithuanian Copyright Act |
| **LLM** | Large Language Models |
| **LuDA** | Luxembourgish Copyright, Database and Related Rights Law |
| **MCST** | Malta Council for Science and Technology |
| **MDR** | Medical Devices Regulation |
| **ML** | Machine Learning |
| **MS** | Member State |
| **MS Teams** | Microsoft Teams App |
| **NFTORE** | National Framework on the Transition to an Open Research Environment |
| **NN** | Croatian Copyright and Related Rights Act |
| **NOAP** | National Open Access Policy (of Malta) |
| **NORF** | National Open Research Forum (of Ireland) |
| **NPOS** | National Plan for Open Science (of Italy) |
| **OA** | Open access |
| **OCSSPs** | Online Content Sharing-Service Providers |
| **OD** | Open Data |
| **ODD** | Open Data Directive |
| **OECD** | Organisation for Economic Co-operation and Development |
| **OpenAIRE** | Open access Infrastructure for Research in Europe |
| **OpenAlex** | Open Catalog of Scholarly Papers, Authors, Institutions, Venues, and Concepts. |
| **OS** | Open Science |
| **OSPP** | Open Science Policy Platform |
| **OWD** | Orphan Works Directive |
| **PSBs** | Public Sector Bodies |

| | |
|---|---|
| **PSF** | Policy Support Facility |
| **PSI** | Public Sector Information |
| **RDA** | Romanian Copyright Act |
| **RFOs** | Research Funding Organisations |
| **RLD** | Rental and Lending Directive |
| **ROs** | Research Organisations |
| **RPOs** | Research Performing Organisations |
| **SCD** | Satellite and Cable Directive |
| **Software Directive** | Computer Programs Directive |
| **SPR** | Secondary Publication Right |
| **SRIA** | Strategic Research and Innovation Agenda |
| **SSSA** | Scuola Superiore Sant'Anna (Sant'Anna School of Advanced Studies) |
| **SZJT** | Hungarian Law about Copyright |
| **TDM** | Text and Data Mining |
| **Term** | Term Directive |
| **TPMs** | Technological Protection Measures |
| **TRIPs** | Agreement on the Trade-Related Aspects of Intellectual Property Rights |
| **UM** | University of Malta |
| **UN** | United Nations |
| **UNESCO** | United Nations Educational, Scientific and Cultural Organisation |
| **UPA** | Polish Copyright and Related Rights Act |
| **UrhG-A** | Austrian Copyright Act |
| **UrhG-G** | German Copyright and Related Rights Act |
| **URL** | Swedish Copyright Act |
| **VLOPs** | Very Large Online Platforms |
| **VLOSEs** | Very Large Online Search Engines |
| **WIPO** | World Intellectual Property Organisation |
| **WTO** | World Trade Organisation |
| **ZKUASP** | Slovakian Copyright Act |

## Purpose and scope of the study

The study's main objective is to assist the European Commission (EC) in delivering the primary outcomes of priority action 2 of the European Research Area (ERA) Policy Agenda 2022-2024. Action 2 of the ERA Policy Agenda aims to "Propose an EU copyright and data legislative and regulatory framework fit for research". It has two outcomes:

- **Identifying barriers and challenges** to access and reuse publicly funded R&I results and of publications and data for scientific purposes, and identifying potential impacts on research through an analysis of relevant provisions under EU copyright and data and digital legislation and related regulatory frameworks and of relevant institutional and national initiatives.

- **Proposing legislative and non-legislative measures** to improve the current EU copyright and data legislative and regulatory frameworks to make it fit for scientific research, open research data and ERA.

The study's scope encompasses two specific strands of work: 1) **EU copyright legislation**[5] and 2) **EU data and digital legislation**.

- **EU copyright law consists of 14 Directives and 2 Regulations**; however, three directives contain key research provisions: The Information Society Directive (ISD), the Database Directive (DBD) and the Copyright in the Digital Single Market Directive (DSMD). In addition to the three key directives, the Data Act Proposal contains provisions on the *sui generis* right relevant to research.

- **EU data and digital legislation (EU DDL)** are relevant for accessing and reusing publications and data. In this area, six legislative acts are critical: Open Data Directive, Data Governance Act, Data Act, Digital Services Act, Digital Markets Act and Artificial Intelligence Act Proposal[6]. Additionally, this study explores the relevant provisions for the European Open Science Cloud.

## Structure of the report

This report serves as a comprehensive evaluation of the impact of the EU copyright framework on research, emphasising a critical analysis of its effects and proposing potential interventions for improvement. The study follows a structured approach based on the following tasks:

**Task 1: Assessing the effects on research.** The first task offers an extensive legal analysis of the challenges presented by existing EU copyright legislation (see Chapter 1, Sections 1.1 and 1.2). This analysis draws upon insights from a thorough literature review and various consultation activities undertaken in this study. It specifically focuses on the examination of accessibility and reuse of publications and data, emphasising the implications of open access and the complications that stem from current EU copyright laws.

5 https://digital-strategy.ec.europa.eu/en/policies/copyright-legislation

6 Please note, as the political agreement between the Council and the Parliament has been reached, the text is very likely to be formally adopted before the finalisation of this study.

Building on the findings of Task 1, **Task 2** focuses on **identifying and elaborating on areas within the EU copyright framework that necessitate enhancement** (in this report, it is covered under Sections "*1.3. Overview of plausible options and areas in need of improvement"*). This task is focused on developing potential interventions strategically aligned with addressing the shortcomings identified in the literature and during the consultation activities, thus contributing to the evolution of a more conducive environment for research within the copyright landscape.

**Task 3: Estimating advantages and/or benefits** encompasses **an assessment** that investigates the potential outcomes and effects of implementing the interventions proposed under Task 2 within the EU copyright domain. This Task aims to project the impact and efficacy of the potential interventions, envisioning a more supportive copyright framework for research endeavours. In this report, Task 3 is covered under *"1.4. Results: estimated advantages and/or benefits".*

Additionally, it is part of this Chapter 2, which provides an **analysis of EU data and digital legislation (Task 4)** and discusses how researchers and related entities can benefit from these laws by assessing **compliance strategies and potential advantages for stakeholders in this legislative area (Task 5)**.

This report is structured into two introductory Sections and the two main Chapters:

- **Section 1** – Introduction – provides the purpose and scope of the study, as well as specific issues investigated under EU copyright and EU data and digital legislation and their interplay with EU Open Science policy.

- **Section 2** – Methodology– provides a framework of the work, including the approaches used for the literature review and desk research, stakeholder consultations, multi-criteria analysis and comparative analysis of Green open access publications.

- **Chapter 1** – **Copyright** – Legal overview of the challenges posed by the EU copyright legislation on access to and reuse of publications and data, including open access analysis of obstacles or issues raised by the EU copyright legislation – it contains the literature review, the cross-analysis of evidence from consultations, the overview of the plausible policy options and areas for improvement, the results from the estimated advantages and/or benefits, and the overall conclusions regarding the need for legislative and non-legislative interventions.

- **Chapter 2** – **Data and Digital legislation** – Chapter 2 overviews EU digital and data legislation, explores national implementations, and analyses their implications for researchers and organisations. It also examines the European Open Science Cloud and provides recommendations to enhance alignment with the goal of promoting scientific research.

- **Annexes** – Annex 1 literature review and desk research on copyright legislation, Annex 2 comparative analysis of Green OA publications, Annex 3 interview programme, Annex 4 survey programme, Annex 5 synopsis of the survey programme results.

## Copyright legislation from the perspective of the EU Open Science policy

Under the first strand of work on EU copyright legislation, the study investigates the question of how the protection of copyright and *sui generis* database rights can be reconciled with and contribute to the attainment of the goals formulated in priority Action 2 of the ERA Policy Agenda 2022-2024. In particular, the overarching objective is to arrive at a single, borderless market for research, innovation and technology across the EU. This includes the ambition to create "an area in which knowledge circulates freely." In this context, Action 2 aims to "Propose an EU copyright and data legislative and regulatory framework fit for research". This means that the protection of copyright and *sui generis* database rights should not pose obstacles to the accessibility and reusability of research outputs. Instead, access and reuse of data for research purposes – including data enjoying copyright and/or *sui generis* database protection – should be supported. The aim of establishing a legislative and regulatory framework "fit for research" can be translated into the goal of enabling:

- Access to (including open access) and reuse of publicly funded R&I results;
- Access to and reuse of publications, data, and other works or subject matter for research purposes;
- Data services and infrastructures are managed by/for the benefit of research stakeholders.

In light of these objectives, the different tasks as part of this study serve the following purposes:

- **The literature and stakeholder consultations** take stock of existing knowledge and insights into potential obstacles to the realisation of ERA Action 2 objectives. In light of these objectives, work under Task 1 was articulated under the following sub-tasks:

– *Mapping of potential incompatibilities*: an in-depth review of literature, case law and other relevant (policy and legislative) documents, was carried out to update and supplement existing studies, knowledge and insights into potential obstacles that may arise from copyright and *sui generis* database protection.

– *"Reality check" to identify concrete problems* : based on stakeholder consultations and in-depth interviews with legal and other experts, the study determines the extent to which potential problems signalled in the knowledge resources consulted in the previous step pose obstacles in research practice – broadly understood as a reference to both:

  - The individual work of researchers and (transnational) research consortia;
  - The work of providers of research data and infrastructures.

– *Overview of challenges*: Finally, the study assessed all insights gathered in the preceding steps to identify all challenges posed by EU copyright and *sui generis* database protection that may interfere with ERA Action 2 objectives. In particular, the study distils concrete examples and stories from the preceding data-gathering process to provide evidence of issues that researchers and/or providers of research services encountered with regard to research projects.

Task 2 serves the purpose of translating the insights from Task 1 into concrete proposals for legislative and non-legislative measures that could be taken to improve the current EU *acquis* in the area of copyright and *sui generis* database legislation and arrive at a legislative and regulatory framework that offers the support necessary for the attainment of ERA Action 2 policy objectives, in particular the free flow of knowledge across Member States. Task 2 focuses on all conceivable policy and legislative interventions that are "credible" in the sense of having chances of success and implementation in the current environment for policy-making at the EU level. With the adoption of the Directive on Copyright in the Digital Single Market in 2019 (CDSMD), the EU legislator has added important new rules on Text and Data Mining (TDM) research to the portfolio of research-related provisions in the EU *acquis*, which will be evaluated in the coming years. While, for instance, the establishment of a comprehensive EU Copyright Code, potentially in the form of a regulation, has been proposed and discussed in the literature, this type of far-reaching and fundamental legislative change was not the focus of Task 2. Instead, the adopted strategy was to focus on the most promising legislative and non-legislative interventions that could achieve maximum benefits for research (and ERA action 2) within the existing legislative instruments forming the EU *acquis*, including in particular, the 2001 Information Society Directive (ISD) and the 1996 Database Directive (DBD) next to the aforementioned CDSMD. Following this strategy, insights from Task 1 were translated into an overview of plausible policy options and areas in need of improvement accompanied by tentative proposals for legislative and non-legislative interventions focusing on two distinct avenues:

  - *Open access interventions*: options for establishing a secondary publication right at the EU level were explored;

  - *Improvement of research-related provisions*: attention was devoted to other components of the copyright *acquis* that would solve the problems identified in Task 1 and could be implemented in the current legislative framework.

- Finally, Task 3 offers an evaluation of the effects of the legislative and non-legislative interventions that have been devised in Task 2 on the basis of the insights obtained in Task 1. Focus is placed on a cost/benefit analysis addressing each individual intervention developed in Task 2. Following this evaluation, a final analysis was carried out to arrive at proposals for concrete legislative and non-legislative interventions.

The described work on copyright and *sui generis* database protection did not start with a "from scratch" analysis. Potential tensions between open access (OA) policies and copyright protection or the *sui generis* database right are not uncharted territory. Instead, the Angelopoulos study conducted for the European Commission already pointed to the paradox that arises from the fact that researchers – as primary copyright holders – may finally be unable to ensure the free accessibility and reusability of their research output even though they may want to achieve these goals. Angelopoulos explains that:

> *"Researchers tend to be motivated primarily by reputational gains, with peer esteem understood to translate indirectly into professional advancement. In principle, therefore, the implementation of OA should be easy to achieve: researchers own their copyrights and have an incentive to release their works in OA. In practice, the situation is complicated by the current business model of scientific publishers. For the most part, scientific publishers, particularly those operating on a commercial basis who therefore profit by selling access to scientific content, require assignment of or the grant of an exclusive licence over copyright in the scientific articles they publish"*[7].

The result of this existing study shows clearly that obstacles to the attainment of ERA Action 2 objectives may arise from the contractual relationship between researchers and publishers and the exploitation strategy that publishers build on the transfer of copyright. Angelopoulos's observation can be placed in the context of the research "output dimension": once research output has been created, copyright and *sui generis* database rights, depending on how it is exercised by the rightsholder, may come to stand in the way of free accessibility and reusability of the research results and interfere with ERA Action 2 objectives in this way.

Placing the discussion on the impact of copyright and *sui generis* database rights in the context of the fundamental rights in the Charter of Fundamental Rights of the European Union (CFR), the Senftleben study – also commissioned by the European Commission – shed light on a structural imbalance that can be found in the current EU copyright and *sui generis* database *acquis* and intellectual property rights regimes more general. Senftleben points out that:

> *"it is inconsistent to assume that protection of copyright is the rule and freedom of research is the exception. Considering the equal status of the right to property (Article 17 CFR) and the freedom of expression, information and science (Articles 11 and 13 CFR), holders of copyright, related rights and database rights cannot expect to enjoy a legal position which, by definition, has more weight. Researchers must not be forced into a weak position by obliging them to defend data access and use activities on the basis of exceptions and limitations that may be construed restrictively. In the norm hierarchy, the fundamental rights and freedoms recognised in the Charter constitute primary sources of law"*[8].

Discussing the problem of a bias in favour of copyright and *sui generis* database owners in more detail, the Senftleben study led to the insight that there are several legal uncertainties and inconsistencies in the current EU legislative framework and its transposition into national law in the Member States that can easily place constraints on the use of protected resources for research purposes.

Quite clearly, the Angelopoulos study and the Senftleben study are exponents of a broader discussion in copyright and *sui generis* database law that includes further aspects and nuances – that have been taken into account in the mapping work and reality check carried out under Task 1. Based on this, several initial considerations were identified:

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7 Angelopoulos, C., Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access: exceptions and limitations, rights retention strategies and the secondary publication right, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, pp. 8-9.

8 Senftleben, M., Study on EU copyright and related rights and access to and reuse of data, Independent expert report commissioned by the European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, pp. 14-15.

- First, it has been pointed out in line with the findings in the Angelopoulos and the Senftleben studies that the existing research exceptions in the EU *acquis*, as well as those which may be teleologically interpreted for these purposes – such as Article 5(3)(d) ISD for quotation, criticism and review – are too narrowly tailored and fragmentedly applied in Member States. For example, Germany and France impose caps on the amount of protected work that can be reused or prevent commercial exploitation[9]. Taken together with restrictions concerning, e.g. the subject matter and the provision of remuneration duties, the scope of exceptions serving research purposes is likely to fail at providing a favourable regime for researchers in the sense of ERA action 2. The fragmented implementation at the national level risks substantially impairing the objectives set out with the EU Data Strategy and fails to operationalise the Union-driven policy pull towards the cross-border exchange and higher levels of access to and reuse of research data.

- Second, it has already been noted several times in the literature and policy debate that many datasets are protected through *sui generis* database rights, the scope of which is interpreted by the Court of Justice of the European Union (CJEU)[10] in a way that leaves room for de facto data ownership strategies that are based on the use of restrictive licensing terms. Paradoxically, CJEU case law offers room for far-reaching contractual restrictions with regard to those databases that cannot be protected under EU copyright or *sui generis* database law. This status quo reached in the jurisprudence of the Court may be of particular importance to the analysis of proposed new rules concerning the *sui generis* database right, in particular, the exclusion of *sui generis* rights in the case of machine-generated data in Article 43 of the Data Act.

- Third, existing literature and policy discussions have already highlighted the tension between exceptions to copyright and *sui generis* rights on the one hand and the use and protection of technological protection measures (TPM) on the other hand. While statutory exceptions may seek to offer researchers freedom of use, protecting TPMs may substantially curtail this freedom in practice[11].

- Fourth, it has already been indicated that the lack of harmonisation of publishers' rights, also considering the high differences in national contract law regimes – as well as in the conception of "normal exploitation" of scientific publications – under Member State law pose additional quandaries, with the effect of thwarting the reuse of academic articles, research data and other research-relevant protected materials.

9 Senftleben, M., Study on EU copyright and related rights and access to and reuse of data, Independent expert report commissioned by the European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, pp. 19 et seq.

10 See, e.g., Hugenholtz, P.B., Something Completely Different: Europe's Sui Generis Database Right, (2016), in S Frankel, D Gervais (eds), The Internet and the Emerging Importance of New Forms of Intellectual Property, Wolters & Kluwer, pp. 205-222; Derclaye, E., Databases sui generis right: what is a substantial investment? A tentative definition, (2005), International Review of Intellectual Property and Competition Law, 36(1); Sganga, C., Ventisei anni di Direttiva Database alla prova della nuova strategia per i dati: evoluzioni giurisprudenziali e percorsi di riforma, (2022), Diritto dell'Informazione e dell'Informatica (II), 651-704.

11 See, e.g., Geiger, C., et al., The Exception for Text and Data Mining (TDM) in the Proposed Directive on Copyright in the Digital Single Market – Legal Aspects: In-Depth Analysis, (2018), Policy Department for Citizens' Rights and Constitutional Affairs, Directorate General for Internal Policies of the Union); Geiger, C., et al., Text and Data Mining in the Proposed Copyright Reform: Making the EU Ready for an Age of Big Data?, (2018) 49 IIC 814; Ducato, R., Strowel, A, Limitations to Text and Data Mining and Consumer Empowerment: Making the Case for a Right to "Machine Legibility", (2019) 50 IIC 649; Otero Gonzalez G, Machine Learning Models Under the Copyright Microscope: Is EU Copyright Fit for Purpose? (2021) GRUR International 1043; Rosati, E., An EU Text and Data Mining Exception for the Few: Would It Make Sense? (2018) 13 JIPLP 429; Guadamuz A, and Diane Cabell, Data Mining in UK Higher Education Institutions: Law and Policy, (2014) 4 Queen Mary Journal of Intellectual Property 3.

- Fifth, scholars already indicated that the absence of an EU-consistent scope for licensing/assignment contracts – stemming from the lack of harmonisation of the moral rights of authors and, as a reflection of this, of the limits to publishers' prerogatives – exacerbates the imbalance of power between publishers, authors and re-users of research data[12]. In this respect, it has been highlighted in particular that users of protected works often need "lawful access" or "legal access" in order for flexibilities enshrined in provisions such as Article 5(3)(a) ISD, Article 9(b) DBD and Article 3 CDSMD to play a role – a circumstance that reduces their effectiveness to a great extent[13]. Without adequate safeguards in EU law, flexibilities in favour of research use and the provision of research services may be overridden by contract, revealing tensions with the open science policies underlying ERA action 2.

- Sixth, it was argued that the EU *acquis* in copyright and *sui generis* database law needs fine-tuning and adaptation in line with the latest trends in broader EU data and digital legislation. Further coordination is required with regard to the concepts of "reuse" and "research data", which remain unclear under both the Data Act and the Data Governance Act (DGA), as well as their interplay with the preceding Open Data Directive. In this respect, the scope of the broader EU data and digital legislation in relation to EU copyright and *sui generis* database protection should be clarified, with the aim of finding common ground for achieving the accessibility and reusability of research works, as envisaged in ERA action 2. In this regard, several policy and research lines can be identified in the existing discussion. In particular, it seems that there should be some coordination with regard to the concept of "reuse" under broader EU data law, on the one hand, and the scope of economic rights, such as reproduction, making available to the public, reutilisation and extraction under EU copyright and *sui generis* database law. Moreover, data intermediation services envisaged under the DGA, which serve the legitimate interests of re-users of research data and protected contents, may be identified as those capable of establishing models for data-sharing contractual licensing terms, taking research-related exceptions to copyright and *sui generis* database rights into account. Therefore, a "horizontal" approach to "research data" – also in order to detect carve-outs for further processing of data for research purposes – can be of key importance to clarify the legal status of "research data" by also guaranteeing a sound "legal basis" for their further processing in line with ERA Action 2[14].

12 Angelopoulos, C., Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access: exceptions and limitations, rights retention strategies and the secondary publication right, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022.

13 Senftleben, M., Study on EU copyright and related rights and access to and reuse of data, Independent expert report commissioned by the European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, pp. 69 et seq.

14 See, e.g., M Leistner, The Existing European IP Rights System and the Data Economy – An Overview With Particular Focus on Data Access and Portability, (2020), in Drexl, J (ed), Data access, Consumer Protection and Public Welfare (Verbraucherrechstage 2019), tbc, Nomos 2020; Reichman JH, Rethinking The Role of Clinical Trial Data in International Intellectual Property Law: The Case for a Public Goods Approach, (2009), Marquette Intellect Prop Law Rev, 13(1):1-68. PMID: 20431702; PMCID: PMC2860741; Fia, T, An Alternative to Data Ownership: Managing Access to Non-Personal Data through the Commons, Global Jurist 2020, SSRN: https://ssrn.com/abstract=3698914 or http://dx.doi.org/10.2139/ssrn.3698914.

This concise overview of copyright and *sui generis* database issues in previous research and policy work already shows that, in addition to the fundamental rights perspective of the Senftleben study and the contract-related analysis in the Angelopoulos study, this study offers an unprecedented opportunity to add a further central perspective, namely the perspective of broader EU data and digital legislation that will be explored in Tasks 4 and 5. Besides contractual issues arising from publishing contracts and legal doctrinal issues arising from the limited scope, high level of fragmentation and drawbacks in the legal design of research-related exceptions in the EU copyright *acquis*, there is a need to consider the strong Union-led policy pull towards open data, Open Science and data sharing that has been translated into the Data Act, the Data Governance Act, the Digital Services Act and the Open Data Directive[15]. These legal instruments mark a paradigm shift that offers new opportunities for defining and recalibrating the interface with EU copyright and *sui generis* database legislation. Departing from the traditional focus of the intellectual property regimes on protection, the policy dimension underlying the broader EU data and digital legislation may allow a focus on data accessibility and reusability, conceiving data as a fully-fledged commodity to be exchanged technically (FAIR) and legally fair (FRAND)[16] conditions for the public interest of advancing innovation and, in most cases, promoting reuse and interoperability as such[17].

Therefore, work under Tasks 1, 2 and 3 also sought to interact and create bridges with the insights evolving from Tasks 4 and 5. Following this integrated approach, we arrived at proposals for legislative and non-legislative measures in Task 2 – proposals capable of supporting the work of researchers and data intermediation services, as envisaged in ERA action 2. In line with the broader policy dimensions of the EU data and digital legislation, this means that the study provided important new impulses and pave the way for:

- An adequate regulatory framework for exploitation contracts covering scientific publications and data, in particular tackling potential issues of accessibility and reusability based on Secondary Publication Rights; and

- A modern design, interpretation and application of research exceptions in copyright and *sui generis* database law – considering recent developments in the broader EU data agenda and principles, such as FAIR and FRAND access and reuse conditions.

15 Eechoud, M., Study on the Open Data Directive, Data Governance and Data Act and their possible impact on research, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022. https://data.europa.eu/doi/10.2777/71619; Lundqvist, B., Study on the Digital Services Act and Digital Markets Act and their possible impact on research, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022. https://data.europa.eu/doi/10.2777/751853; Leistner, M, Antoine, L, IPR and the use of open data sharing initiatives by public and private actors, Study requested by the JURI committee, Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies, PE 732.266, 2022, 1-130.

16 Wilkinson, MD, Dumontier, M, and Aalbersberg, I e.a., The FAIR Guiding Principles for scientific data management and stewardship, Sci Data 3, 160018 (2016); Ménière, Y, Fair, Reasonable and Non-Discriminatory (FRAIND) Licensing Terms: Research Analysis of a Controversial Concept, Publications Office 2015.

17 Deloitte, Study on emerging issues of data ownership, interoperability, (re-)usability and access to data, and liability, Study prepared for the European Commission, 2016; Deloitte and others, Study to support an Impact Assessment on enhancing the use of data in Europe, 2022, available at: https://digital-strategy.ec.europa.eu/en/library/impact-assessment-report-and-support- studies-accompanying-proposal-data-act; Hoffmann, J, Otero, B, Demystifying The Role Of Data Interoperability In The Access And Sharing Debate, (2021) 11 JIPITEC 252.

## An analysis of EU data and digital legislation from the perspective of research

The EU Open Science policy identifies access to and reuse of scientific publications and data as core elements. Open science policy objectives are inscribed in a wide range of EU instruments covering Recommendations[18], Directives[19], Regulations[20], and policy documents such as the European Research Area Policy Agenda 2022–2024[21]. The work developed by the EC towards the accessibility and reusability of research results also includes initiatives such as the European Open Science Cloud (EOSC) and the Open Research Europe open access publishing platform[22].

Of particular relevance for this project, next to copyright legislation, is the emerging EU legislative framework in the field of data and digital legislation[23]. More specifically, the following legal frameworks are covered in the study "An Analysis of EU Data and Digital Legislation from the Perspective of Research": the Open Data Directive (ODD), the Data Governance Act (DGA), the Digital Services Act (DSA), the Digital Markets Act (DMA), the Data Act (DA), the Artificial Intelligence Act (AIA) and the non-legislative framework: the European Open Science Cloud (EOSC), together referred to as the EU DDL in this study.

EU DDL reflects the ambition of EU legislators to regulate digital and data-intensive markets comprehensively and consolidate an EU Data Strategy[24]. The role played by research and research organisations in this broader data landscape is not absent; however, it is often expressed in the form of exceptions, special provisions or derogatory measures. In other words, the new wave of EU DDL, while not completely forgetful of the needs of research, research organisations and researchers, has not produced a consolidated and coordinated legislative instrument of reference for the research sector. On the contrary, the specific impact on research has to be identified in a long list of acts of secondary legislation (some of which need to be transposed into national law, adding complexity to the scenario), leading to a fragmented and potentially uncoordinated framework for researchers and research organisations.

The study aims to identify relevant provisions for researchers and research organisations in EU DDL and to analyse potential opportunities and challenges in these instruments, taking into account the perspective of compliance.

18 See Commission Recommendation (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information.

19 See Directive (EU) 2019/1024 on open data and the re-use of public sector information.

20 the Data Governance Act, the Digital Services Act, the Digital Markets Act, and the proposals for an Artificial Intelligence Act, and a Data Act..

21 See European Research Area Policy Agenda – Overview of actions for the period 2022-2024, European Commission Directorate-General for Research and Innovation Directorate A — ERA & Innovation Unit A.2 — ERA governance and Implementation, 2021.

22 European Commission, Directorate-General for Research & Innovation, Annex II of the Tender Specifications (RTD/2023/SC/01 - Study to evaluate the effects of the EU copyright framework on research and the effects of potential interventions and to identify and present relevant provisions for research in EU data and digital legislation, with a focus on rights and obligations) (2023) at 8-9.

23 Tender Specifications Sec. 3.1.4.

24 This comprehensive approach can be identified not only in the travaux préparatoires, but also rather explicitly in the relevant EC policy documents. See, e.g., the European Data Strategy (n 5). See C Ducuing, T Margoni, L Schirru, D Spajic, T Lalova-Spinks, L Stähler, E Bayamlıoğlu, A Pétel, J Chu, B Peeters, A Christofi, J Baloup, M Avramidou, A Benmayor, T Gils, E Kun, E De Noyette, and E Biasin. 2022. White Paper on the Data Act Proposal. CiTiP Working Paper Series 11-12, <https://www.law.kuleuven.be/citip/en/news/item/old/white-paper-data-act> .

## Framework for the work

The methodology employed for this study adheres to a structured approach designed to comprehensively address the study's objectives and tasks outlined within the Tender Specifications. The study is underpinned by an evidence-based design, relying on a data triangulation logic (i.e. the use of multiple methods, sources, or perspectives to cross-verify and validate findings) to ensure consistent and robust findings. The framework encompasses five core tasks detailed below, each featuring an overarching approach summarised therein with key methods identified.

1. **Task 1** focuses on evaluating the concrete effects of the EU copyright framework on research. This involves extensive **desk research, literature reviews**, and **surveys targeting researchers, research performing organisations, and publishers** alongside an **interview programme**. Utilising a combination of qualitative and quantitative analyses, Task 1 aims to lay the groundwork for subsequent tasks and support Task 3 delivery.
2. **Task 2** further **elaborates on areas needing improvement and potential interventions** based on Task 1 outcomes. It encompasses analysis utilising data collection methods from Task 1 and cross-national legal analyses concerning the Secondary Publication Right.
3. **Task 3**, contingent on Task 2 findings, evaluates the effects of potential interventions primarily through **multi-criteria assessment**, utilising data derived from Tasks 1 and 2.
4. **Task 4 delves into identifying relevant provisions for researchers, organisations, and infrastructures** under EU data and digital legislation. This involves desk research, literature review, interviews, and surveys to highlight pertinent provisions in legislation such as the Open Data Directive and Digital Services Act.
5. **Task 5 assesses compliance and benefits from EU data and digital legislation** for research entities, synthesising findings from Task 4 to present comprehensive insights.

The study's tasks are interlinked, with outputs from one task informing subsequent stages. Parallel team efforts facilitate timely data collection and analysis. This is particularly significant in tasks involving legislative assessment. This framework ensures comprehensive coverage and systematic progression across the study's components.

## Literature review and desk research

*Copyright legislation*

Aligned with these overarching aims and objectives, the desk-based research designed for this study stands on **three pillars**.

- The first pillar provides a comprehensive literature review of the scholarly contributions that have an up-to-date focus on the opportunities and challenges raised by the EU copyright framework to achieve and operationalise OS.

- The second pillar offers an insight into the OS policies and agenda of the EU and the selected EU Member States (Austria, Belgium, France, Germany, Hungary, Ireland, Italy, Lithuania, Malta, Portugal, Romania and Spain) by systematically reviewing policy

documents and reports focusing on the OS goals set at the EU and national levels. This narrative is accompanied by a review of the scholarly literature focusing on the enablers and disablers of OS that are inherent in the national copyright regimes of the selected Member States. The selection of the Member States is aimed at achieving a sufficient representativeness of the central, northern, and southern European legal traditions and milieu.

- The third and last pillar of the research is dedicated to mapping the legal tools inherent in the EU copyright *acquis* and case law, as well as the national copyright frameworks of the 27 EU Member States. This will demonstrate the legal tools that would facilitate or might hamper OS while also unveiling strengths and pitfalls of national copyright laws in accommodating and operationalising these goals. In so doing, the analysis showcases the convergences and divergences in the EU Member States' strategies to implement the EU rules and the impact of such discrepancies on the realisation of the pan-European OS goals. Thus, this pillar produces a comparative analysis of the EU and national as well as cross-national copyright flexibilities encompassed within this study. The analysis underpins the conclusions as well as the policy and legislative gaps identified in the study to address the fields which require the EU's intervention.

*EU Data and digital legislation*

The literature review covered the whole body of data and digital legislation. This was done through desk research using the main legal databases as well as authoritative online sources such as the websites of the European Parliament, the European Commission, the Council and the Court of Justice of the European Union (CJEU). These were particularly useful given the fact that some of the main items of enquiry (DA, AIA) are, or were, in a development phase during the study, and we often had to interact with different new texts resulting from the legislative process. A complete bibliography is listed in the Chapter 2 of the study. After the completion and analysis of the literature review, gaps were identified, which concerned the assessment of specific provisions of data and digital legislation with regard to researchers and research organisations. Some of these gaps were expected, while others emerged as new following the literature review. As a mitigation strategy for the potential lack of literature on specific areas, the study complemented the literature review with interviews. Further information on the methodology adopted for the analysis of the data, digital legislation, and EOSC are provided in the aforementioned document.

## Stakeholder consultations via surveys

The study encompassed extensive consultation activities involving key stakeholder groups, such as:

- Researchers – The study team contacted researchers using the Participant Contact (PACO) from Horizon 2020 and Horizon Europe projects. While the contacts of this stakeholder group were obtained through their participation in the EU Framework Programmes, the questionnaire specifically asked respondents to focus on their non-Horizon publications. The researchers contacted reflected the overall population of researchers, representing various disciplines, including but not limited to social sciences, engineering, health, and agriculture. Further information on the contact gathered is provided in Annex 5.

- Research performing organisations (RPOs) – the study team utilised the Legal Entity Appointed Representative (LEAR) of entities in the EU/EEA, the UK and Switzerland which had received funds or indicated an interest in applying for funds from Horizon 2020 and/or Horizon Europe, to distribute the survey to the targeted individuals. Although reaching the targeted persons via LEAR required an additional step of forwarding the survey, it was deemed the best option. Other manual selection options were not feasible due to the vast number of RPOs in EEA, Switzerland and the UK and the lack of access to the correct contact positions, potentially resulting in contacting colleagues with a 'cold' email and not reaching the right individuals. When it comes to RPOs, the final set of responses included a variety of institutions, including universities, research institutes, museums, and cultural heritage institutions. Thus, both the survey of researchers and RPOs cover a variety of disciplines as well as categories of users of copyright-protected material. Further information on the contact gathered is provided in Annex 5.

- Publishers – The study team generated the scientific publishers' list using the OpenAlex catalogue for the global research system. It was done by matching the publishers with the Horizon 2020 publications and counting the publications per publisher. Then, the contacts were collected using the Apollo.io tool to find the country, website, and email address. The collection was boosted using a LinkedIn Sales Navigator in-mail tool and various Associations, such as the STM Association, the French Publishers Association, and the French Publishers Journal Association. Further information on the collection of contacts is provided in Annex 5.

### Researchers survey (Survey 1)

The researchers' survey ran from 6 October 2023 to 6 November 2023, addressing copyright and data and digital legislation. Participants were sourced from a European Commission-provided contacts database, refined to 107 102 unique contacts. Sampling aimed for representation without overflooding, involving 10 000 randomly selected PACOs through stratified sampling. The survey was later boosted by 4 000 PACOs to increase the number of responses. A pilot survey on 6 October 2023, ensured functionality, and a booster on 24 October 2023, addressed imbalances. The survey timeline included an official launch, reminders, and data extraction on 6 November 2023. The findings underwent categorisation, and the analysis of open-ended responses was facilitated through the utilisation of artificial intelligence, specifically ChatGPT. This AI tool enabled the systematic classification of the diverse open-ended responses into overarching topics. Subsequently, these broad topics were meticulously scrutinised to extract meaningful insights and patterns. The application of artificial intelligence, exemplified by ChatGPT, not only accelerated the categorisation process but also contributed to a thorough examination of the responses, enhancing the depth and efficiency of the overall analysis.

### Research performing organisations survey (Survey 2)

The RPOs survey, covering copyright and data and digital legislation from 6 October 2023 to 6 November 2023, utilised Legal Entity Appointed Representatives (LEARs) in the EU/EEA, UK and Switzerland from Horizon 2020 and Horizon Europe database for distribution. A list of 8 316 contacts was refined to 4 915, with no sampling applied. LEARs, reminders, and qualification checks ensured engagement. The survey timeline included a pilot on 19 October 2023, an official launch on 26 October 2023, and reminders. Invitations were extended through LIBER Europe and Knowledge Rights 21. Data extraction occurred on 20 November 2023.

### Publishers survey (Survey 3)

The survey of publishers was conducted from the 3rd to the 30th of November. The process of gathering contacts employed OpenAlex and Apollo.io tools, resulting in a list of 615

publishers. To enhance response rates, the strategy involved targeting up to three contacts per organisation, focusing on individuals in high-ranking positions. Distribution channels for the survey included LinkedIn Sales Navigator Inmail messages and associations such as the STM Association, French Publishers Association (SNE), and French Publishers Journal Association (FNPS). A carefully structured timeline was implemented to ensure thorough engagement, which included pilot phases, reminders, and proactive follow-up with non-responsive contacts.

***Note:*** *See* ***Annex 4 for the questionnaires of each survey and Annex 5 for detailed methodology, including population, sampling, and timeline specifics for each survey, as well as a detailed analysis of the results for each question.*** *In addition, Annex 5 includes details on the data cleaning process, the limitations of the survey, and the frequency tables.*

*Please refer to the* ***EU Open Research Repository*** *to access the raw data collected via the surveys described above (https://doi.org/10.5281/zenodo.11116641).*

### Interview programme

The copyright law-related interviews were aimed at targeting legal experts providing inputs on copyright law and identifying current issues and challenges. The questionnaire has been organised based on the targeted groups of legal experts (i.e. academia and research organisations, umbrella organisations linked to universities, policy-related or advocacy organisations, and umbrella organisations linked to publishers) and has been personalised for each interviewee on a case-by-case basis. The data and digital legislation interviewees aimed to fill in the gaps identified during the literature review, and the questionnaire has been organised around legislative instruments and framework (i.e. EOSC, Data Act, AI Act, Open Data Directive, Data Governance Act, Digital Services Act, Digital Markets Act). Additionally, the study team conducted follow-up interviews from the survey programme (researchers, RPOs, publishers) and further explored case scenarios.

The participants of the interview programme were selected based on the areas of expertise, size and country of the organisations. The list was finalised by eventually choosing as representative a sample as possible.

After the selection of the potential interviewees, they were contacted via email and were provided with an overview of the study, an EC privacy note, and an explanatory letter. Having agreed to participate, the interviews were conducted using MS Teams or the preferred conferencing tool and took between 45 and 60 minutes. Some interviews took over 60 minutes with the agreement of the interviewee. The interview questionnaires were shared with the interviewees prior to the interview. They contained an introduction to the study and study team, presented the objectives of the study, and provided indicative questions for shaping the interview discussion (See more detailed information regarding the interview programme in Annex 3).

**Table 1. List of stakeholder groups of the interview programme**

| Stakeholder groups | Number of completed interviews |
|---|---|
| Copyright legislation interviews | |
| **Academia and research organisations** | 5 completed |
| **Umbrella organisations linked to publishers** | 5 completed |
| **Policy-related or advocacy organisations** | 6 completed |
| | |
| **Umbrella organisations linked to universities and ROs** | 2 completed |
| **Follow-up from the researcher's survey** | 4 completed |
| **Follow-up from RPO survey** | 2 completed |
| **Follow-up from publishers' survey** | 2 completed |
| Data and digital legislation interviews | |
| **EOSC** | 7 completed |
| **Artificial Intelligence Act** | 4 completed |
| **Data Act** | 4 completed |
| **ODD/DGA/DSA** | 7 completed |

*Source: Compiled by the study team.*

*Please refer to the **EU Open Research Repository** to access the raw data collected via the interview programme described above (https://doi.org/10.5281/zenodo.11116641).*

## Multi-criteria analysis

The comparison of options is organised into four policy fields, each of which is assessed separately. To compare the attractiveness of these policy fields to the stakeholders, we apply a multi-criteria analysis approach, a technique whereby a range of positive and negative impacts are brought together into a single framework to allow easier comparison of options. It allows the comparison of both qualitative and quantitative data. The multi-criteria analysis provides a transparent presentation of the key issues at stake and allows trade-offs to be outlined clearly.

Criteria are compared by ranking their positive (from + to +++) or negative (- to ---) performance against the baseline, represented by 0. The baseline will be defined by the current situation (as uncovered by Task 1).

**Table 2. Ranking**

| Ranking | +++ | ++ | + | 0 | - | -- | --- |
|---|---|---|---|---|---|---|---|
| Impact compared with baseline scenario | Substantial and direct benefit for stakeholders | Significant and direct benefit for stakeholders | Modest or indirect benefit for stakeholders | No change compared to baseline | Costs are minimal | Costs are modest to high | Costs are substantial |

*Source: Compiled by the study team.*

The results are presented in the impact matrixes, each of which showcases justifications for the evaluation given to each of the criteria. The justification builds on the data collection exercise as defined in Task 1 (namely, literature review, surveys and interviews). The criteria assessed are presented in Table 3.

**Table 3. Assessed criteria**

| Measurement | Justification | Criteria for assessment |
|---|---|---|
| **SOCIAL IMPACTS/IMPACTS ON SCIENCE** | | |
| IPR | Depending on the types of licences and regulations in place, the publishers, researchers and research organisations hold intellectual property rights for the scientific output. The policy options will affect the ownership and width of that. | The extent to which policy options have positive/negative effects on the IPR of the stakeholders. |
| Quality control and improvement of research | The peer review process ensures that only publications of acceptable quality are published in the particular journal. There is concern that OA strategies may have less robust peer review than the baseline[25] however, the evidence is still inconclusive. This criterion assesses the policy option on peer review strategy. | The extent to which policy options affect the peer review process |
| Advancing scientific knowledge/innovation through the availability of research | Changes in the regulatory framework regarding access to academic journals/scientific outputs might affect researchers' ability to build on the knowledge created in previous research and advance it for the benefit of science and society.<br>Researchers in many countries, including wealthy ones, report difficulties accessing scientific literature. Research should be widely available to as many EU scientists as possible, with special attention paid to Widening countries, countries with fewer resources who would not have had access before[26]. | The extent to which policy options affect the accessibility of scientific literature to researchers |
| Creation of and access to diverse research and results | Subscription-based models incentivise researchers to carry out research and publish results that they know would interest the journals. Negative results and replication studies, critical for the advancement of science, are not rewarded[27]. New policy options should consider how they would affect that trend. | The extent to which policy options affect the diversity of research and results |
| Collaboration Opportunities | Scientific progress advances faster when researchers can collaborate. | The extent to which policy options affect scientific collaboration |
| **ECONOMIC IMPACTS** | | |
| Sectoral competitiveness | It is important to assess the policy option's impact on the potential competitiveness of the market and ensure that stakeholders do not lose significant commercial gains[28]. | The extent to which policy options affect the sector's competitiveness (internally and externally). |
| Conduct of business | The policy options have an impact on the costs and revenues incurred by the stakeholders. Change in the net benefit might affect strategic decisions and future actions of the stakeholders. | Change in the costs and revenue of publishers and change in the costs incurred by the RPOs. |

*Source: Compiled by the study team.*

25 Ibid.

26 Ware M, Mabe M. The stm report. An overview of scientific and scholarly journal publishing. Oxford: International Association of Scientific, Technical and Medical Publishers, 2009.

## Comparative analysis of Green OA publications since 2011

This method was aimed at comparing different sources of information about Green open access (OA) in EU-27 countries from 2011 to 2022. The study team checked data from OpenAlex and OpenAIRE Graph and compared it with trends in open access to publications outlined in the report "Study on Open Science: Monitoring trends and drivers"[29]. The study team opted to use OpenAlex because it showed more details about the types of OA. For more information on the analysis and its results, please see Annex 2.

27 Is the staggeringly profitable business of scientific publishing bad for science? https://www.theguardian.com/science/2017/jun/27/profitable-business-scientific-publishing-bad-for-science

28 Angelopoulos, C., Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access : exceptions and limitations, rights retention strategies and the secondary publication right, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022.

29 https://research-and-innovation.ec.europa.eu/document/download/a5bd70c0-5cc8-45b0-b3f4-0fa35946b768_en?filename=ec_rtd_open_science_monitor_final-report.pdf

# 1. CHAPTER 1 – COPYRIGHT LEGISLATION

This chapter presents a legal overview of the challenges posed by EU copyright legislation on access to and reuse of publications and data, including Open access analysis of obstacles or issues raised by EU copyright legislation.

## 1.1. Overview of EU and national OS policies, comparative analysis of the challenges posed by EU copyright legislation and its national implementations to access to and reuse of publications and data, and related literature review

*The content of this Section has been authored collaboratively by Caterina Sganga, Pelin Turan, Magali Contardi, Camilla Signoretta, Ernesto Edwards.*

This Section provides a short summary of the analysis conducted as a background to this study and consisting of (a) the mapping of EU and national OS policies, (b) an assessment of the interplay between the EU copyright *acquis* and OS policies and of the challenges posed by the current EU copyright legislation and its national implementations to access to and reuse of publications and data, and (c) a review of related scholarly contributions. The results of the analysis are available in full in Annex 1. Annex 1 relies on and further elaborates on a robust, comprehensive and updated set of OA legislative and soft law initiatives endorsed at the EU and national levels. From this, it is easily inferable that the scope of the analysis goes beyond the EU open access policy framework dated to 2011, including and focusing on the law making and policy documents issued from 2019 onward. After tackling the initiatives embraced in the EU from 2004 to 2022, the Annex continues with an overview of national OA policies, with an emphasis on the interSections and endeavours to align OA goals with EU copyright law. In this respect, the impact of the Horizon 2020 programme, the latest transpositions into national law, as well as the institutional mechanisms, action plans and OA standards set up in order to favour the dissemination of research data and publications in OA are investigated.

### 1.1.1. EU and Member States' Open Science policies

The EU has taken a leading role in championing OS initiatives, which have evolved over time[30]. The EU strategy on innovation and OS set forth in "Open Innovation, Open Science, Open to the World"[31] brought significant changes in technological and scientific infrastructures and sought structural reforms in research evaluation and incentive systems, interoperability, with the ultimate goal of increasing the societal impact of research. These endeavours were followed by Recommendations from the Open Science Policy Platform[32] to facilitate the open and interoperable sharing of metadata and to enable the access to and preservation of scientific information by introducing incentives for researchers to embrace and integrate OA and OS principles into their research life cycle.

With respect to copyright-related aspects, inaugurated with the launch of the Horizon 2020 research and innovation programme, the EU started to promote OA and OS systematically, allocating resources for research projects studying the compatibility of the existing copyright and data regimes with the Union's OA and OS goals.

30 For a detailed overview of the EU's OS policies and agenda, please see "A Glance at the Open Science Agenda and Policies of the EU and selected Member States" in Annex.

31 European Commission, Directorate-General for Research and Innovation, 'Open innovation, open science, open to the world: a vision for Europe, Publications Office', 2016, https://data.europa.eu/doi/10.2777/061652, accessed 11 August 2023.

32 European Commission, Directorate-General for Research and Innovation, 'OSPP-REC: Open Science Policy Platform Recommendations, Publications Office', 2018, https://data.europa.eu/doi/10.2777/958647, accessed 11 August 2023.

The Horizon 2020 programme aimed at fostering a digital society founded on open, reliable and accessible knowledge. To lay the groundwork necessary to achieve this goal, the EU embarked on a comprehensive mapping project, consolidated into the "Open Science and Intellectual Property Rights" study, which shed light on the implementation of the EU copyright *acquis*, with a specific focus on Member States' exceptions and limitations (E&Ls) to copyright and related rights[33]. Not only did this study reveal that the EU copyright landscape, which has achieved a certain level of harmonisation, is not necessarily in line with the OA and OS goals, but it also highlighted several nuances in national laws that frustrate the operationalisation of OA and OS and cross-border research activities. These discrepancies include the identification of beneficiaries, the varying scope of permitted acts for research purposes, the requirements concerning attribution and fair remuneration, and the introduction of additional criteria that are not envisioned in the corresponding EU E&Ls (such as quotas to limit what extent a work or other subject matter can be lawfully reproduced). In line with what was suggested by several IP scholars, the Study advocated for the introduction of mandatory research exceptions and specific provisions for scientific publishing, the granting of reversion rights, and the establishment of an EU-wide secondary publishing right (SPR) specifically aimed at OA through self-archiving. In addition to copyright-related measures, it also suggested crystallising the scope and fields of application of the ODD in order to provide a sound basis for research performing organisations (RPOs and universities and for harmonising open licensing schemes to enable interoperable data sharing across the EU.

The ideals and goals set during the mandate of the Horizon 2020 programme have been further advanced in the context of the Horizon Europe programme, which goes beyond OA to enable, incentivise and reward broader OS practices. The Council Conclusions on Research Assessment and Implementation of Open Science of June 2022 acknowledged the need to reform research assessment to accelerate the implementation of OS policies and practices and invited the EU and Member States to develop their capacities for academic publishing[34].

The EU OS agenda has triggered the adoption of strategies and action plans at the national level[35]. **A cross-country analysis of the OS policies of *selected* EU Member States** shows that national approaches to OA and OS are in alignment with the EU's European Research Area (ERA) Policy Agenda. Despite this substantive convergence, Member States' timelines to adopt and implement OS goals and their approaches show different nuances. While some countries launched their first OS initiatives as early as 2012 (Belgium and Ireland), others are still in the earlier stages of their OS journey (e.g. Malta and Romania). **Most of the Member States have adopted soft law instruments**, such as national strategies or action plans, while other national legislators have adopted ad hoc acts (France, Spain).

33 See: Directorate-General for Research and Innovation, 'Open Science and Intellectual Property Rights' https://research-and-innovation.ec.europa.eu/knowledge-publications-tools-and-data/publications/all-publications/open-science-and-intellectual-property-rights_en, accessed 11 August 2023.

34 See: Council Conclusions on Research Assessment and Implementation of Open Science, 10 June 2022, https://www.consilium.europa.eu/media/56958/st10126-en22.pdf.

35 For a detailed analysis of the matter, please refer to "A Glance at the Open Science Agenda and Policies of the EU and selected Member States" in Annex.

Soft law instruments show convergences with the EU OS policies and goals, and they **prioritise access to publicly funded research**. The national OS agenda of many Member States (Austria, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Romania, and Spain) emphasise the need to reinforce the OA of scientific publications. Some countries (Austria, Ireland, Lithuania, Luxembourg, Romania) make explicit references to Creative Commons (CC) or other open licensing schemes as a means to achieve open access to scientific works, while others (Germany, Ireland, Malta) take into account the added value of Gold and Green OA, or encourage educational institutions to adopt open formats to publicly disseminate scientific materials that are used for educational and research purposes (Austria). To achieve the same goal, Hungarian authorities have negotiated agreements with major publishers.

Furthermore, the **accessibility and reusability of data** appear to be a common concern for several Member States, along with the need to implement a **data management plan** in every research life cycle and to manage data in line with **FAIR principles** (Austria, Germany, Hungary, Ireland, Italy, Malta, Portugal, Romania, Spain). Not enough convergence can be found, instead, on other matters, such as the necessary features of OS policymaking or the devising of incentive and reward systems to foster the adoption of OS policies by stakeholders.

Six Member States went as far as to introduce a **secondary publishing right**. Table 4 summarises and compares the main features of the six national SPRs.

**Table 4. Secondary Publishing Right legislations in the EU Member States**

| FEATURES | DE (2014) | NED (2015) | AT (2015) | FR (2016) | BE (2018) | BG (2023) |
|---|---|---|---|---|---|---|
| **Source** | **UrhG, §38** | **AW, Art.25fa** | **UrhG, §37a** | **CPI, Art. L.533-4** | **CDE, Art.XI.196** | **Bulgarian Copyright Act, Art.60** |
| **Subject matter** | Scientific contributions<br><br>Appeared in collections periodically published at least 2 times a year | Short works of science<br><br>No limitation as to venue of first publication | Scientific contribution by member of staff of research institutions<br><br>Appeared in collections periodically published at least 2 times a year | Scientific writing (*écrit*)<br><br>Published in a periodical issued at least once a year | Scientific article<br><br>Published on a periodical (number of issues not specified) | Work of scientific literature |
| **Requirements** | Research publicly funded for > 50% | Research financed entirely/partly publicly | Research publicly funded for at least 50% | Research publicly funded for at least 50%<br><br>Agreement of all co-author(s) required | Research publicly funded for at least 50% | Research publicly funded, in whole or in part |
| **Overrides contrary contractual clauses?** | Y | Y (Article 25h) | Y | Y | Y | Y |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Version limitation** | Only for AAM version | No limitation | Only for AAM version | Only for AAM version | Only for AAM version | No limitation |
| **Content of SPR** | Right to make the contribution available to the public | Right to make the work available to the public free of charge | Right to make the contribution publicly accessible | Right to make available the contribution free of charge in an open format, by digital means | Right to make the manuscript available to the public free of charge | Right to make the work or parts thereof available to the public |
| **Embargo** | 1 year after 1st publication | After a reasonable period | 1 year after 1st publication | 6 month (science, technology and medicine) or 1 year (humanities and social science) after 1st publication | 6 month/1 year after 1st publication, but can be shorter (if so provided by contractual licenser) or longer (by law) | None |
| **Use limitation** | Non-commercial purposes | No limitation (type of use not specified) | Non-commercial purposes | Non-commercial purposes | No limitation (type of use not specified) | Non-commercial purposes Secondary publishing via non-commercial repositories |
| **Mention of source** | Mandatory indication of 1st publication | Mandatory indication of 1st publication | Mandatory indication of 1st publication | Not required | Mandatory indication of 1st publication | Mandatory indication of the 1st publisher |

*Source: Compiled by the study team.*

### 1.1.2. The interplay between the EU copyright *acquis* and OS policies: challenges posed by the current EU copyright legislation and its national implementations to access to and reuse of publications and data

**The EU copyright *acquis*: an overview**

In order to be fully implemented, EU and national OS strategies require an adequate legislative framework, while the cross-border nature of collaborative research projects and activities calls for harmonised solutions across the Union. The EU copyright *acquis* does not feature any provision supporting the implementation of OS principles on the outputs of publicly funded research and their underlying data, neither in the form of rules on OA licensing nor in the form of SPR. However, a comparative mapping of EU and Member States' copyright sources shows the presence of a number of provisions that may facilitate the fulfilment of OS goals by allowing access and reuse of copyright-protected content.

For the purpose of this study, such legal tools may be clustered into two main categories: **(a)** r**esearch-specific provisions and (b) general provisions that may complement and**

**reinforce research-specific tools**[36]**.** They range from copyright E&Ls to licensing schemes and norms regulating the public domain.

1) The first category (**research-specific provisions)** features E&Ls such as
   a. **Article 5(3)(a) ISD** and **Article 10(1)(d) RLD,** enabling the reproduction and communication and making available to the public of works and other subject matter for the purpose of illustration for teaching and research;
   b. **Articles 3 and 4 CDSMD** introduce mandatory exceptions to the exclusive rights of the database author[37], the *sui generis* right of the database maker[38], the right of reproduction under the ISD[39], and the exclusive rights of press publishers[40] against reproductions and extractions made, respectively, by research organisations (ROs) and cultural heritage institutions (CHIs) (Article 3 CDSMD) or by anyone (Article 4 CDSMD); and
   c. **Articles 6(2)(b) and 9(b) DBD** provide for a teaching and research exception to the copyright and *sui generis* right over a database.

2) The second category (**general provisions complementing and reinforcing research-specific tools**) includes a number of **E&Ls** targeting end users, such as:
   a. **Articles 5 and 6 of the Software Directive** allow the lawful user of a computer program, respectively, to perform specific acts necessary for the use of the software in accordance with its intended purpose in the absence of specific contractual provisions and to use and obtain the information necessary to achieve the interoperability of the software with other programs.
   b. **Articles 6(1) and 8 DBD,** enabling the lawful users of databases protected, respectively, by copyright and *sui generis* right to use and access the content of the databases.
   c. **Article 5(1) ISD –** the only mandatory exception under the ISD, allowing temporary acts of reproduction in specific circumstances.
   d. The quotation exception enshrined in **Article 5(3)(d) ISD**.
   e. Other E&Ls that benefit CHIs may indirectly facilitate OS practices due to their role in enabling access to knowledge and engagement with culture for the general public. This is the case of **Article 5(3)(n) ISD,** which allows CHIs to communicate or make available to the public works and other subject matters that are not subject to purchase or licensing terms for the purpose of research or private study and of **Article 5(2)(c) ISD** and **Article 6 CDSMD,** two E&Ls complementing each other and permitting, respectively, the reproduction and digitisation/making available to the public of works present in the CHIs' collections.

While there is no concrete evidence to suggest that **licensing schemes** have been associated with or considered as leverage for OS, they may still act as indirect facilitators of OS policies. In this context, it is worth mentioning **Article 8(1) CDSMD,** which introduces an extended collective licensing (ECL) scheme for out-of-commerce works to increase their accessibility and availability, and **Article 12 CDSMD**, which articulates a general and detailed provision for ECL.

36 For the complete mapping of these tools, accompanied by their detailed description including the relevant CJEU case law, please see "Enablers of Open Science" in Annex.

37 Directive 96/9/EC, Art. 5(a).

38 Ibid, Article 7(1).

39 Directive 2001/29/EC, Art. 2.

40 Directive (EU) 2019/790, Art. 15(1).

**The public domain** is also pivotal for OS goals. The notion has not been holistically defined or regulated by EU copyright law. Still, a number of provisions scattered around the EU copyright framework may contribute to its delineation. This is the case of **Article 1(2) Software,** which stipulates that "[i]deas and principles which underlie any element of a computer program, including those which underlie its interfaces"[41] are not protected by copyright; and **Article 14 CDSMD,** which prevents the protection of the reproduction of a work of visual art in the public domain "unless the material resulting from that act of reproduction is original in the sense that it is the author's own intellectual creation"[42]. To complement the picture, **Article 43 DA** is carved out from the scope of Article 7 DBD databases that are constituted only by data generated by IoT devices.

### The EU copyright *acquis*: enablers and disablers for Open Science goals

The results of the mapping of the EU copyright *acquis*, illustrated in Annex 1, allowed the identification of a number of enablers and disablers for the fulfilment of EU OS goals, which may be summarised as follows:

**Table 5. Enablers and disablers for Open Science goals**

| Research-specific tools | | |
|---|---|---|
| **Provisions** | **Enabling factors** | **Disabling factors** |
| **Articles 6(2)(b) and Article 9(b) DBD** | • Explicitly targeting teaching and research<br>• Broad interpretation of "re-utilisation" and "extraction" by the CJEU in the context of Article 9(b) DBD | • Optional nature<br>• Strict limitation to non-commercial uses<br>• Contractual overridability<br>• Do not apply on non-protected databases (see *Ryanair* decision)<br>• Weak coordination with other research exceptions |
| **Article 5(3)(a) ISD** | • Explicitly targeting teaching and research<br>• Broad language | • Vague notion of "illustration"<br>• "Teaching" together with "research"<br>• Limitation to non-commercial purpose<br>• Optional nature = contractual overridability + national fragmentation<br>• No coverage of collaborative research |
| **Article 10(1)(d) RLD** | • Explicitly targeting teaching and research<br>• No distinction between commercial and non-commercial purpose | • Vague notion of "illustration" |
| **Article 3 CDSMD** | • Mandatory and not overridable by contract<br>• Clarifies treatment of TDM activities<br>• Admits PPP | • Limited to non-commercial purposes<br>• Reinforces the technical and not normative reading of Article 2 ISD (expanding it)<br>• Unclear interplay with Article 5(1) ISD and misalignment in scope (ISD not applicable to databases, Article 3 CDSMD yes) |
| **General tools complementary to research-specific provisions** | | |
| **Provisions** | **Enabling factors** | **Disabling factors** |

41 Directive 2009/24/EC, Art. 1(2).

42 Directive (EU) 2019/790, Art. 14.

| | | |
|---|---|---|
| **Articles 5 and 6 Software** | • Rightsholders cannot prevent lawful users to perform act necessary for normal use of and interoperability of the software in individual research activities | • Uncertain notion of "lawful use" and "lawful acquirer"<br>• Strict purpose limitation<br>• No coverage of collaborative research (no data sharing)<br>• Not well coordinated with general research exceptions in other Directives |
| **Article 8 DBD** | • Rightsholders cannot prevent lawful users to extract or re-utilise insubstantial parts of the database<br>• No distinction between commercial and non-commercial purpose<br>• No other limitations on the purpose of extraction and re-utilisation | • Covers only insubstantial parts of database content |
| **Article 5(1) ISD** | • Key provision for development of TDM datasets | • Limited by Article 3 CDSMD |
| **Article 5(3)(d) ISD** | • Leverage for academic freedom of expression | • Vague language<br>• Optional nature<br>• Restrictive interpretation by CJEU |
| **Article 5(3)(n) ISD** | • Offers opportunity of individual access for researchers | • Several conditions of applicability limit beneficiaries and permitted uses<br>• Only for individual researchers and activities |
| **Article 5(2)(c) ISD + Article 6 CDSMD** | • Indirect positive effect on availability and access to resources<br>• Allows restoring of collections<br>• Allows creation of digital twins to be used for research on and by AI and immersive technologies | • Exclusion also of indirect commercial advantage<br>• Article 5(2)(c) ISD optional; Article 6 CDSMD mandatory<br>• Strict limitation in purpose (preservation) |
| **Article 8(1) CDSMD** | • Increase free availability of out-of-commerce works | NONE |
| **Article 12 CDSMD** | • Possibility for Member States to introduce research-oriented ECL | • Not mandatory<br>• Not directly linked to OS |

| **Further disabling factors** | |
|---|---|
| **In general** | **In specific provisions** |
| • No EU-wide definition of authorship and ownership, detrimental to cross-border research activities<br>• Boundaries of public domain not harmonised | • Broad scope of *sui generis* database right (Article 7 DBD) and uncertain boundaries of subject matter<br>• Member States' discretion on possibility to introduce related right for critical/scientific publications already fallen into the public domain (Article 5 Term Directive)<br>• Unclear applicability of Article 6(2) RLD on e-books after CJEU's *VOB* decision<br>• "Technical" rather than normative reading of the reproduction right (Article 2 ISD)<br>• Expansive reading of right of communication/making available to the public (Article 3 ISD)<br>• Beneficiaries of E&Ls provisions touching directly/indirectly research activities are not harmonised nor consistent |

*Source: Compiled by the study team.*

**Snapshots from the comparative analysis of national implementations**

EU Member States have full discretion on whether to implement optional E&Ls and in the definition of the basic features of each provision in line with their national priorities and policies. In fact, national transpositions of optional E&Ls show, in some instances, significant divergences and fragmentation, with a greatly different degree of harmonisation.

**Table 6. National implementation of the EU provisions**

| Research-specific E&Ls | | |
|---|---|---|
| **Provision** | **Degree of harmonisation** | **Divergences** |
| **Article 6(2)(b) DBD** | Low | Only a few MSs implemented it |
| **Article 8 DBD** | High | • Limitations to amount that can be used (BG, LV, IT, CY)<br>• Additional requirements in CZ and FR<br>• Broader formulation in DE and GR |
| **Article 9(2)(b) DBD** | Average | • 20 MSs implemented it<br>• In 6 MSs requirement of "illustration" is missing<br>• Stricter purpose limitation in IR and FR<br>• Reduced array of permitted uses in SI and HU |
| **Article 5(3)(a) ISD** | Low | • Most MSs mention only teaching activities<br>• Even when mentioning both teaching and research, content is tailored on educational activities<br>• Differences in subject matters covered and related permitted uses (various combinations)<br>• Some MSs have caps on amount of work that can be used (IR, ES, DE)<br>• Divergent scope of permitted uses (broad vs narrow)<br>• Remuneration required in BE, FI, ND, AT, SE, with divergent schemes |
| **Article 3 CDSMD** | High / average | • Divergences in definition of beneficiaries<br>• Harmonisation of permitted uses, few MSs added rights not covered by Article 3 CDSMD<br>• Only a few MSs adopted detailed guidelines on security measures<br>• Diverging approaches on definition of code of conducts |
| **General E&Ls complementary to research-specific E&Ls** | | |
| **Provision** | **Degree of harmonisation** | **Convergences/divergences** |
| **Article 5 Software** | High | • Mandatory in NL, LT, HR, SI<br>• Additional conditions of applicability (LT, PL, SE, SI) |
| **Article 6 Software** | Very high | • None (but for BG) |
| **Article 5(1) ISD** | Very high | • Further conditions of applicability in CY, PT, CZ<br>• Exclusions of software and databases in DK, MT, SE<br>• RO requires compliance with fair practice |
| **Article 5(3)(d) ISD** | Average | • Greatly different approaches to permitted uses<br>• Limitations in amount that can be quoted (BG, FR, GR, IE, LT, SI, SE, ES, RO, CZ)<br>• Different works excluded (LT, MT, NL, SI, ES)<br>• Specification of purpose(s): none, broader, narrower |
| **Article 5(3)(n) ISD** | High | • Not implemented in KR, GR, SE, RO, CY<br>• Limitation as to amount of work that can be used in DE<br>• Additional limitations in LT, LUX, MT<br>• FI, NL, ES do not limit E/L to copies not available for purchase/licence |

| | | |
|---|---|---|
| **Article 5(2)(c) ISD** | Average | • Provision implemented in all MSs but FR<br>• General convergence but several MSs provide patchwork of subject-specific provisions<br>• Some MSs introduced limitation of purpose (preservation) |
| **Article 6 CDSM** | High | • Few MSs introduced more articulated provisions of beneficiaries (AT, ES, LT, FR, HU)<br>• Fragmented differences (e.g. remuneration in DE; limitation on number of copies in RO etc.) |
| **Licensing schemes** | Low | Special ECLs for educational/research activities in FI, CZ, IE, ES, SK |
| **Public domain** | Low / average on some categories | Great variety of lists of subject matters excluded from protection, convergence on a handful of items |

*Source: Compiled by the study team.*

Against this background, a number of conclusions could be drawn.

1. With regard to research-specific exceptions: Most Member States have implemented optional research-specific E&Ls, except for Article 9(2)(b) DBD, which is featured in 20 national copyright statutes only, and for Article 6(2)(b) DBD, which has been transposed only by a handful of countries.
2. Due to the optional nature of all E&Ls, but for Article 3 CDSMD, national transpositions present a low to average degree of fragmentation.
3. In this respect, the most problematic case is that of Article 5(3)(a) ISD, where the contextual presence of teaching and research in the same provision, without differentiation, led to national implementations that mostly focused on educational activities rather than on research. To further complicate the framework, national solutions are characterised by divergences in beneficiaries, works covered, and permitted uses and often introduce additional limitations, remuneration requirements, and conditions of applicability. Hence, while this optional provision finds correspondence in the national copyright laws of all Member States, the level of fragmentation and misalignment with the text of the provision is high.
4. The implementation of Article 3 CDSMS, thanks to its mandatory nature, has led to greater harmonisation. However, differences in national solutions can still be found, particularly with regard to the regulation of the code of conduct and the specification of security measures.

With regard to other instruments that are complementary to research-specific E&Ls:

1. Most E&Ls present a high degree of harmonisation. This is particularly the case for the exception enshrined in Articles 5 and 6 Software, for the temporary reproduction exception under Article 5(1) ISD, for the private study exception under Article 5(3) ISD, and for Article 6 CDSM. However, their suitability to be used for the fulfilment of OS goals is partially hampered by their limitation in purpose, the divergent definition of beneficiaries, and their restrictive interpretation, which makes it impossible to adapt them to research needs and to collaborative research settings.
2. Other E&Ls benefiting CHIs and their role as intermediaries facilitating access to and reuse of research outputs are limited in purpose and suffer from severe fragmentation of national solutions.
3. Apart from very limited cases, more flexible instruments such as licensing schemes have never been used by Member States to address OS-related needs. The situation did not change after the entry into force of Article 12 CDSMD on ECL.
4. Lack of harmonisation and doubts on the contours of the public domain contribute to the legal uncertainty surrounding the treatment of a number of subject matters, which risk being attracted under the copyright/database umbrella to the detriment of access and reuse of research outputs.

### 1.1.3. Literature review

Despite their inner potential, all provisions present features that limit their usefulness for OS goals. Such flaws have been strongly emphasised by two seminal studies commissioned by the EC in 2022 and authored by Senftleben[43] and Angelopoulos[44], which have been preceded and followed by other sectoral contributions.

The wealth of literature on the interplay between EU copyright and data legislations and OS goals shows a general consensus on the positive **availability of a multitude of legal** instruments that may facilitate access to and reuse of scientific and cultural content. At the same time, it underlines **the shortcomings of each provision,** which weaken their suitability to help achieve **OS policy goals.** Such flaws can be clustered into four major categories, which are **interrelated and interdependent**. They comprise complications stemming from **(1)** the EU legislative strategies, **(2)** Member States' divergences in the implementation of EU law, which are exacerbated by further divergences in national judicial decisions; **(3)** the interplay of (or the absence of a dialogue between) copyright and data-related legislation; and finally, **(4)** the role of private actors and the impact of freedom of contract on the balance of rights and interests set by legislation.

***EU legislative strategies.*** As noted by Senfleben, four main issues arise here.

1) The terminology adopted by the EU legislator is not always consistent and often opaque, and this creates problems when interpreting and implementing intertwined norms within the EU *acquis*. This is particularly evident in research-specific exceptions such as Article 5(3)(a) ISD and may end up generating unforeseen restrictions on the access to and reuse of data for research purposes, as in the case of the definition of "lawful use" or "lawful acquirer" under Article 5(1) Software.
2) The optional nature of most E&Ls and their very broad and vague language has caused a great fragmentation of national solutions with regard to the definition of key elements of such provisions, from beneficiaries to the subject matter, permitted uses, criteria of applicability et al. (see also Angelopoulos and Sganga et al., the latter using the example of Article 5(3)(a) ISD, which has been transposed to or finds correspondence in all national copyright statutes, but with greatly diverging provisions[45]).
3) The EU copyright *acquis* features both optional and mandatory E/Ls without following a common rationale for the attribution of this or that legal regime. This causes the contextual presence of both optional and mandatory E&Ls in the same field (see, e.g. research or cultural preservations), with negative effects on harmonisation strategies (Senftleben).
4) Last, the vagueness, optional nature and contractual overridability of most E&Ls engender the risk of dissonance between the public and private regulatory tools, as an E/L that ostensibly facilitates the access to and reuse of works and other subject matter may leave leeway for contractual clauses to inherently discriminate among members of a research team, mostly defined under national laws, given the different attitudes and policies embraced by different licensors.

43 Senftleben, M, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 12-15.

44 European Commission, Directorate-General for Research and Innovation, C Angelopoulos, 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access: exceptions and limitations, rights retention strategies and the secondary publication right', Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/891665, accessed 11 August 2023.

45 Sganga, C, Contardi, M, Turan, P, Signoretta, C, Bucaria, G, Mezei, P, Harkai, I, 'Copyright Flexibilities: Mapping and Comparative Assessment of Eu and National Sources' (January 16, 2023) SSRN: https://ssrn.com/abstract=4325376 or http://dx.doi.org/10.2139/ssrn.4325376, accessed 11 August 2023.

Along the same lines, Margoni and Kretschmer[46] and Ducato and Strowel[47] highlight that the articulation of EU research-specific E&Ls, and particularly those included in the CDSMD, pave the way to restricting, rather than enhancing, access to and reuse of copyright-protected data, especially when compared to the general optional E&Ls enshrined in the ISD. With regard to Article 3 CDSMD (TDM for research purposes), while recognising that public-private partnerships are explicitly allowed, they emphasise the restrictions it imposes on non-commercial purposes and argue that non-research-specific E&Ls, such as Article 5(1) ISD (temporary reproduction) and other provisions enabling de minimis and lawful uses (e.g. Article 5(2)(d) ISD, Article 5(3)(i) ISD, Article 5 and 6 Software Directive, Article 6(1) and 8 DBD) might of be of greater help to facilitate research activities, for they do not discriminate between public and private ROs.

***Member States' divergences in the implementation of the EU law.*** Two major issues can be pinpointed here.

1) The national implementation strategies of the Member States differ not only in the transposition of the optional E&Ls but also in the transposition of the mandatory ones (see Ducato and Strowel, Margoni and Kretschmer, Flynn et al.[48], Sganga et al.);
2) The national implementations of the EU rules might be interpreted differently by the national courts, which might lead to market failures and distortions while also aggravating an already fragmented legal and policy scenario (Senftleben).

***The interplay of copyright and data-related legislation.*** Taking into account the interplay between open data, data sharing, and IP, Leistner and Antoine[49] challenge the legal protection of databases, which goes beyond the protection granted by the DBD. Along the same line, Maurel and De Filippi[50] mention the hardship faced in licensing public sector information (PSI) due to the *sui generis* regime envisioned for non-original databases. This narrative has been confirmed by Sganga's analysis[51] of the CJEU case law, while van Eechoud[52] further elaborates on the clashes between the ODD and the DBD.

Possible solutions to enhance access to and reuse of data vis-à-vis emerging technologies, such as ML and AI, have also been investigated in a study commissioned by the EC and published in 2018[53]. The study recognises that the DBD features several – yet limited – instruments that may facilitate scientific research, but it also highlights the obsolescence of the Directive against new technological developments, for it fails to distinguish among different activities concerning data (collection, aggregation, arrangement, alteration, computational analysis etc.) and does not consider the specificities of "sole-source databases" and publicly funded databases.

46 T. Margoni/M. Kretschmer, "A Deeper Look Into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology", CREATe Working Paper 2021/7, Glasgow: CREATe Centre 2021, 5 and 10.

47 Ducato, R, Strowel, A, 'Limitations to Text and Data Mining and Consumer Empowerment: Making the Case for a Right to "Machine Legibility"', (2019), International Review of Intellectual Property and Competition Law, 50(6), 649-684, DOI: 10.1007/ s40319-019-00833-w.

48 Flynn, S, Schirru, L, Palmedo, M, Izquierdo, A, 'Research Exceptions in Comparative Copyright' (2022) PIJIP/TLS Research Paper Series no. 75.

49 Leistner, M, Antoine, L, 'IPR and the use of open data sharing initiatives by public and private actors', Study requested by the JURI committee, Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies, PE 732.266, 2022, 1-130.

50 De Filippi, P, Maurel, L, 'The paradoxes of open data and how to get rid of it? Analysing the interplay between open data and sui-generis rights on databases', (2015), Columbia Science & Technology Law Review, 1-22, DOI: 10.1093/ijlit/eau008.hal-01265200.

51 Sganga, C 'Ventisei anni di direttiva database alla prova della nuova strategia europea per i dati: evoluzioni giurisprudenziali e percorsi di riforma', in "Diritto dell'informazione e dell'informatica", 2022, pp. 651-704.

52 van Eechoud, M, 'A Serpent Eating Its Tail: The Database Directive Meets the Open Data Directive', (2021), International Review of Intellectual Property and Competition Law 2021, No. 52.

53 2018 'Study supporting the evaluation of the Database Directive': https://digitalstrategy.ec.europa.eu/en/library/study-support-evaluation-database-directive, accessed 11th August 2023.

Focusing on Articles 3 and 4 CDSMD, Ducato and Strowel, as well as Moscon, Frosio, Geiger and Bulayenko[54], argued that the two provisions fall short of facilitating the advancement of ML and AI applications. This is particularly the case for Article 4 CDSMD, mainly because the letter of the provision gives the rightsholders the opportunity to reserve their exclusive rights over the works and other subject matter, thus preventing the use of such works and other subject matter for TDM purposes. Additionally, the effectiveness of the provision might be hampered since it is possible to limit its application mainly by technological protection measures (TPMs) or via contractual provisions.

***Private actors' role and impact on EU OS policies.*** Alongside the reform of EU copyright and data legislation, Angelopoulos maintains that the EU OS policy agenda would also **benefit from a greater harmonisation of assignment and licensing of copyright over scientific works**, especially those that are publicly funded.

Based on these assessments of the EU copyright *acquis* through the perspectives of researchers**, academic commentators have advanced a number of policy recommendations to advance the operationalisation of EU OS policies and goals.**

1. Provisions in the ISD and the CDSMD should be better aligned and their terminology streamlined. The same should be done for the interplay between copyright and data-related legislation.
2. Research E&Ls, which are currently optional but for a handful of cases, should be made mandatory.
3. The three-step test should be interpreted in an alternative way to balance the freedom of science and academic freedom against the economic interests of copyright holders.
4. Fourth, it is also suggested to exclude the possibility of contractual operability from any provisions that centralise research activities.
5. A reform of the DBD to address its shortcomings, which have been highlighted in its second review[55], is necessary to achieve OS goals, and particularly to ensure its consistency with the ODD and the DGA, in order to eliminate the barriers stemming from the unclear boundaries of the *sui generis* right.

## 1.2. Cross-analysis of evidence from the consultation activities

*The content of this Section has been authored collaboratively by Deimantė Kazlauskaitė, Rūta Dėlkutė-Morgan, Gabija Šiaulytytė, Tomaš Voronecki, Anthony Ross-Hellauer.*

This Section presents a comprehensive cross-analysis of survey results obtained from three distinct stakeholder groups within the research ecosystem: **researchers**, **research performing organisations (RPOs),** and **publishers**. The survey responses were segmented while differentiating researchers based in countries with or without a Secondary Publication Rights (SPR) regime. Additionally, we aggregated publisher responses according to their type: institutional, commercial, and non-commercial publishers, based on their selection of the type in the survey. We also divided publishers' answers by revenue: low revenue (less than 0.5 million and 2.4 million euro), medium revenue (between 2.5 and 9.9 million euro), and high revenue (more than 10 million euro).

54 C. Geiger/G. Frosio/O. Bulayenko (2019), "Text and Data Mining: Articles 3 and 4 of the Directive 2019/790/EU", Centre for International Intellectual Property Studies Research Paper 2019/08, Strasbourg: CEIPI, 5.

55 See: Commission Staff Working Document, Evaluation of Directive 96/9/EC on the legal protection of databases, Brussels, 25.04.2018, SWD(2018) 146 final.

**Institutional Publishers.** Institutional publishers are part of academic or cultural institutions and publish work related to their own research and educational activities. They aim to spread knowledge and support their community's learning and discovery efforts.

**Commercial Publishers.** Commercial publishers are businesses that publish a broad range of content to sell to the public. They focus on reaching wide audiences and generating profits through sales and subscriptions.

**Non-Commercial Publishers.** Non-commercial publishers publish content for specific academic or professional communities without seeking profit. They aim to make research and educational materials accessible, often funded by donations or memberships.

These **surveys were complemented by insights gleaned from in-depth interviews conducted with targeted legal experts** working at academic institutions and outside, along with a spectrum of other experts and stakeholders, such as policy and advocacy organisations, umbrella entities associated with publishers, and pertinent European Commission (EC) officers. The integration of interview results alongside survey outcomes augments this analysis, offering deeper insights and empirical case illustrations to better understand and substantiate the specific challenges encountered within the regulatory framework affecting research activities. The analysis is structured into four principal Sections within this report:

1. Publishing practices and access to knowledge resources, and institutional open access/open science policies.
2. Experiences with Secondary Publication Rights regimes in the five countries that have introduced it (namely Austria, Belgium, France, Germany and the Netherlands).
3. Perspectives on the adoption of a potential EU-wide Secondary Publication Rights regime.
4. The current copyright policy and challenges faced by stakeholders.

The following Sections are additionally organised by relevant sub-topics, such as barriers to open access and Text and Data Mining (TDM) provisions. The analysis makes reference to the survey questions from where the data were taken. The numbering of the survey questions aligns with the numbering contained in the synopsis report (Annex 5).

### 1.2.1. Publishing practices and access to knowledge resources and institutional Open access/open science policies

Below we present a detailed fact box showcasing various open access models, as these will be referred to in the analysis of the survey results.

**Open access models**

**Green open access (Self-Archiving):** *In this model, authors or researchers deposit their manuscripts or preprints in institutional or subject-specific repositories, making them freely accessible to the public. These repositories can be managed by universities, research institutions, or discipline-specific communities.*

**Gold open access (Publishing):** *In gold open access, research is published in open access journals or platforms that are freely available to readers. The costs of publication are typically covered by author fees, institutional support, or other funding sources. These journals may also be funded by non-profit organisations or academic institutions.*

**Diamond (Platinum) open access:** *Diamond open access journals are typically free to both authors and readers. They are often run by volunteers or funded by academic institutions or non-profit organisations. These journals do not rely on author fees to cover publication costs.*

*Institutional open access /Open Science policies*

**The findings from the surveys indicate a predominant trend toward embracing open access and open science policies within both RPOs and among researchers**.

The majority **(69.5%) of RPOs** responding to the survey indicated that they have an **open access or open science policy**, while 30.5% did not (Q7, RPO survey).

The results of the researchers survey suggest that **there is overall a good understanding of these policies among researchers**. The collected data indicate that 71.4% of respondents were aware that their organisation had an open access or open science policy (28.6% were not, Q22, researchers survey) and that there were no discernible differences between SPR countries and non-SPR countries (Q22, researchers survey). Of the 71.4% of respondents, the majority (67.7%) answered that they knew the policy well or rather well, while 32.3% answered that they did not know its contents very well or at all indicating that there is still room to improve knowledge of institutional open access policies. (Q23, researchers survey).

Regarding the content of these policies, as reported in both the survey of RPO representatives (Q10, RPO survey) and researchers (Q24, researchers survey), RPOs **mainly recommend rather than mandate practices**. Specifically, researchers indicated that the main recommended and/or mandated provisions included in institutional open access policies cover the following aspects:

- Making research data available as FAIR (Findable, Accessible, Interoperable, Reusable) principles;
- Providing immediate open access to scientific publications;
- Utilising repositories to provide open access to scientific publications.

This trend was consistent across both SPR and non-SPR countries, indicating a general inclination towards promoting open access and FAIR data practices without imposing rigid requirements.

The results can be explained by **considering insights gathered from the interviews, which indicate that the differing levels of adoption of open access or open science policies within an organisation might stem from the varied perceptions of such policies.** While in certain organisations, for example, often at universities, open access policies are formally documented or stated within official texts, in other organisations, they are often integrated as a scientific approach encompassing both open access and copyright considerations. Furthermore, at universities, policies can vary between faculties and disciplines.

The results obtained from the EOSC Observatory's[56] survey offer additional insights. **Among the 26 surveyed countries, 21 (80.8%) reported having a national policy on open access to publications. Notably, out of these countries, only 8** (France, Cyprus, Latvia, Luxembourg, Norway, Portugal, Slovenia, and Spain) **enforce open access to publications as a mandatory policy**. The EOSC Observatory survey also revealed that **14 (53.8%) out of the 26 countries have specific policies on immediate open access to publications, with 6** (Cyprus, Luxembourg, Norway, Slovenia, Spain, and Switzerland) **making it mandatory**. When respondents were asked about the number of RPOs in their countries with a policy on open access to publications, 20 participants provided responses. Among them, three respondents indicated that none of the RPOs in their countries have such a policy. The remaining answers varied from one (Luxembourg and Czechia) to 73 (Poland), with an average of 17.

The EOSC Observatory's survey indicated that **15 (57.7%) out of the 26 countries have a national policy on FAIR data**. **Out of these, 5** (Cyprus, Latvia, Norway, Slovenia, and Spain) **enforce it as a mandatory policy**. Respondents were also queried about the number of RPOs in their countries with a policy on FAIR data, and 15 participants responded. Among them, 5 (33.3%) indicated that none of the RPOs in their countries have such a policy. The remaining answers varied from one (Luxembourg) to 52 (Spain), with an average of 11. **These findings collectively suggest that while there is widespread adoption of policies on open access to publications and FAIR data, only a limited number of countries make these policies mandatory.**

When it comes to **publishers** (see Table 7), **the leading model is when some scientific publications are openly accessible to everyone upon the payment of a fee, and some others are only accessible to subscribers** (39.2% of publishers indicated this model comprises 50%-99% or 100% of their scientific journals and/or publishing platforms). Another prevalent model, which was selected by 33.7% of publishers comprising 50%-99% or 100% of their scientific journals, is making all scientific publications openly accessible without a publication fee, with 28.7% of publishers exclusively adopting this approach. Notably, 67.8% of respondents stated that none of their publications follow the closed journal model, where access is restricted to subscribers.

56 It is a policy intelligence tool for monitoring policies, practices, and impacts related to the European Open Science Cloud (EOSC). The annual survey on National Contributions to EOSC 2022 for the EOSC Steering Board collected responses from 32 Member States and associated countries in Europe. While considering the countries included in our survey results, the external survey did not collect responses from Belgium, Iceland, Italy, Romania and the United Kingdom.

**Table 7. Publishing models used by scientific journals and/or publishing platforms of the surveyed publishers**

| | 0% of your scientific journals and/or publishing platforms | 1-24% of your scientific journals and/or publishing platforms | 25-49% of your scientific journals and/or publishing platforms | 50-99% of your scientific journals and/or publishing platforms | 100% of your scientific journals and/or publishing platforms |
|---|---|---|---|---|---|
| Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee. (n=101) | 24 (23.8%) | 36 (35.6%) | 7 (6.9%) | 5 (5.0%) | 29 (28.7%) |
| Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. (n=98) | 35 (35.7%) | 30 (30.6%) | 19 (19.4%) | 10 (10.2%) | 4 (4.1%) |
| Open access publishing journals in which some scientific publications are openly accessible to everyone upon the payment of a fee, and some others are only accessible to subscribers. (n=92) | 42 (45.7%) | 8 (8.7%) | 6 (6.5%) | 34 (37.0%) | 2 (2.2%) |
| Closed journals in which all scientific publications are only accessible to subscribers. (n=90) | 61 (67.8%) | 9 (10.0%) | 4 (4.4%) | 10 (11.1%) | 6 (6.7%) |

*Source: Publisher's survey, Q9:" In the previous question, you indicated that you have at least one scientific journal and/or publishing platform. Could you tell us, out of those, what percentage of them are" (given options presented in the table).*

Those publishers who indicated that at least 50% of their portfolio included open access publishing journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee were asked **about the provisions governing their journals or platforms.** Responses to this question highlighted **a strong trend toward facilitating broader accessibility to scholarly works from these publishers, aligning with open access principles**. The most common practices observed include the publisher allowing authors to provide open access to the published version immediately (no embargo period) (93.3%). Additionally, authors are often allowed to provide open access via repositories to the published version immediately and under open licences (93.3%) (Q10, publishers' survey).

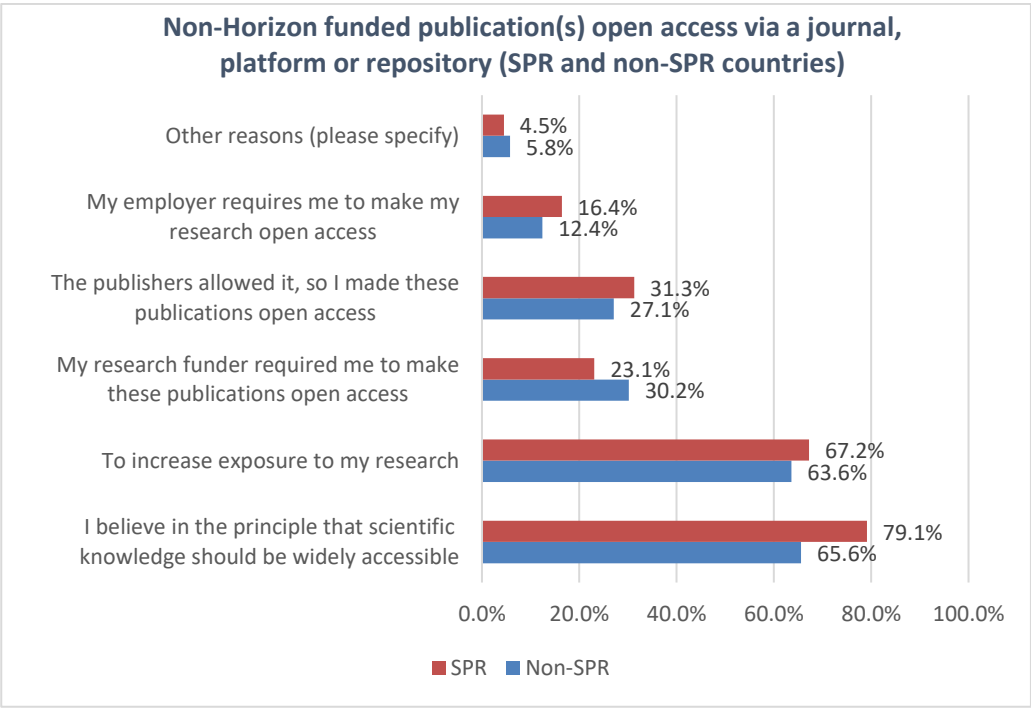
### *Motivations for open access and publishing*

Across countries that have an SPR regime (Austria, Belgium, Germany, France, and the Netherlands) and the remaining surveyed countries (EEA, UK and Switzerland), the primary deciding factors for publication venue selection include **the quality of the peer review process** (47.1%), **journal prestige** (46.4%), **publication costs** (38.5%), and **the opportunity for open access publication** (27.2%). Differences in attitudes toward these factors between researchers in SPR and non-SPR countries were marginal. For specific details, see Q5, researchers survey.

The researchers' survey highlighted the **slightly differing significance attached to various motivations driving the adoption of open access within the research community**, particularly among surveyed researchers from countries with SPR or without SPR. Motivations for open access remained, however, consistent across both groups (Q11, researchers survey): belief in the principle of access to scientific knowledge (69.7%), desire to increase research exposure (64.6%), publisher permissions (28.4%), funder requirements (27.9%), and employer expectations (13.6%).

Even though the interviewees and survey respondents did not explicitly indicate the differences between countries with and without policies supporting open access (SPR), a distinct contrast emerged between researchers in these groups. As illustrated in Figure 1 below, a significant disparity is evident. Notably, **a higher proportion of researchers from SPR countries emphasised the importance of the foundational principle of accessible scientific knowledge, with 79.1% emphasising it compared to 65.6% from non-SPR countries.** This divergence highlights slightly differing priorities placed on the core principle of open access across regions with varying policy frameworks.

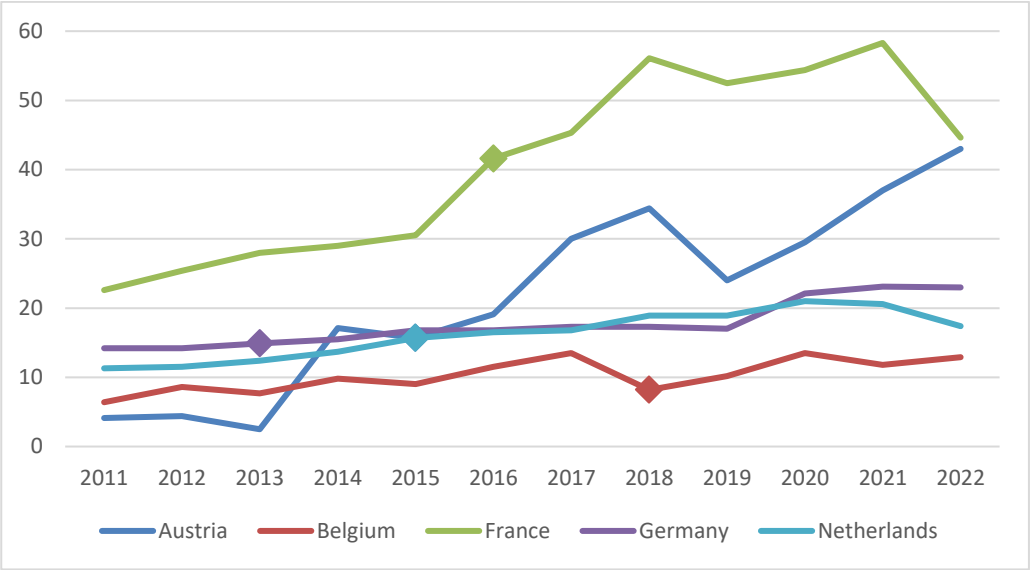
**Figure 1. Reasons to make publications open access**




*Source: Researchers survey, n is not provided, as it was a multiple choice question, and respondents were able to select more than one option. Q11: "Why did you make your non-Horizon funded publication(s) open access via a journal, platform or repository?".*

A comparative analysis of Green OA publications since 2011 (see Annex 2 for details) was also performed. The analysis shows that, **overall, the number of Green OA publications was at least slightly increasing in all five SPR countries.** A notable increase in the Green OA share since SPR was introduced can be seen in Austria and France. In Austria, the increase was slightly delayed, with SPR introduced in 2015, but a jump of over 10% happened in 2017. In France, in 2016, which is when SPR was introduced, there was an increase of over 10% as well. There is no large increase in Germany or the Netherlands, but a constantly increasing trend can be seen. While a small increase can also be noted in Belgium, it is hard to gauge whether it was because of the introduction of SPR due to the low increase across the years.

**Figure 2. Share of Green OA by SPR country by year**




*Source: Compiled by the study team using OpenAlex data. The dots in the figure correspond to the year when SPR was introduced in each country.*

Still, it is important to acknowledge that the increase in OA publications might not necessarily be directly associated with the introduction of the SPR. The SPR primarily concerns the rights of authors regarding the republication or secondary use of their work after its initial publication. It is a mechanism aimed at providing authors with more control over their scholarly output.

The **increase in OA publications can be attributed to various factors, including mandates from funding agencies or institutions requiring researchers to make their work openly accessible. Many governments, institutions, and funding bodies have pushed for OA to increase the dissemination and impact of research**. For example, Horizon Europe, the EU Framework Programme for Research and Innovation for the period 2021-2027 requires beneficiaries to ensure open access to peer-reviewed scientific publications relating to their results[57]. The overarching goal is to enhance the accessibility and reusability of scientific research outcomes funded by the European Commission.

57 https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf, p. 278

**"Transformative agreement"** is an umbrella term describing agreements negotiated between institutions and publishers in which former subscription expenditures are repurposed to support open access publishing. These agreements are based on a centrally negotiated procedure.

For example, the European University Institute has agreements with Springer, Wiley, and Elsevier, allowing corresponding authors from the institute to publish articles with open access in thousands of journals without paying any Article Processing Charges (APCs)[58]. Similarly, the University of Cambridge has signed transformative agreements with several publishers, including the Association for Computing Machinery (ACM) and the American Chemical Society (ACS), enabling unlimited open access publishing for papers with a University of Cambridge corresponding author[59]. In Germany, the Projekt DEAL consortium negotiated a major transformative agreement with Elsevier, covering over 900 academic institutions and allowing German researchers to publish open access in Elsevier's extensive portfolio of journals[60].

Transformative agreements and initiatives, such as Plan S in Europe and similar mandates worldwide, have been instrumental in promoting OA. These agreements typically negotiate terms with publishers to facilitate open access to research, often by balancing subscription costs against publication fees. However, it is crucial to recognise that while these measures may promote OA, they do not significantly reduce the dominance of leading academic publishers. These entities have skilfully shifted to the OA model, often profiting from article processing charges (APCs). Therefore, while the SPR may influence authors' decisions to disseminate subsequent versions of their work, its direct role in reducing the market dominance of these publishers in the OA context may be less pronounced than initially perceived[61]. This is the case in particular if the SPR is strongly limited (e.g. it does not cover the version of record and an embargo period needs to be respected), as in the five countries that have introduced the right thus far. The policy options towards the SPR are presented in Section 1.5.

*Prevalence and venues of open access*

The majority **of surveyed RPOs indicated substantial levels of open access to their publications, with nearly three quarters reporting that at least 50% of their publications were open access.** Some 19.9% of RPOs reported that over 90% of their publications are open access, and another fifth (21.8%) mentioned that 75 to 89% of their publications are open access (Q8, RPOs survey).

When examining the venues through which open access was provided by researchers (for their publications published in 2022), the majority (65.3%) indicated that they published in fully open access journals. (Q8, researchers' survey).

58 https://www.eui.eu/Research/Library/PublishingAndOpenScience/OAPublishing-LibraryAgreements

59 https://www.openaccess.cam.ac.uk/publishing-open-access/open-access-agreements

60 https://publishingperspectives.com/2023/09/elsevier-and-projekt-deal-more-open-access-in-germany/

61 The oligopoly's shift to Open access: How the big five academic publishers profit from article processing charges," Quantitative Science Studies, https://doi.org/10.1162/qss_a_00272

**Table 8. Venues where the open access scientific publications were published**

| | Share | Total |
|---|---|---|
| Fully open access journals (journals in which all content is openly accessible to everyone) or platforms (e.g. Open Research Europe) | 65.3% | 320 |
| Open access repository | 34.7% | 170 |

*Source: Researchers' survey Q8: "Out of your open access scientific publications published in 2022, how many were published in the following places?", n=490.*

Additionally, the survey shed light on the versions of the publication to which open access was provided, with **three quarters (75.4%) indicating they provided open access to the author accepted manuscript**. Some 15.7% provided open access to the version of record, 6.0% the pre-peer review preprint and 3.0% selected "other" (Q9, researchers survey).

Notably, differences surfaced between countries with or without SPR legislation, where **non-SPR countries tended to provide open access to the version of the record more frequently** (19.2% vs 8.6% for SPR countries) **and the author accepted manuscript less often compared to SPR countries** (72.7% vs 82.9% for SPR countries). However, it is challenging to attribute this difference solely to policy influence, especially given the relatively low awareness of policies supporting open access in SPR countries (Q23 researchers survey).

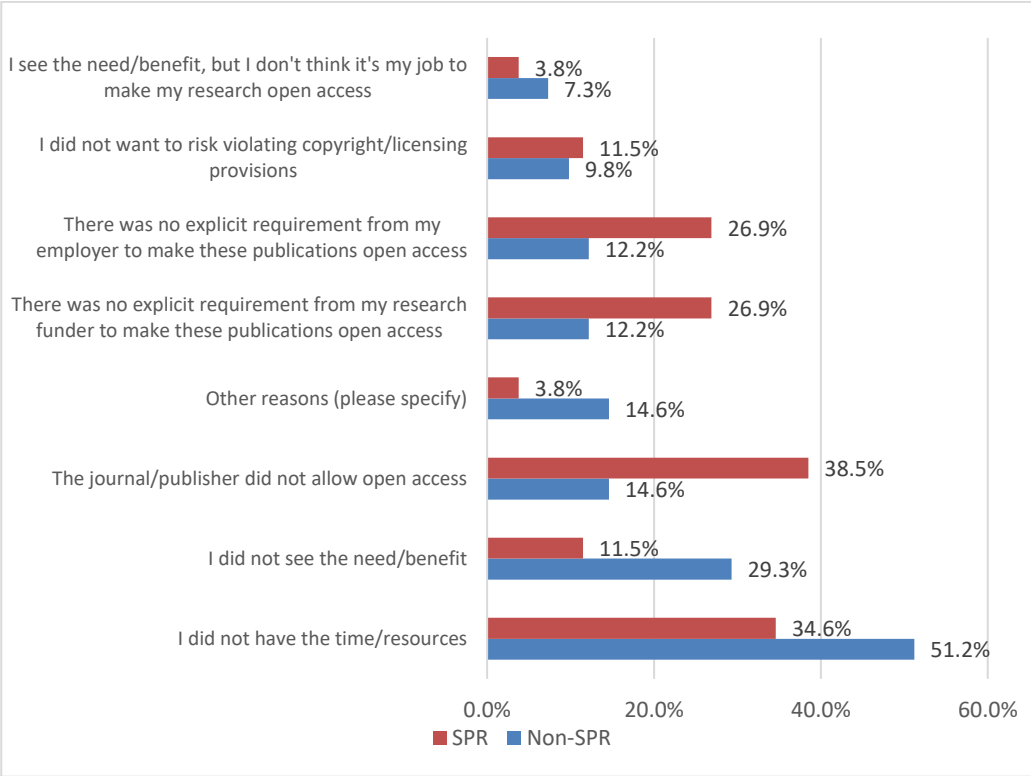
When discussing the various versions of the publication, respondents provided insightful, open-ended answers in the survey. One participant emphasised the importance of retaining rights to the final peer-reviewed manuscript accepted for publication. They recounted a discouraging experience with a major publisher that restricted their self-archiving to just two pages of a chapter, leading to reluctance to make similar requests. Despite colleagues having successfully shared entire manuscripts online with the same publisher, this individual's paper remains limited to two visible pages on their webpage. In Germany, another respondent highlighted the inadequacy of the manuscript version for proper quoting, asserting that most of the work is carried out by the author rather than the publisher. They expressed the view that publisher rights are still excessively strong, indicating a perceived imbalance in the distribution of rights between authors and publishers.

### *Barriers to OA*

The overall findings indicate a **multitude of reasons hindering the uptake of open access publication, with diverse obstacles reported by survey respondents and interviewees.** These barriers encompassed issues such as lack of time or resources, constraints imposed by journal policies, perceived lack of benefits, absence of funder or employer requirements, and concerns regarding copyright or licensing provisions.

According to the survey results, reasons for not making publications open access (Q12, researchers survey) were diverse, including **lack of time or resources** (44.1%), **the journal/publisher not permitting it** (23.5%), **not perceiving a need or benefit** (22.1%), l**ack of funder/employer requirements** (17.6%) and **fear of violating copyright or licensing provisions** (10.3%). In terms of the SPR and non-SPR countries (Q12, researchers survey), the reason indicating the **lack of resources or time was a much larger factor in non-SPR** (51.2%) than in SPR countries (34.6%), while **in SPR countries, the journal/publisher not allowing open access was actually the main factor** (38.5%, vs 14.6% for non-SPR countries). Since SPR ensures rights to open access despite publisher policies, this finding could be taken to underline a lack of understanding of SPR provisions in those countries that have enacted them. During the interviews and open-ended survey responses, explanations for the differing opinions on the barriers to implementing open access publications between SPR and non-SPR countries were not identified.

**Figure 3. Reasons NOT to make publications open access (SPR and non-SPR countries)**




*Source: Researchers' survey, n is not provided, as it was a multiple choice question, and respondents were able to select more than one option. Q12: "Why did you NOT make any of your non-Horizon-funded publications open access?".*

These trends are mirrored in the interviews, where it emerged that there was a **common practice among researchers to upload articles to open access repositories without a comprehensive understanding of their publication rights**. In contrast, institutional repositories diligently scrutinise these rights before allowing deposition, sometimes leading to articles being withheld due to contractual complexities. For example, one interviewed researcher from a country with an SPR stated that:

*From the perspective of researchers, **most researchers put their articles in open access without thinking about whether they have transferred rights or not**. Not necessarily because they do not care, but maybe they do not get it. Most of the time, **they sign contracts without reading them**. On the side of institutions dealing with institutional repositories for the articles, because they are liable, they check very carefully whether the researcher has the right to publish or not. This is where obstacles arise, and **some articles will not be openly accessed on these internal repositories because of the contracts that were signed.** However, this does not prevent researchers from putting it on specific repositories in open access.*

Asked about obstacles to immediate open access, RPO respondents (Q9, RPOs survey) noted that **the main barrier (71.1%) was researchers' attraction to the most prestigious journals** (that often have restricted access), followed by **open access being perceived as too expensive (59.1%)**, **embargo periods** (40.2%) and **ownership rules which do not give research institutions initial copyright ownership of research outputs** (39.4%).

The interviews also highlighted that **challenges surface when collaborating with co-authors from different countries due to negotiation complexities with publishers.** Moreover, gaps and uncertainties in current EU legal provisions raise concerns regarding researchers' rights to publish in open access formats.

Beyond legal complexities, interviewed **stakeholders representing the research community express worries about the heavy burden placed on researchers by mandates for open access publishing**. Several interviewees expressed concerns regarding high open access Article Processing Charges (APCs). According to a recent study by Morrison et al., in 2021[62], the typical cost for publishing a research paper in open access amounted to close to EUR 1 600. Journals with high impact factor tend to impose much higher fees, such as EU 9 500 at *Nature*, for instance. However, it is important to note that funders usually do not mandate to provide OA via the journal only but keep the possibility to provide OA via the repository as well.

According to one interview with RPOs, *mandates to publish in open access are putting a lot of weight on researchers because publishers ask for APC payment, and this is* ***detrimental for early career researchers*** *coming from* ***less privileged institutions,*** *for* ***researchers who do not publish in English or are outside of the EU****. Many researchers are disadvantaged by the APC system.*

The interviews found that **the commercial publishers' perspective underscores the need for substantial financial resources to facilitate the expansion of open access** publications, anticipating inevitable cost increases for EU countries in embracing a more predominant open access future.

*Open access publishing requires financial resources.* ***To significantly expand the number of open access publications, a well-funded and easily accessible funding system is essential****, allowing publishers to participate directly. Given the global nature of the academic publishing market, which intersects with other sectors such as professionals, the costs for EU countries are bound to rise inevitably if open access is to become predominant in the future (interview with commercial publisher).*

**These findings indicate the need for clearer and unified rights provisions at a European level.** Addressing these challenges could support open access publishing for researchers while navigating the complexities of current publishing practices and legal frameworks across borders.

62 http://hdl.handle.net/10393/42327

*Agreements and negotiations with publishers*

Amidst the complex landscape of **RPOs negotiating agreements with publishers, a significant proportion — 43.4% — revealed they had ventured into agreements outlining open access policies and requirements**, while 56.6% disclosed no such agreements. The challenges encountered in these negotiations were voiced by RPO survey respondents. **The cost of open access publishing emerged as the most daunting challenge,** with 88.6% of respondents finding it somewhat or very challenging. Additionally**, terms/costs of subscriptions** (86.5%), **conditions surrounding open access publishing** (72.9%), and **embargo periods** (61.8%) were reported as significant hurdles (Q22, Q23 RPOs survey).

Conversely, when looking into the researcher-publisher negotiations, we found that **an overwhelming 94.0% of researchers had not engaged in negotiating publication access and reuse rights provisions over the previous year** (Q13, researchers survey). Their rationale centred predominantly on a lack of time or resources, a resonating sentiment echoed uniformly across both SPR and non-SPR countries, displaying a consistent trend in researcher negotiation practices. However, among the minority who had engaged in negotiations (Q14, researchers survey), discussions revolved around diverse issues, encompassing publication fees, embargoes, retention of intellectual property rights, and permissions for sharing in specific contexts. Over half of researchers reported their negotiations as successful, indicating some positive strides amidst the challenges (Q15, researchers survey).

These findings show the complexities of such negotiations between the research community and publishers. They reveal big hurdles and suggest a need for better and more coordinated ways to negotiate. At the same time, researchers are not negotiating much, which points to a lack of resources or understanding of the complexities associated with contracts.

*On transformative agreements*

**According to the survey results, 55.3% of researchers mentioned that transformative agreements had had a positive impact on their ability to access and reuse articles**, while 39.1% noted they had no impact, and 5.7% reported a negative impact (Q16, researchers survey). The study team observed no differences in answers across SPR and non-SPR countries. Positive impacts included better access, simplified processes, reduction of costs for individual researchers, and facilitating OA transition in certain fields. This is in line with some of the views of the interviewed RPOs in Sweden, who indicated that **transformative agreements with publishers have significantly increased open access publishing**. According to the interviewees, **these agreements made open access with a CC-BY licence the default option for Swedish authors, which encourages wider accessibility to research outputs.**

The negatives that were mentioned in the survey included limits on the number of articles covered and high competition for their use, concerns about increasing costs overall, and loss of access to some journals due to protracted negotiations with some publishers (Q17, researchers survey). Similarly, interviews with RPOs suggest certain challenges regarding transformative agreements, especially concerning the price of the agreements. In 2021, the Association of Swedish Higher Education Institutions established a working group titled "Beyond transformative agreements" with the goal of fostering the transition towards open access. Currently, this group has developed a strategic approach for guiding Sweden and the Bibsam Consortium in their discussions with publishers[63]. The objective is to shift from transformative agreements towards a financially viable model that encourages a complete transition to an entirely open publishing system. It was indicated that in the Swedish case, "The number of transformative agreements signed through the Bibsam Consortium[64] has steadily increased in recent years, from three in 2017 to 27 in 2022. This has meant that the expenses have grown from SEK 35 million in 2017 to SEK 408 million in 2022"[65].

*One RPO voiced concerns about transformative agreements, explaining **feeling trapped with transformative agreements because of limits and extra costs.** The push for open access increased expenses for institutions using these agreements. Balancing the need to cut costs while promoting more open access creates this trapped feeling. Plus, **focusing more on the number of publications than their quality makes negotiating these agreements harder**. It is a clash between saving money and needing to publish more.*

Interviews with small commercial publishers (50-249 scientific publications published in 2022, Q7 publishers' survey) shed light on **the disparity between large international publishing corporations and smaller publishers in terms of access to funding and fair treatment in transformative agreements**.

*The interviewee representing a commercial publisher, highlighted the **challenges faced by smaller publishers, notably in Humanities and Social Sciences (HSS),** where the slower pace of production compared to Science, Technology, Engineering, and Mathematics (STEM) fields **influences their struggle to adapt to open access models** within transformative agreements due to insufficient funding or support.*

Publishers were also asked whether they entered into any agreements with institutional users or representative organisations that define open access requirements. In total, 54.9% of publishers reported having entered into such agreements. Breaking down the data by publisher types, **non-commercial publishers showed the highest percentage of agreements at 48.0%**, **followed by commercial publishers at 66.0%.** In the case of **institutional publishers, 31.6% indicated that they had entered into such agreements** (Q16, publishers' survey).

Regarding the challenges faced in negotiations (Q17, publishers' survey), the most frequently cited area of difficulty was the **cost of open access publishing, with 36% of publishers finding it very challenging**. Additionally, 48.0% considered the cost somewhat challenging. **For commercial publishers, negotiating the cost of open access publishing emerged as the most important challenge**, with 41.4% finding it very challenging and an additional 55.2% indicating it was somewhat challenging.

63 https://www.su.se/english/news/open-access-need-to-move-away-from-transformative-agreements-1.683787

64 Bibsam Consortium is a consortium in which 85 higher education and research institutions in Sweden participate to negotiate license agreements for electronic information resources

65 https://www.kb.se/samverkan-och-utveckling/nytt-fran-kb/nyheter-samverkan-och-utveckling/2023-05-31-costs-of-scholary-publishing-2022.html

In addition to the financial aspects, negotiations around subscription terms and costs for journals with restricted access were also a noteworthy challenge, with 56.5% reporting that they were somewhat challenging and 8.7% finding them very challenging. Subscription terms and costs for journals with restricted access were also challenging for commercial publishers, with 71.4% reporting it as somewhat challenging, 3.6% very challenging, and 7.1% not challenging. As for institutional publishers, subscription terms/costs for journals with restricted access proved to be a considerable challenge, with 40.0% finding it very challenging.

Overall, these findings **indicate a potential need for amendments or clarifications in EU copyright law to address challenges hindering open access adoption**, emphasising the importance of balancing rights provisions and supporting more accessible publishing practices across European borders. The policy option in this regard will be elaborated in Sections 1.3 and 1.5.

### 1.2.2. Experiences with Secondary Publication Rights (SPR) legislation in the five countries that have already introduced it

The specifics of the Secondary Publication Right for each nation are comprehensively examined in Annex 1, 'Literature Review.' It should be noted that this report was compiled prior to Bulgaria's adoption of the Secondary Publication Right. As a result, the analysis within this report encompasses five countries: Austria, Belgium, France, Germany, and the Netherlands.

**Preprint** – This is a term used for an early version of a research article. There can be several versions of a preprint as it is amended and worked on prior to submission to a journal. By its very definition, preprints are unrefereed works (i.e. they have not been through a formal peer review process)

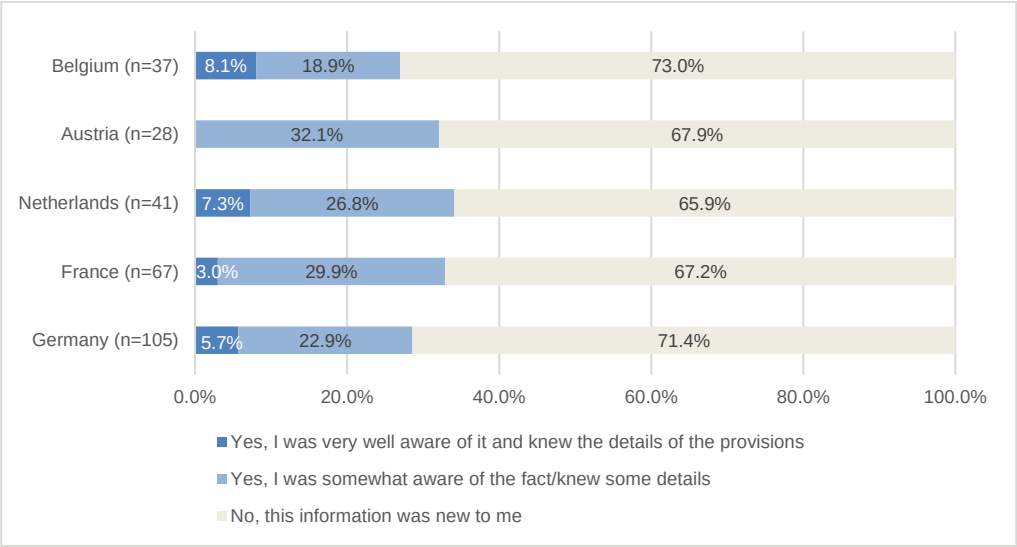
**Author Accepted Manuscript (AAM) –** The final peer-reviewed manuscript accepted for publication, which incorporates any amendments based on the peer-reviewers' feedback. It refers to a version accepted by the journal but before copyediting and typesetting by the publisher.

**Version of Record (VoR)** – The final published peer-reviewed version containing the publisher's copy edits and layout. This is the version that appears in the journal's archives and is considered the official publication.

**Researchers and RPOs' perspectives**

**The survey highlighted that approximately 70% of researchers based in Austria, Belgium, France, Germany, and the Netherlands is unaware of the opportunities offered by SPR**. This lack of awareness is not surprising, as researchers often have limited knowledge of copyright law, including the specifics of SPR. Belgium, which adopted SPR in 2018, shows the lowest level of familiarity among researchers, possibly due to its more recent implementation compared to other countries. Even a decade after Germany's adoption of SPR and 8 years in Austria, under a third of the surveyed researchers had some awareness of its existence, with none of the 28 Austrian respondents fully understanding the SPR provisions. Interestingly, the survey revealed that the majority of respondents (79%) of those who were very familiar with SPR were primarily leading or established researchers.

**Figure 4. Researchers' awareness of the SPR legislation**



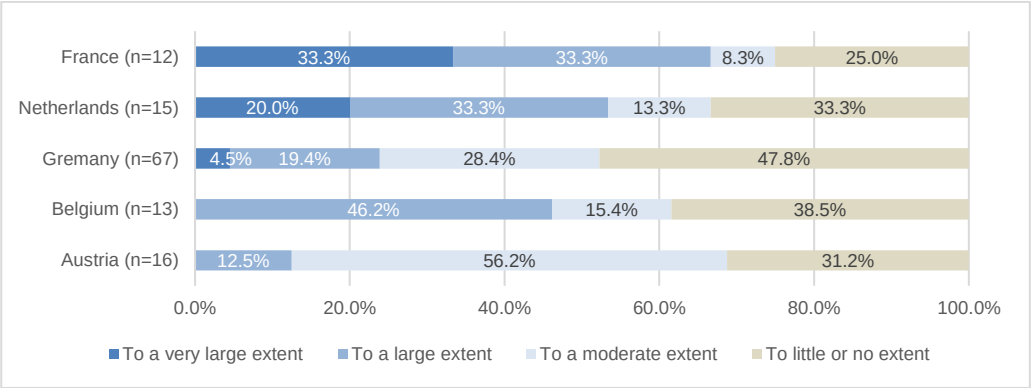

*Source: Researchers' survey, Q26, Q30, Q34, Q38, Q42, Question in the survey: "Were you aware that your country had introduced the Secondary Publication Right (SPR) legislation", n=278.*

**SPR was an important tool in commitment to open access for those aware**. Researchers' survey respondents reported that SPR gave them the opportunity to freely publish, access, disseminate, and enable others to reuse their research. In an open-ended question, **respondents highlighted the positive impact of SPR on the visibility of research** and the possibility of making work public even when there is no budget for APC. Some respondents to open-ended questions noted that SPR enhanced not only dissemination but also enabled access to other authors' resources.

According to the RPOs respondents from the countries that have already introduced SPR, SPR had a moderate impact on RPOs' activity. Survey results indicate that SPR impacts RPOs from France the most (75%), while almost half of respondents from Germany reported little or no impact at all (see Figure 5 below). RPOs from Austria, Belgium, France, Germany, and the Netherlands, based on their experience with SPR, indicate that **the benefits of the SPR legislation are directly related to the extent of its exploitation by researchers**. Meanwhile, researchers, **either because of legal uncertainty or lack of awareness, are hesitant to use SPR.** Some respondents from an RPO to an open-ended question noted that the challenge is to publicise SPR more and encourage researchers to use it. This is not easy, as many researchers are still reluctant to do so. They are not sure what is covered and how to apply it.

A stakeholder from an advocacy organisation (representing researchers and RPOs) in an interview noted: *I think that the biggest feedback from researchers is confusion. There often seems as if there are a lot of conflicting obligations upon individual researchers. They don't necessarily understand the ramifications of any particular publishing model that they may choose until afterwards, and then they can't do anything about it. So, I think it's difficult, and there are a lot of varying views.*

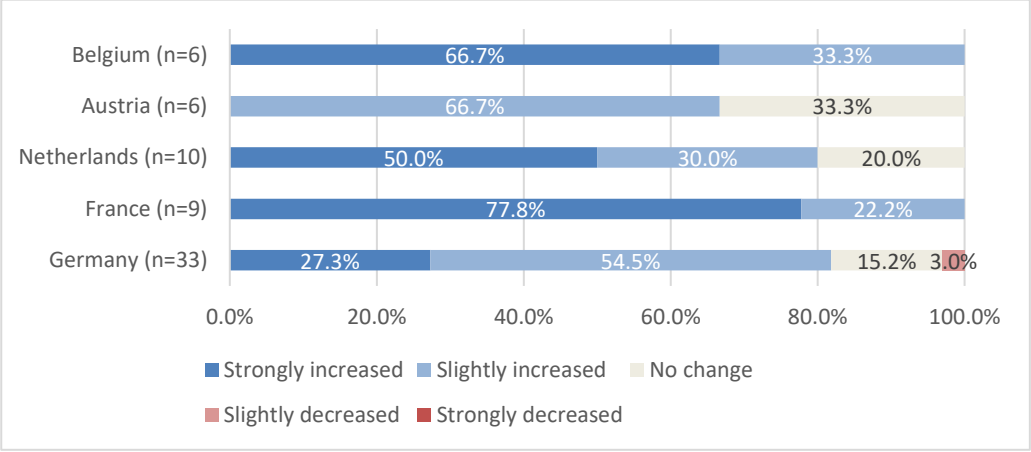
**Figure 5. Impact of SPR provisions on RPOs**




*Source: RPO survey, Q41, Q43, Q45, Q47, Q49, survey question: "Overall, to what extent do the Secondary Publication Right provisions impact your organisation?", n=123.*

RPOs that declared at least moderate impact stated that **the introduction of SPR increased the share (or the total number) of research publications published in open access.** All RPO respondents from France and Belgium reported a positive effect (see Figure 6 below). However, some survey respondents in open-ended questions noted that even though SPR supports OA, its benefits should be distinct from genuine open access. SPR confers very limited additional rights to reuse, making it helpful in disseminating research output but not addressing its exploitation.

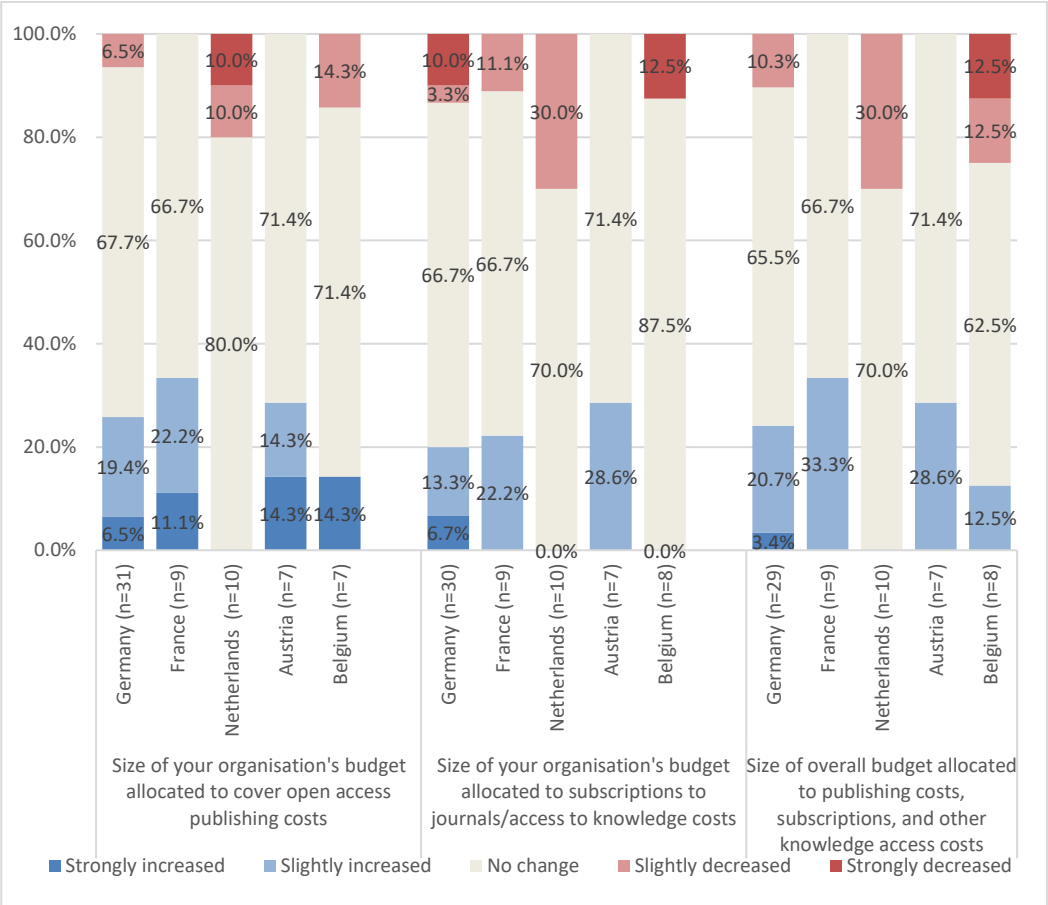
**Figure 6. Share of organisation's research publications published in open access**




*Source: RPO survey, Q42, Q44, Q46, Q48, Q50, Survey question: "Specifically, how strongly do the Secondary Publication Right provisions in your country affect the following: Share or total number of your organisation's research publications published in open access?" n=64.*

An absolute majority of RPO respondents who stated that SPR had at least a moderate impact on their organisation indicated that the effect was not financial – the size of the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs did not change. The RPOs that did experience budgetary changes as a result of the SPR reported that the increase in budget allocated to cover open access publishing costs was more substantial than the increase in budget allocated to subscriptions to journals and costs related to access to knowledge.

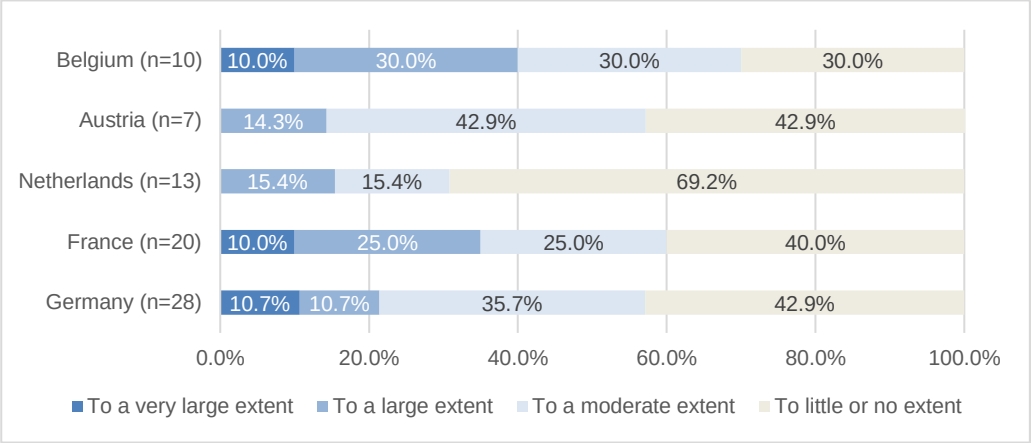
**Figure 7. Impact of SPR provisions in the five SPR countries on various factors**




*Source: RPO survey, Q42, Q44, Q46, Q48, Q50, Survey question: "Specifically, how strongly do the Secondary Publication Right provisions in your country affect the following" (answer options provided in the figure), n=64.*

For SPR provisions to be useful for researchers, **the clarity of the conditions under which SPR may be applied is important.** While Germany, Austria, France, and Belgium specify precise public funding requirements, embargo period, or the version for which the rights are granted under the SPR, **the open-ended definitions in the Dutch SPR cause uncertainty for researchers** and limit its applicability. Consequently, only around 30% of researchers from the Netherlands who were at least somewhat familiar with SPR found it impactful, compared to 60-70% in other countries (see Figure 8 below). Conversely, several responses mentioned the need for more open-ended formulations to include different types of scientific output, such as conference proceedings, which are particularly relevant to, for instance, computer science.

**Figure 8. The impact of SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research**




*Source: Researchers' survey, Q27, Q31, Q35, Q39, Q43, Survey question: To what extent do the Secondary Publication Right (SPR) provisions in your country impact the way you publish, access, disseminate and enable others to reuse your research? n=78.*

**Clear provisions in the SPR were considered essential for the relevance of SPR** for RPOs. Aspects frequently mentioned in the RPO surveys and interviews concern the collaboration of researchers from different countries and the validity of SPR outside the country of the legislation. It is unclear whether this law also applies to foreign publishers or if the signed publishing agreement names another country as a jurisdiction. RPO representatives from Belgium commented that researchers are afraid of legal actions when using SPR while collaborating with authors from other countries or publishing in journals of publishers in other countries. This observation links to the fear of using SPR mentioned above.

RPOs are expected to provide guidance to researchers on SPR provisions, RPO survey findings suggest. Researchers are unsure of their rights and are afraid of copyright claims, which leads them to seek time-intensive legal consultation. During the interviews, it was explained that Dutch universities have come together to provide clarity for researchers and commit to open access using SPR. This approach had a significant impact on the number of articles published in Dutch open repositories.

*In 2015 – despite the government's preference for the gold route[66] – the green route to open access received important legal support. In 2019, a pilot project was launched by the UKB[67] to support authors who wanted to make use of secondary publication right. Guidelines were developed on what 'a reasonable period' [of embargo] would be (6 months) and which version of the 'short academic work' could be shared (the version of record). Over the course of the year, more than 600 researchers participated, and more than 2 800 publications were made open access through this pilot project. Despite the fact that publishers have expressed concerns about the Taverne Amendment, no formal take-down notices have been reported, which emphasises the value of these kinds of legal provisions in at least three ways:*

- *Providing a fallback option in cases where other routes to open access are not available yet;*
- *Facilitating open access to other formats other than journal articles;*
- *Enabling retrospective open access.*

*Many universities in the Netherlands are considering how to embed the Taverne Amendment in their institutional policies. In its 2020 letter to the Minister of Education, Culture and Science, the VSNU advocated for a review of the Taverne Amendment in such a way that it would support the zero-embargo sharing of papers and would allow sharing with an open licence to make it a worthy instrument for Plan S[68] compliance[69].*

Dutch RPOs' action for OA from: *Advancing open access in the Netherlands.*

Researchers' survey respondents, asked about positive and negative examples of the impact of SPR provisions, were the most critical about the embargo length, with several respondents from the Netherlands expressing the need for clarification of the "reasonable period" definition contained in the Dutch legislation. Furthermore, Dutch respondents, similar to a group of German and French respondents, highlighted that the embargo period was too long. A respondent from Belgium noted that despite SPR enabling open access, the embargo period of 6 months is still too extended to comply with the Horizon Europe requirements, that is to provide immediate open access to peer-reviewed publications. Despite differences in embargo periods across countries and disciplines, **the need for sooner provision of SPR was expressed by respondents from all fields.**

The imposed embargo period in SPR, especially when the length of the embargo period is 12 months, has raised concerns among RPO respondents, too. Some 72.4% of RPO survey respondents from Belgium and France, where the embargo varies between 6 and12 months and 87.8% of respondents from Germany and Austria, where the embargo period is 12 months, reported the need for a shorter embargo period. The extended embargo is criticised for making SPR irrelevant in some subject areas, with concerns that articles might become outdated by the time SPR is granted. As noted by one respondent, "it is difficult to actually publish something secondarily with the embargo period. One year after the initial publication is usually too late; therefore, in most cases, authors will not use this potential". Notably, this situation also varies from one discipline to another.

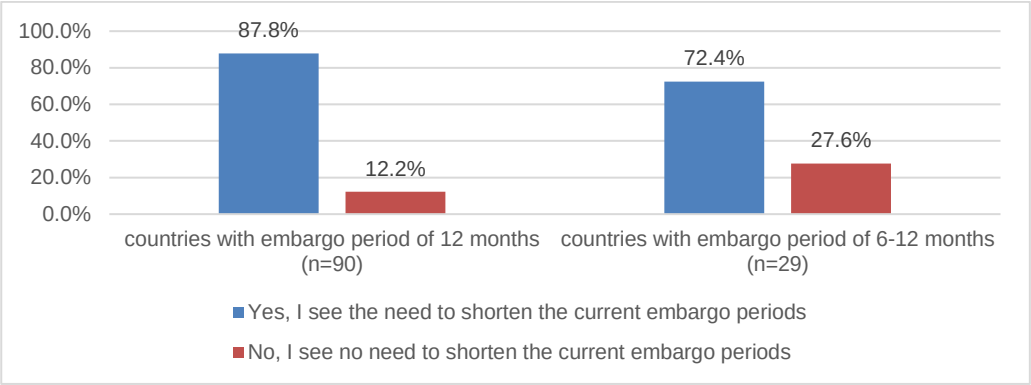
66 House of Representatives of the States General, 2013. Letter from the State Secretary of Education, Culture and Science. Source:https://zoek.officielebekendmakingen.nl/kst-31288-354.html#

67 UKB is a partnership of Dutch University Libraries and The Royal Library of the Netherlands (Koninklijke Bibliotheek).

68 Plan S is an initiative for Open access publishing that was launched in September 2018. The plan is supported by cOAlition S, an international consortium of research funding and performing organisations. Plan S requires that, from 2021, scientific publications that result from research funded by public grants must be published in compliant Open access journals or platforms.

69 Bosman, J, et al. (2019) Advancing Open access in the Netherlands.

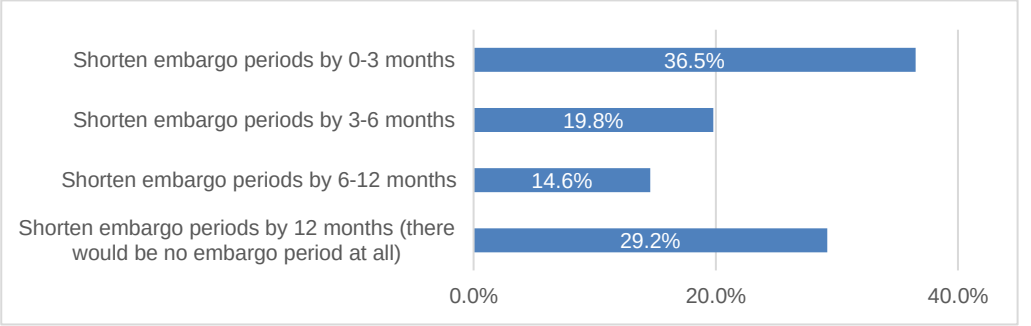
**Figure 9. Need for a shorter embargo period in SPR legislation**




*Source: RPO survey, Q35, Q36, Survey question: To what extent would you see a need for the embargo period to become shorter? n=119.*

The RPO respondents who expressed the need for a shorter embargo period were not unified regarding the preferred shortened length. While most RPO respondents suggested that shortening the embargo period by 0-3 months is optimal (36.5%), a substantial share advocated for removing the embargo period entirely (29.2%). The results may be affected by the varying length of the embargo period across disciplines and countries. Moreover, in some countries, the differences in the length of the embargo period for different disciplines add a layer of complexity in terms of identifying which embargo period applies. One of the respondents to an open-ended question noted: “In practice, it is not always easy to determine the discipline for a particular manuscript and, therefore, the embargo period that applies”. The discipline could depend on the journal where the article is published, the individual manuscript, the author's faculty/department, the discipline the author identifies with and a list of other factors, according to the same respondent.

**Figure 10. Preferred length of embargo periods**




*Source: RPO survey, Q37: “In the previous question, you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most?”, n=96.*

Researchers responding to the survey further reflected that after the end of the embargo period, the SPRs’ usability for the dissemination of research to the public is still constrained. **Effective exploitation of SPR, in some cases, requires an accessible repository infrastructure.** A respondent to the open-ended question from Germany acknowledged that while the impact of self-archiving is modest, there is a lack of a central repository where publications could be archived. French respondents complimented the usefulness of such a repository – HAL - in France. Several respondents were asked about examples of the impact of SPR on publications access and reuse and noted the benefits of institutional repositories for research dissemination.

*HAL is the "green heart" of the French open access infrastructure. Currently (September 2019), the repository contains more than 1.9 million items, mostly articles (55%) and conference papers (30%) but also book chapters (9%), dissertations (5%) and other text and data files in all disciplines. 32% of the items are document deposits, and the other 68% are records, i.e. metadata without text or data files. Like its American model, the arXiv e-prints service, the HAL repository was initially designed on the principle of direct communication among researchers to facilitate and accelerate the exchange of scientific results even before they are published in a journal or book. With time, in particular, after the signature at the Academy of Sciences on 2 April 2013 of the "Partnership Agreement in favour of open archives and the shared HAL platform" between French universities and research organisations, HAL has become a kind of national institutional repository, a "shared national infrastructure hosting institutional archives or towards which other institutional archives are firmly invited to release their content"[70].*

Other respondents to the researchers survey proposed that publishers must be in charge of making the research public, referring to difficulties tracking the embargo period and insufficiency of the final peer-reviewed manuscript accepted for publication – also known as Author Accepted Manuscript (AAM) for quoting and effective exploitation. "The publishers' rights are still too strong if compared to the share of work done by the author", a respondent noted. Therefore, either shifting the responsibility of secondary freely accessible publication to the publisher or easing the confinement to the author accepted manuscript in SPR is desired, according to researchers survey respondents.

In the survey, **86.7% of RPOs indicated a need for the provision of SPR for the final peer-reviewed version – also known as Version of Record (VoR).** A respondent explained that one big challenge when implementing SPR is the permission for secondary publication being limited to the author's accepted manuscript version (AAM). In some cases, authors believe that the circulation of several versions harms the effective dissemination and exploitation of research; therefore, they do not wish to share an AAM and see the need to rely solely on VoR. Only the version of record allows for consistent citations and quotations with accurate page numbers. Hence, implementing an EU-wide SPR that permits sharing the version of record seems advisable for RPOs.

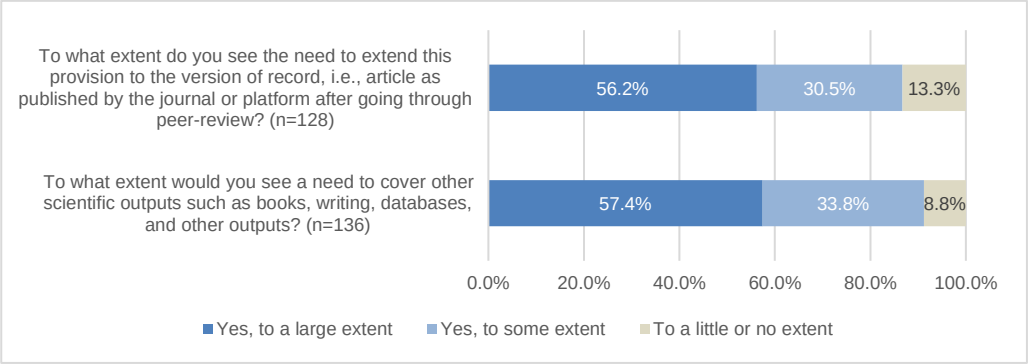
A respondent to the RPOs survey noted: *While authors should always retain copyright to their material, I believe that research institutions should be allowed to re-publish all publications produced by their employees in their respective institutional repositories. This would safeguard long-term accessibility to our collective knowledge production.*

More than 90% of RPOs survey respondents considered the need to cover other scientific outputs than those covered by their current national SPR, which is limited to journal articles in the five countries that have adopted SPR already. As indicated by an interview respondent, there is consensus among RPOs that SPR should be provided for all scientific output. However, when it comes to books, uncertainty arises. On the one hand, according to the same respondent, books should be included because they serve the same purpose as articles. On the other hand, promoting the availability of books via controlled digital lending[71] could be a preferred option because publishers could still make money by selling books to libraries.

70 Schopfel, J, et al. (2019) Going Green. Publishing Academic Grey Literature in Laboratory Collections on HAL.

71 Controlled Digital Lending is a practice that allows libraries to lend out digital copies of copyrighted works in their collections under certain conditions. This concept is based on the principle of "own to loan," meaning that a library can lend out a digital version of a physical book it owns in a controlled manner, similar to how it would lend out the physical book itself.

**Figure 11. Need to extend the scope of national SPR legislation**




*Source: RPO survey, Q32, Q38, Survey question: "Your country's current Secondary Publishing Right framework limits its scope to 'articles published in journals', and author accepted manuscripts. To what extent would you see a need for the following?", n=136.*

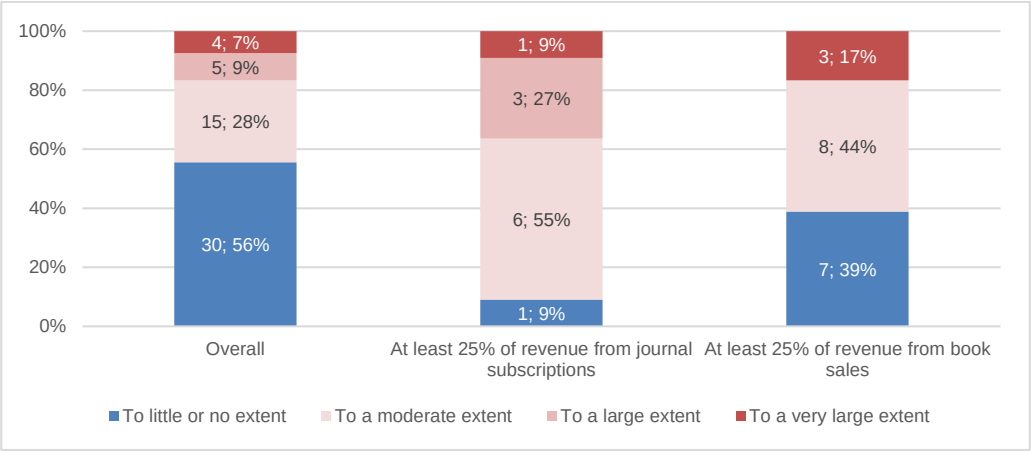
### Publishers' perspective

The majority of publishers' respondents from the SPR countries, regardless of revenue source, perceive little to no impact from SPR provisions. This suggests that a substantial portion of organisations do not consider these provisions to be a major factor affecting their operations. A moderate extent of the impact is acknowledged by 28% of respondents, indicating that a portion of publishers recognises some influence of the SPR provisions, but it is not perceived as overwhelming.

Publishers with at least 25% of their revenue coming from journal subscriptions are more likely to acknowledge a moderate impact. A minority of publishers, particularly those with journal subscription revenue, perceive a large or very large impact, suggesting that certain publishers within this category experience notable consequences. Publishers with at least 25% of their revenue coming from book sales are more evenly split between little to no impact (44%) and a moderate extent (39%)[72].

72 The analysis breakdown by other types of outputs does not show meaningful results due to a very small sample size.

**Figure 12. Impact of the SPR provisions on publishers**




*Source: Publishers' survey, Q35: "Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?", n=54.*

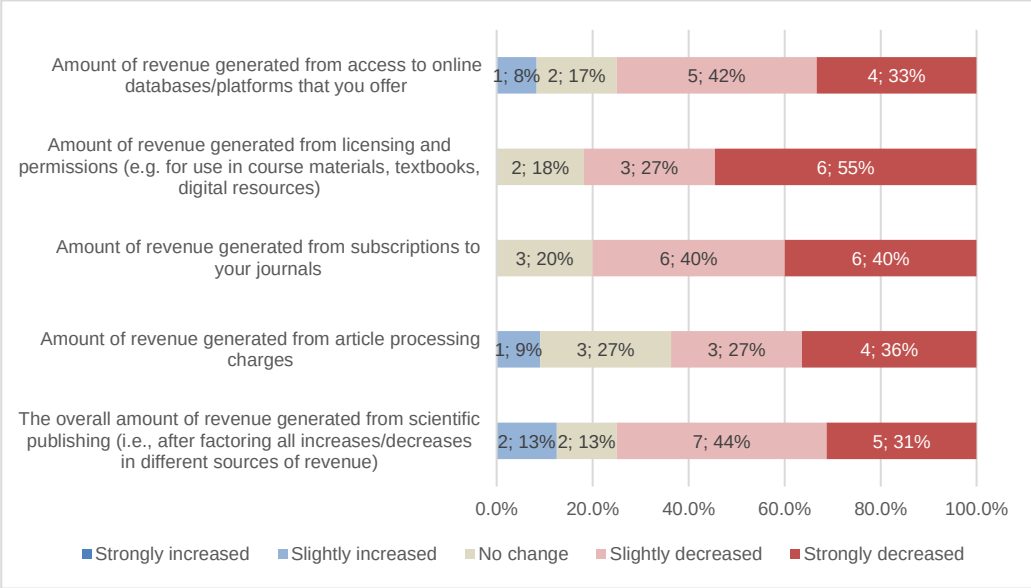
In total, 44.4% reported that the SPR provisions in the five EU Member States (Austria, Belgium, France, Germany, and the Netherlands) impact their organisation at least to a moderate extent. Of those who reported seeing an impact of SPR, 70% indicated that their overall revenue decreased due to the SPR provisions.

The amount of revenue from Article Processing Charges (APCs) was reported to have decreased for 7 respondents (63.6%). In total, 11 respondents replied to this question, which allows us to assume that the rest of the sampled respondents did not find this source of revenue significant to their organisations.

A total 80% of respondents reported a decreased amount of revenue from subscriptions, 81.8% reported a decreased amount of revenue from licensing and permissions and 75% reported a decreased amount of revenue from Online Databases/Platform.

Overall, we see that most respondents who notice SPR's impact report a decrease in revenue. Nevertheless, such findings must be treated with reservations. The sample size is very small, and more importantly, as discussed above, most respondents reported that SPR had little or no impact on their organisations.

**Figure 13. Impact on publishers of SPR in five EU Member States, aspects related to revenue**

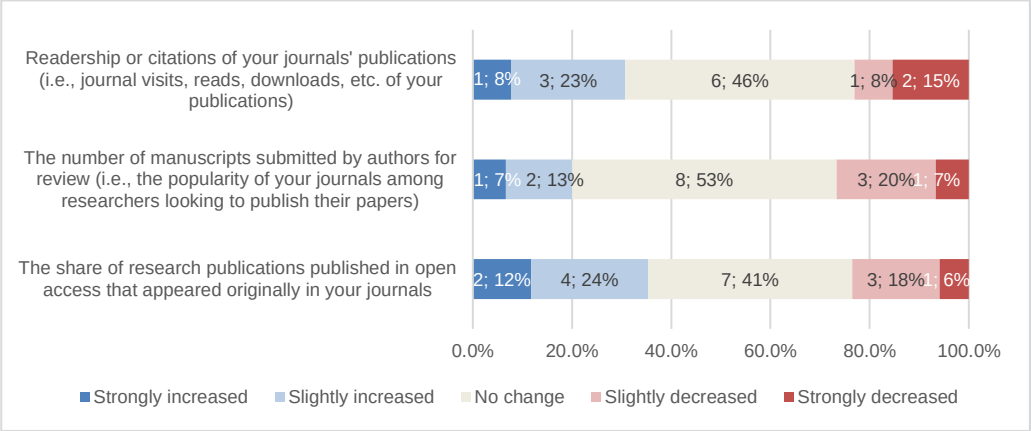



*Source: Publishers' survey, Q36: "In your opinion, did the Secondary Publication Right provisions in the five EU Members (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following", n=16.*

As with the revenue analysis, it is important to note that the question presented below was answered by a very small sample (of 17). The overall trend in the responses suggests a mixed impact of the SPR provisions on the volume of scientific publishing. There is a perceived positive impact on the share of research publications published in open access. Nevertheless, more publishers claim that the number of manuscripts submitted for review decreased rather than increased.

Most respondents (77%, or 10 in total) reported either no change or a positive impact on the readership or citations of their journals' publications. According to the respondents, this indicates that the SPR provisions might not have significantly harmed the visibility or impact of their journals' content.

**Figure 14. Impact on publishers of SPR in five EU Member States, aspects related to the volume of scientific outputs**

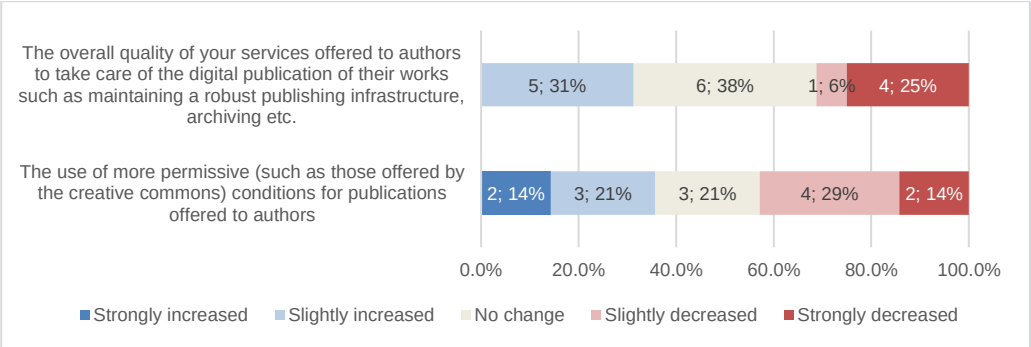



*Source: Publishers' survey, Q36: "In your opinion, did the Secondary Publication Right provisions in the five EU Members (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following", n=17.*

Among the effects of SPR, we also explored the use of more permissive conditions for publications offered to authors. A combined 35% reported an increase in the use of more permissive conditions, such as those offered by Creative Commons licences. A smaller share of 33% indicated that there was no change. This might imply that a number of publishers either maintained their existing conditions or ensured greater rights and flexibility in how their works are used.

In addition, the quality of services offered to authors was explored. Out of all publishers who claimed that the introduction of SPR had at least some moderate impact on their organisation, only 5 respondents out of 16 (31.3%) reported a slight or significant decrease in the quality of their services. Again, these findings are based on a rather small sample; nevertheless, this is a positive finding, indicating that most publishers either maintained or improved their service standards.

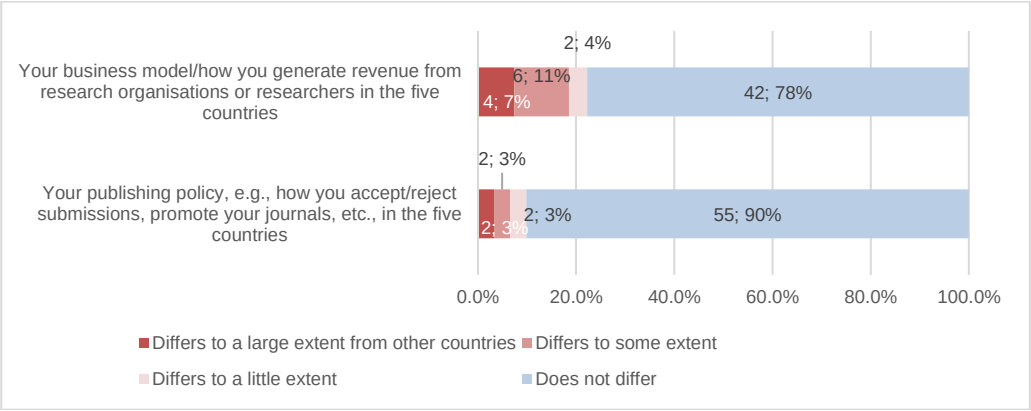
**Figure 15. Impact on publishers of SPR in five EU Member States, aspects related to interaction with authors**




*Source: Publishers' survey, Q36: "In your opinion, did the Secondary Publication Right provisions in the five EU Members (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following", n=16.*

In addition, the survey underscores the publishers' commitment to a consistent and adaptable approach across diverse geographical contexts, even in the face of regulatory changes introduced by SPR legislation in specific EU Member States. The **findings point to a concerted effort by publishers to maintain uniformity in their operations, likely driven by the desire for standardised practices, compliance with industry trends, and adaptability to local regulations.** The limited reported differences may stem from nuanced adjustments to accommodate regional variations but do not suggest a radical departure from established publishing norms.

**Figure 16. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries**




*Source: Publishers' survey, Q37: "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Right (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?", n=36.*

As discussed above, a few publishers reported negative changes to their revenue or business model as the result of SPR legislation. In addition, all publishers were asked to reflect on their further reservations about the SPR provisions. Their responses showcase a range of considerations, including the potential impact on subscriptions and financial sustainability, embargo period preferences, and concerns about academic freedom.

In the open responses to the survey, some **publishers expressed concerns about subscription cancellations as content becomes freely and immediately available through alternative platforms**. This is expected to have financial implications. On the other hand, respondents who are already publishing with full open access express no reservations about Member States introducing secondary publishing rights. In addition, concerns were also raised about potential confusion and the loss of added value for the publisher if the secondary publication includes the Version of Record (VoR) rather than the author accepted manuscript (AAM).

When it comes to the **embargo period, in their open responses some respondents suggest that it should depend on how fast the research field is progressing.** In some cases, it should be extended up to 5 years, especially in subject areas that do not move as fast as certain others. In some cases, shorter embargo periods are sufficient for publishers to make money.

*A common perception of the interviewed publishers and publisher associations was that different research areas may have valid reasons for wanting a different length for an embargo. For instance, one interviewee noted an example of the London Mathematical Society. When you are dealing with mathematics, then the [embargo] does have to be 12 months [because of longer relevance of findings compared to medicine where advancement occurs rapidly]. But then again, if you are coming to something in healthcare or health, they might have a different position. It depends on what the researcher community is.*

Some publishers expressed reservations that SPR should remain an author's right rather than an author's duty. There is an emphasis on maintaining the distinction and not making it an obligation. Setting obligations may conflict with academic freedom and copyright. The need to keep SPR as a faculty, respecting researchers' choices, was emphasised. On the other hand, there is another side to this argument. Keeping SPR as the right and not an obligation would be beneficial to publishers' financial interests as not all authors would opt to claim their secondary publication right.

In addition, publishers were asked to suggest any changes to the existing SPR regime to support public policy goals aiming at open access and availability of scientific publications. The responses reflect a range of recommendations and considerations related to open access, embargo periods, discipline-specific differences, legal clarity, academic freedom and administrative requirements. A summary of the suggested improvements is provided in Table 9.

**Table 9. Publishers recommendations on how to support Open Access availability of scientific publications**

| Suggested improvement | Details and to which country[73] of operations the suggested improvement is associated to |
|---|---|
| Support for open access Models | France: The suggestion of the S2O (Subscribe-to-Open) model as a way to promote open access is mentioned. This model involves subscription-based journals transitioning to open access when a sufficient number of subscribers is reached. |
| Embargo Period Considerations | Germany: Recommendations are made regarding the embargo period. Some respondents suggest either abolishing the regimes or extending the embargo period to 5 years, especially in slower-moving scientific disciplines. Others propose allowing the secondary publishing of the published version after a specified period (e.g. 6 months to 1 year).<br>France: Suggestions include considering the copyright of a scientific publication to fall under the public domain within a specific timeframe (e.g. 20 years) after publication. |
| Clarity in Legislation | Netherlands: The recommendation is made for the Dutch Secondary Publication Rights regime to clarify that it does not necessarily apply to the Version of Record (VoR). This emphasises the importance of clear and unambiguous legal language to avoid misunderstandings.<br>France: There is a cautionary note about the potential negative perception of open science if deposit requirements are perceived as administrative constraints. |
| Academic Freedom | France: A perspective is shared that current and future legislation should not encroach on academic freedom. |
| Encouraging Researchers to deposit their research in repositories | France: The importance of helping researchers understand the significance of Secondary Publication Rights is highlighted. Encouraging researchers to deposit articles in public repositories after the embargo period is emphasised. |

*Source: Publishers' survey, Q39: "To support public policy goals aiming at open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in [your country] that you would recommend", n=10.*

### 1.2.3. Views on the provisions of a potential EU-wide Secondary Publication Right legislation

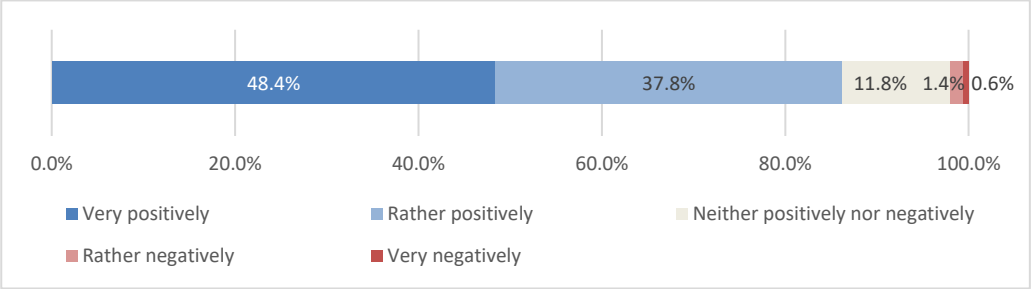
**Researchers and RPO's perspectives**

As illustrated in Figure 17, most RPOs participating in the survey (86.2%) have a positive view of the potential introduction of an EU-wide SPR. The support was even stronger for countries that had already introduced SPR (93.1%). The breakdown by country shows that only in three countries was the share of rather positive or very positive views below 70% - Slovakia (68.8%), the UK (68.2%), and Poland (67.7%). Half of the respondents who expressed a negative view (2%) were non-European countries, signalling potential concerns about the compatibility of SPR with the legal framework of countries outside the EU. An RPOs respondent who expressed a negative view of the EU-wide SPR elaborated:

73 There were no suggestions coming from publishers from Austria and Belgium.

*One RPO survey respondent noted: I believe this would need to be fully harmonised across the EU and EEA to be effective. SPR suggests that authors (and potentially their current employing organisation) will bear responsibility for handling permissions and, if so, risk increasing workloads and administrative burden and impact authors disproportionately, and there may be variability in terms of responses to permission requests, which may make permission clearance more complex. Theoretically, it may be possible for authors to refuse permission selectively and risk non-inclusivity and inequality.*

**Figure 17. RPOs' attitudes toward the potential introduction of EU-wide Secondary Publication Right legislation**




*Source: RPO survey, Q29: "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?", n=498.*

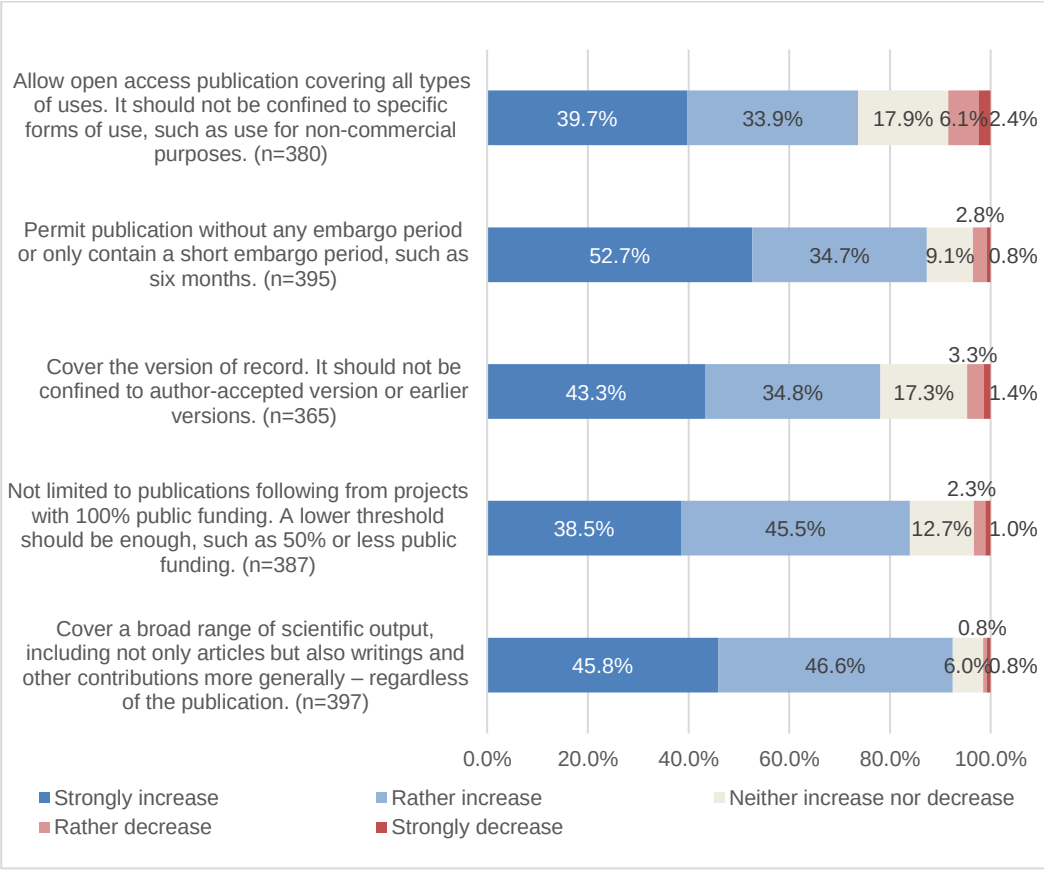
RPO representatives participating in the survey endorsed that the extension of rights provided by SPR[74] compared to the provisions of existing national SPR legislations would positively contribute to immediate open access. Across all extended rights, the proportion of respondents who believe there would be neither an increase nor a decrease in open access is relatively small, ranging from 1.4% to 17.9%. Those who believe these extended rights would decrease open access are even fewer, with the highest percentage at 8.5% for the least supported feature and the lowest at 1.6% for the most supported feature. A total 92.4% of respondents believe that SPR should cover a broad range of scientific output, including articles, writings, and other contributions (see Figure 18). Likewise, RPO representatives were positive about the short embargo period (87.4%), low threshold for public financing (84%) and coverage of the version of record (78.1%). More than a half of respondents expressed that no embargo period or only a short embargo period would have a strong positive effect on the immediate provision of open access, while for the other features the share of RPOs that indicated a strong increase was around 40%.

*One RPO survey respondent noted: I think that just the existence of some percentage of public funding should allow the scientific publication to be open. Of course, from the policy, political, and political economy perspective, it will be very problematic. But it will give a clear message. And we cannot pretend that we can make all the changes by securing the publishing economy.*

74 Extension of rights provided by SPR compared to the provisions of existing national SPR legislations refer to: allowing Open access publication covering all types of uses; without any embargo period or only a short embargo period; covering version of record; covering lower threshold than 100% public funding; covering a broad range of scientific output.

The respondents were relatively sceptical about the positive effect of allowing SPR without confinement to non-commercial use – 8.8% believe it would decrease the provision of immediate open access, while 17.9% indicated neither positive nor negative effect. Nevertheless, the share of RPOs suggesting a positive impact of no confinement to specific forms of use is prevailing (73.6%). Interview respondents expressed their opinion that open access is for scientific purposes, which, in essence, is non-commercial. If you publish in a commercial context, you are in competition with your publisher, which, in their opinion, should not be allowed.

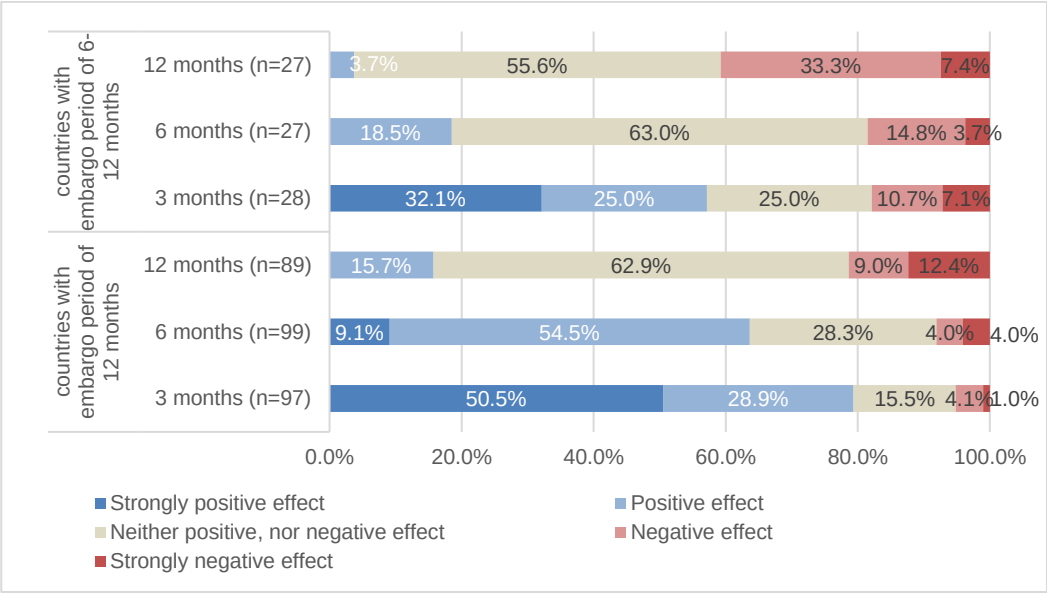
**Figure 18. Features of an EU-wide Secondary Publication Right legislation and their impact on immediate open access**




*Source: RPO survey, Q31: "To what extent do you believe the following features of the potential Secondary Publication Right would increase or decrease the provision of immediate open access to publicly funded research, assuming that they are implemented across the EU?", n=397.*

The RPO survey respondents from countries that have already introduced SPR were asked to share their views on the effects a change of embargo period would have. The responses clearly suggest a negative relationship between embargo length and potential positive benefits. A positive effect from an embargo period of 12 months expressed by 3.7% of respondents from France and Belgium increases to 57.1% for a three-month embargo period. Austrian, Dutch, and German respondents aligned the benefit of 12 months to 15.7%, which increases to 79.4% for a three-month embargo period. Setting the embargo period at 6 months was perceived much more positively by respondents from countries in which the current embargo period is 12 months than by respondents from countries with 6-12 months embargo periods (63.5% and 18.5%, respectively).

**Figure 19. Impact of different embargo periods on organisational goals**




*Source: RPO survey, Q33, Q34, Survey question: "The current Secondary Publication Right legislation in your country has an embargo period of 12 months or 6-12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals?", n=127.*

Overall, specific licensing arrangements[75] are perceived as an acceptable alternative if the EU-wide SPR is not achievable, as long as they contribute to accessibility to research findings. Respondents to open-ended questions mention an appreciation for the simplicity and flexibility that collective licensing offers. It is seen as a more straightforward, familiar mechanism for RPOs that can reduce administrative burdens and simplify access to intellectual resources, especially for smaller research organisations with limited resources. Some RPO respondents to the survey believe that licensing arrangements are efficient in aspects which SPR fails to provide, namely immediate open access and consistent citation possibility.

Nevertheless, a substantially larger share of RPOs report SPR as the preferred solution due to the democratisation of access to all research and guaranteed affordability. Respondents expressed concerns about the transparency of collecting institutions[76]. They were referring to the fact that institutions often make the system more complex by adding new layers rather than safeguarding it.

As noted in open-ended questions, *publicly funded research is using taxpayer money - these funds should not be funnelled to collecting societies. Academics are paid as part of their contract and do not receive any remuneration from publishing articles in journals as the norm. It is entirely inappropriate that more public money should be spent to buy access to materials we have funded the creation of.*

75 Such as extended collective licensing (collecting societies offer umbrella licenses covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open access publishing).

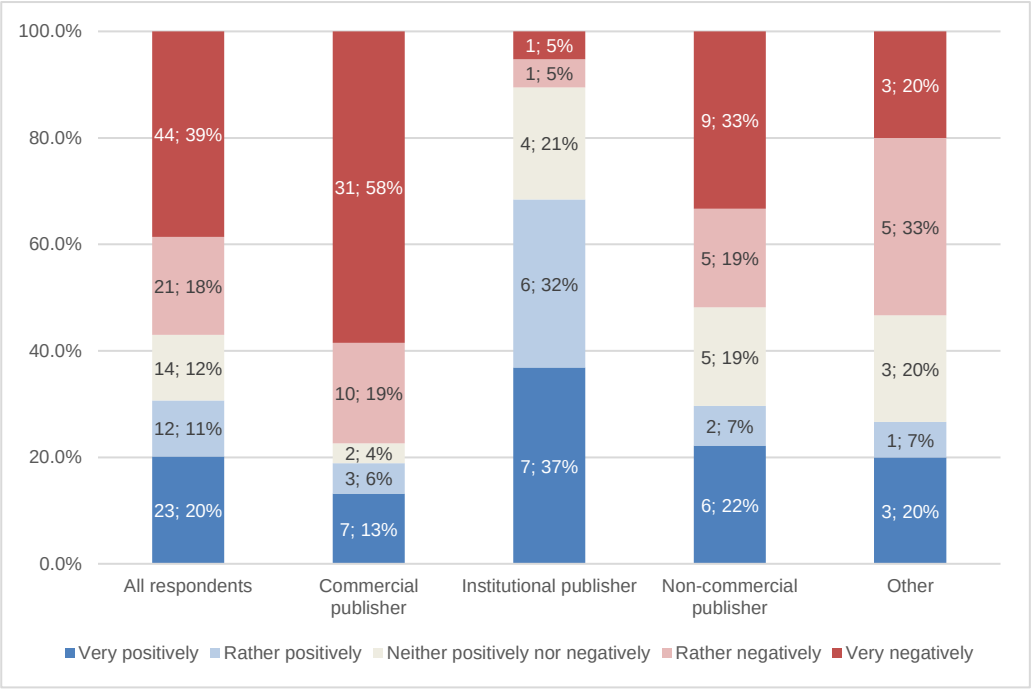
76 In the context of scientific publishing, "collecting institutions" typically refer to organizations that gather, preserve, and sometimes publish research outputs and data.

Unlike alternative proposals that involve payments to publishers, SPR might not involve additional financial burdens, aligning with the idea that publicly funded research should lead to affordable open access. In general, respondents admit that alternative solutions to SPR are easier to implement and have less copyright-related burden for RPOs. However, they express concerns about the cost of current open access models, which these solutions do not address.

**Publishers' perspective**

**Around 57% of publishers who responded to the survey expressed a negative view toward the potential introduction of an EU-wide SPR.** As discussed in the analysis below, the negative views might be rooted in concerns about potential disruptions to existing business models and revenue streams. On the other hand, 31% of respondents view the potential introduction of an EU-wide SPR legislation favourably. Approximately 12% of respondents indicate a neutral stance, neither positively nor negatively viewing the potential introduction of the legislation. This suggests a segment of the surveyed publishers may be adopting a cautious or wait-and-see approach, indicating a level of uncertainty or reserved judgment. The diversity of opinions underscores the complexity of the issue. Publishers may have varying expectations, concerns, or interpretations of how the legislation could impact their operations, business models, and the scholarly publishing landscape.

**Figure 20. Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (breakdown by commercial, institutional, and non-commercial publishers)**




*Source: Publishers' survey, Q22: "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?", n=61. Note: numbers in the bars are presented in the following format: "number of responses; percentage share".*

**The survey results also show that there is a divide in the opinions about potential EU-wide SPR legislation across the different types of publishers**. While commercial publishers expressed overwhelmingly negative sentiments towards the potential introduction of the EU-wide SPR legislation, no institutional publishers indicated a negative attitude about the potential introduction of such a legislation. When it comes to non-commercial publishers – around a third were negative about the potential legislation.

In the survey, the negative perceptions were further explored. Overall, the respondents expressed a variety of concerns related to the potential consequences of introducing an EU-wide SPR, particularly in the context of its financial impact on publishers, business models, and the broader landscape of academic publishing.

Some respondents, particularly in disciplines with limited funding for gold open access, expressed concerns that an EU-wide SPR could undermine existing models, making it more difficult to generate income from subscriptions and transformative publishing agreements. The introduction of an EU-wide SPR was seen as a threat to publishers' ability to recoup investments in services to the community, including production, hosting, peer review processes, and maintaining ethical and scientific integrity. The expansion of SPR at EU level was predicted to harm smaller academic publishers considerably, putting pressure on their business models that rely on paid subscriptions.

Some of the respondents also draw attention to the nuance in the type of scientific outputs. An EU-wide SPR may have a stronger negative effect on the publishing of books and databases. Some respondents argued that EU-wide SPR, particularly for certain types of publications like books, would draw away a significant source of revenue that helped offset the original cost of publication. They cautioned that if authors retain re-publishing rights it could lead to some works not being published at all. In addition, publishers argued for the need for exclusive rights for an extended period (e.g. 10 years) to amortise their investments, especially for databases.

Concerns were also raised about the potential misuse of republished or reused content. The spread of misinformation and misinterpretation of findings by non-experts could lead to changes in the meaning of the initial publication and harm various stakeholders, including authors, editors, and publishers. Similar concerns were raised during the interviews too.

*One interviewed publishers' association elaborating on transformative agreements stated that there is no one-size-fits-all approach to SPR. Instead, he explains that transformative agreements are tailored to specific contexts, customer needs, and market dynamics, resulting in a wide range of solutions and negotiations across different countries and even within individual nations.*

As shown above, the potential effects on publishers' business models are one of the most frequently mentioned concerns among the respondents. In the survey, we tested specific potential features of an EU-wide SPR and expected effects on publishers' business models. As presented in Table 10, the publishers' views conflict when broken down by separate SPR features. Some publishers, ranging from 19.5% to 27.9%, believed that none of the discussed features would necessitate a major modification to their existing business models. However, alterations in any of these features are **most likely to lead to a substantial restructuring of their business models**. The greatest impact would occur if an EU-wide SPR allowed open access publications covering all types of uses (including for commercial purposes), as most publishers indicated it will require a fundamental reshaping of business models (70.1%) or some degree of changes to be made (10.3%).

**Table 10. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (all types of publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model |
|---|---|---|---|
| A harmonised Secondary Publication Right **would cover a broad range of scientific output**, including not only articles but also other works – regardless of the publication. | 52 (61.9%) | 10 (11.9%) | 22 (26.2%) |
| A harmonised Secondary Publication Right would **not be limited to publications following from projects with 100% public funding**. A lower threshold would be enough, such as **50% or less public funding**. | 49 (57.0%) | 14 (16.3%) | 23 (26.7%) |
| A harmonised Secondary Publication Right would cover the **version of record** (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author accepted version or earlier versions. | 57 (66.3%) | 5 (5.8%) | 24 (27.9%) |
| A harmonised Secondary Publication Right would permit publication **without any embargo period or only contain a short embargo period, such as six months**. | 54 (62.1%) | 10 (11.5%) | 23 (26.4%) |
| A harmonised Secondary Publication Right would allow **open access publication covering all types of uses**. It would not be confined to specific forms of use, such as use for non-commercial purposes. | 61 (70.1%) | 9 (10.3%) | 17 (19.5%) |

*Source: Publishers' survey, Q24: "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?", n=87.*

Institutional publishers stand out when looking at the same data broken down by publisher type. The absolute majority of the institutional publishers who answered this question stated that none of the SPR potential features presented in Table 11 would require any substantial changes to their current business model Nevertheless, it is important to keep in mind that the sample is very small, with only nine institutional publishers. The breakdown of answers from other types of publishers follows the general trend presented in the table below.

**Table 11. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (Institutional publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model |
|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication. | 2 (14.3%) | 4 (28.6%) | 8 (57.1%) |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | 2 (15.4%) | 2 (15.4%) | 9 (69.2%) |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author accepted version or earlier versions. | 2 (15.4%) | 1 (7.7%) | 10 (76.9%) |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as six months. | 3 (23.1%) | 1 (7.7%) | 9 (69.2%) |
| A harmonised Secondary Publication Right would allow open access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes. | 4 (33.3%) | 2 (16.7%) | 6 (50.0%) |

*Source: Publishers' survey, Q24: "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?", n=14.*

Contrasting outcomes emerge when comparing publishers with low (less than 0.5 million and 2.4 million euro) and high (more than 10 million euro) revenues. As depicted in Table 12, the necessary fundamental changes due to the adoption of various features of an EU-wide SPR vary for low-revenue publishers, ranging between 41% and 47.5%, depending on the specific feature. In contrast, for high-revenue publishers, this range is significantly higher, spanning from 76.5% to 93.8%.

**Table 12. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models, breakdown by revenue**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| Low revenue publishers | | | | |
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication. | 16 (42.1%) | 6 (15.8%) | 16 (42.1%) | 38 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | 16 (41.0%) | 7 (17.9%) | 16 (41.0%) | 39 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author accepted version or earlier versions. | 18 (45.0%) | 4 (10.0%) | 18 (45.0%) | 40 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as six months. | 17 (41.5%) | 6 (14.6%) | 18 (43.9%) | 41 |
| A harmonised Secondary Publication Right would allow open access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes. | 19 (47.5%) | 8 (20.0%) | 13 (32.5%) | 40 |
| High-revenue publishers | | | | |
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication. | 13 (81.3%) | 1 (6.3%) | 2 (12.5%) | 16 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | 13 (76.5%) | 2 (11.8%) | 2 (11.8%) | 17 |

| | | | | |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author accepted version or earlier versions. | 15 (88.2%) | 0 (0.0%) | 2 (11.8%) | 17 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as six months. | 13 (81.3%) | 1 (6.3%) | 2 (12.5%) | 16 |
| A harmonised Secondary Publication Right would allow open access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes. | 15 (93.8%) | 0 (0.0%) | 1 (6.3%) | 16 |

Source: Publishers' survey, *Q24: "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?", n=87.*

Similar views to the overall results were expressed by interviewed publishers, below we present an opinion of a small publisher's perspective on a potential EU-wide SPR.

*One interviewee representing a small publisher raised concerns about the potential impacts of an EU-wide SPR. Such publisher highlighted the difference between the author's manuscript and the published version, expressing willingness to accept a delay or embargo for the final published version but advocating for fair remuneration if [immediate] open access is enforced.*

As for large revenue publishers, the difference between the author accepted manuscript was also underlined in the survey open-ended answers:

*Publisher believed that applying an EU-wide SPR to the final published version, or the Version of Record (VoR), should be excluded. The VoR represents a significant editorial effort from both the publishing and journal editorial teams. Making VoRs accessible, immediately or post-embargo, could severely impact their ability to recover the investments made in developing and publishing these works, thereby hindering their mission to disseminate high-quality research globally. However, they noted an exception for cases where the work is made open access through financial compensation, such as article processing charges (APC), transformative agreements, or other sales arrangements, allowing the VoR to be immediately available open access on their platform.*

Such a split in views implies the need for careful consideration and balancing of interests. Policymakers may need to navigate the diverse needs and concerns of publishers to ensure that any legislative measures strike a fair balance between fostering open access, protecting intellectual property, and sustaining viable publishing models.

When it comes to the perceived effect on the revenue, **respondents almost unanimously agree that open access via repositories to scientific publications resulting from public funding is unlikely to lead to increased revenues for publishers**. Nevertheless, there is an almost equal split between those who think there will be no effect on the revenue and those who think that such a provision would lead to a decrease in revenue.

Six scenarios were tested. The peer-reviewed manuscript accepted for publication after an embargo period is the scenario that publishers saw as the least harmful to their revenue, as only 31.6% of respondents think this scenario would lead to some (22.4%) or a large (9.2%) decrease in their revenue. When compared to other scenarios, immediate open access for the published version may lead to a decrease in revenue by the largest share of respondents (60%). Nevertheless, such a share is just marginally larger than in other scenarios.

**Table 13. Expected changes to publishers' revenue depending on the version to which open access is allowed via repositories (all types of publishers)**

| | Large increase in revenue | Some increase in revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue |
|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period (n=98) | 2 (2.0%) | 4 (4.1%) | 61 (62.2%) | 22 (22.4%) | 9 (9.2%) |
| To the peer-reviewed manuscript accepted for publication immediately (n=101) | 3 (3.0%) | 4 (4.0%) | 38 (37.6%) | 30 (29.7%) | 26 (25.7%) |
| To the peer-reviewed manuscript accepted for publication immediately under open licences (n=99) | 5 (5.1%) | 2 (2.0%) | 37 (37.4%) | 14 (14.1%) | 41 (41.4%) |
| To the published version after an embargo period (n=97) | 5 (5.2%) | 1 (1.0%) | 34 (35.1%) | 17 (17.5%) | 40 (41.2%) |
| To the published version immediately (n=100) | 8 (8.0%) | 1 (1.0%) | 31 (31.0%) | 3 (3.0%) | 57 (57.0%) |
| To the published version immediately under open licences (n=97) | 8 (8.2%) | 0 (0.0%) | 32 (33.0%) | 5 (5.2%) | 52 (53.6%) |

*Source: Publishers' survey Q25: "What change of revenue would you expect to your organisation if open access was allowed via repositories to scientific publications resulting from public funding in one of the following ways (provided in the table)".*

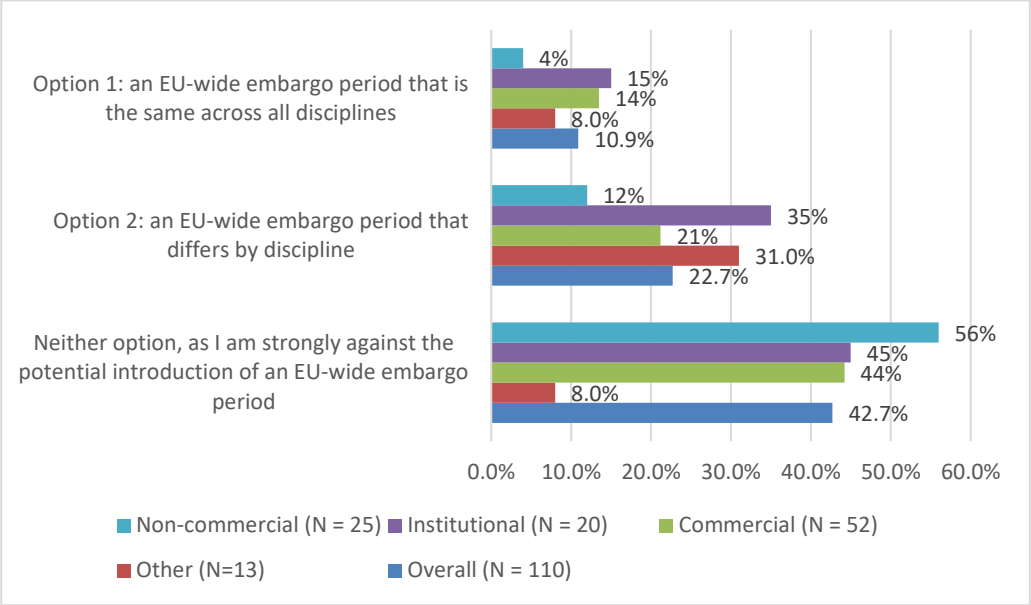
**Around a half of respondents to the publisher's survey (42.7%) indicated strong opposition to the potential introduction of an EU-wide embargo period**. This signals considerable resistance to the idea of introducing an EU-wide embargo period for SPR, regardless of the specific design options.

In contrast, as illustrated in Figure 21, among those who favour the introduction of an EU-wide embargo period, 10.9% of publisher respondents expressed a preference for a standardised embargo period that would be consistent across all disciplines. This suggests a view that uniformity in embargo periods could simplify the regulatory landscape and provide a standardised approach to SPR. Around twice as many survey respondents (22.7%) favoured an EU-wide embargo period that varies based on discipline[77]. This perspective acknowledges the potential diversity in research fields and suggests that different disciplines might require different embargo periods based on their specific characteristics. This is in line with our interview findings[78].

77 Publishers' survey Q26.

78 Publishers, responding to this question, also had an option to insert their own "other" answer option. The analysis of "other" find in the annex 5, under question 26.

**Figure 21. Publishers' preference on the length of a potential EU-wide embargo period, breakdown by publisher type**



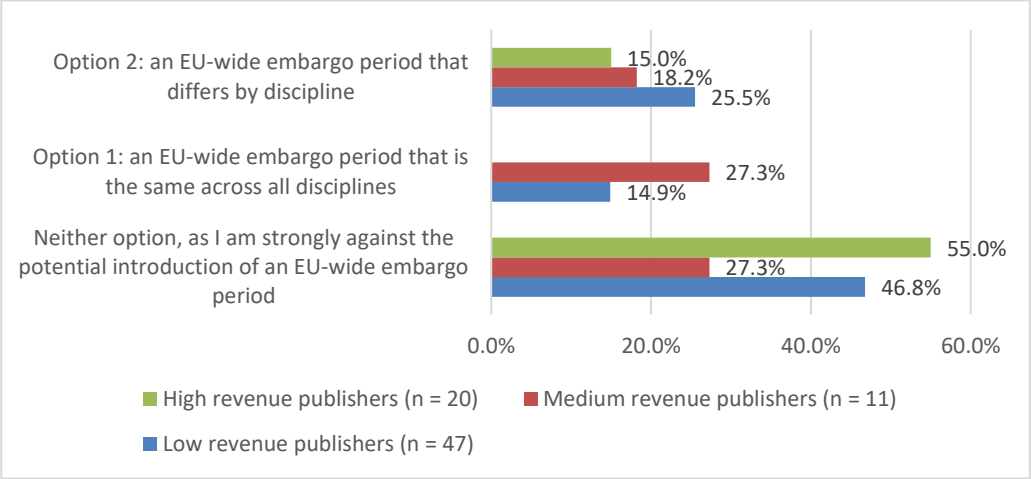

*Source: Publishers' survey, Q26: "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months, and it is between 6 and 12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?".*[79]

In terms of opinions correlated with revenue levels, publishers across all three revenue categories predominantly chose the response, "Neither option, as I am strongly against the potential introduction of an EU-wide embargo period." This sentiment was shared by 46.8% of low-revenue publishers, 20.0% of medium-revenue publishers, and 57.1% of high-revenue publishers[80].

79 "Other" type of publishers include all other non-specified groups of publishers. Among our respondents, among others, they were NGOs, Museums, Private foundations, etc.

80 Publishers, responding to this question, also had an option to insert their own "other" answer option. The analysis of "other" find in the annex 5, under question 26.

**Figure 22. Publishers' preference on the length of a potential EU-wide embargo period, breakdown by publisher's revenue level**




*Source: Publishers' survey, Q26: "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months, and it is between 6 and 12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?".*

**Alternatives: extended collective licensing and lump sum remuneration as suggested by publishers in a survey**

The survey also explored the attitudes of respondents toward alternative mechanisms, specifically extended collective licensing or lump sum remuneration regimes[81], as substitutes for introducing an EU-wide SPR. The almost equal split in responses highlights a balanced division of opinions within the surveyed publishers. There is no overwhelming majority favouring or opposing the proposed alternative mechanisms.

Around one third of respondents (29%) expressed a positive view, indicating that they find specific licensing arrangements, such as extended collective licensing or lump sum remuneration regimes, acceptable for their organisations. This suggests a willingness among a significant portion of the surveyed publishers to consider alternative approaches to an EU-wide SPR. Respondents, in their open answers, express support for collective licensing or lump sum remuneration, emphasising the potential simplification of negotiations with institutions. This is seen as a viable alternative that could benefit both publishers and authors. Respondents also expressed a positive stance towards contributions to non-profit scholarly journals in any form of grant or payment at the EU level to ensure the survival of such journals. There is also an acknowledgement that offering a fixed income promotes a balance between ensuring fair remuneration and supporting open access initiatives.

81 For further information on extended collective licensing or lump-sum remuneration regimes please follow to Policy Option SPR-06: licensing and remunerations schemes

Survey respondents also suggested a viewpoint that funding should not be limited to the most open CC-BY licence, especially in the humanities, where authors may have reservations about giving up their rights. This reflects a nuanced perspective acknowledging the diversity of publishing needs. The fragility of the economics of humanities and social sciences publishers is further highlighted in the open responses. There is an emphasis on the potentially fatal impact of even a slight reduction in revenue. Also, there is a concern that pre-determined lump sums could put significant pressure on the diversity of scientific output in this scientific field.

On the contrary, 52% of respondents indicated a negative stance. They indicated that specific licensing arrangements or lump sum remuneration regimes would not be acceptable to their organisations as alternatives to an EU-wide SPR. This signifies that a considerable portion of respondents are resistant to these proposed mechanisms. The themes of fairness, quality assurance, business model effectiveness, and diversity in publishing types were central to the perspectives expressed.

There is a notable concern that the described arrangements might become a "cash cow" for big publishers, potentially contributing to the erosion of academic biodiversity. The recognition that commercial publishing entities are primarily enterprises, not services supporting academia, underlines scepticism about their motives. Multiple respondents also shared the view that lump sum remuneration regimes are unfair to both authors and publishers. The challenges of defining parameters for lump sums are acknowledged, and there is a concern that such arrangements may not adequately consider the needs of, and be fair for all stakeholders.

Respondents also raised their concerns about the potential revenue loss under an open access regime, with a mention of the reliance on private readers/customers for a significant portion of revenue. There is a worry that reduced revenue could result in fewer books and publications being published in general, with lower quality, which would negatively affect both publishers and the academic community. In addition, some respondents expressed their support for a model where journals are financed by article processing charges (APCs) paid by authors or their organisations.

Finally, some respondents argue that their current business model supports a high level of research in their field, emphasising minimal research funding from the government or other sources for publication support. They express a belief that their business model is not broken and works well for their constituencies.

**Alternatives suggested by surveyed publishers**

In addition to sharing their views on collective licensing and lump sum remuneration, the publishers from non-SPR countries shared their ideas on other legislative interventions or practices that could be envisaged to facilitate the uptake of open access and open science. A substantial number of publishers suggested simply more funding to open access publishing, non-commercial publishers, and libraries. In addition, mandatory open licensing for Author Accepted Manuscripts was suggested. It was also suggested that mandatory open access mandates could apply in the context of third-party funding, with an emphasis on verifying compliance. However, there were also some concerns about the limited coverage of publication costs if mandatory open access for publications funded by third party is implemented.

In addition, some more creative alternatives were proposed. A few respondents suggested a harmonised data repository and information campaigns to encourage depositing manuscripts and adopting open science practices. This could be done through a centralised EU-wide mega-repository for scientific products, which is believed to streamline access and dissemination of research outputs. Such services are currently being developed via the European Open Science Cloud (EOSC), which will be an ecosystem of national and thematic nodes, enabling researchers across Europe to share, access, manage and reuse research articles and datasets. The potential of EOSC is analysed in Chapter 2 of this report about the impact of the EU's data and digital legislation.

Additionally, another alternative includes fostering dialogue between stakeholders, economic and legal assessments, and support for scholar-led scholarly communication ecosystems modelled following the example of successful initiatives in Latin America.

Latin America has been a hub for innovative initiatives in the realm of scholarly communication, particularly in the context of open access publishing and access to scientific knowledge. Here are a few examples of initiatives in Latin America.

**Scielo (scientific electronic library online):** Scielo is a prominent open access publishing platform that originated in Brazil. It has expanded its network to include numerous Latin American countries. Scielo provides a collection of open access journals that adhere to high-quality publishing standards, contributing to the visibility and accessibility of research in the region.

**Redalyc (red de revistas científicas de América Latina y el Caribe, España y Portugal):** Redalyc is a repository and indexing service for Latin American scientific journals. It focuses on providing open access to research articles from a wide range of disciplines. Redalyc aims to strengthen the visibility and impact of Latin American scientific production.

**Amelica (open knowledge for Latin America and the global south):** Amelica is an initiative that seeks to contribute to the development of open knowledge infrastructure. It advocates for cooperative and non-commercial publishing models, aiming to enhance the visibility and accessibility of Latin American scholarly output.

Some interviewed publishers suggested that transformative agreements are a preferable alternative to the introduction of an EU-wide SPR, citing several reasons:

*Interviewees representing publisher stakeholder group indicated that transformative agreements have had a more significant impact on market accessibility and content availability compared to the SPR. The interviewees refer to encouraging open access (OA) numbers in Europe, particularly through the OA dashboard[82], suggesting that transformative agreements contribute positively by providing access to the version of record, which is not fully achieved by the SPR. They note that SPR implementation isn't clearly visible and might not be widely adopted by researchers, potentially leading to the publication of accepted manuscripts instead of Gold OA articles, which allow access to the version of the record. This situation reinforces the use of subscription models by authors and grants access to non-final versions of articles, suggesting that transformative agreements are increasingly becoming a dominant business model in the research sector.*

82 STM OA Dashboard. Source: https://www.stm-assoc.org/oa-dashboard/

### Added value from publishers and the potential effect of SPR

Scientific publishers serve as intermediaries for researchers to share their findings. Through a peer review process, these platforms ensure the quality and scholarly integrity of disseminated knowledge. The value added by scientific publishers extends to comprehensive editorial efforts, including organising peer review and copyediting, which enhance the precision and clarity of published works. Furthermore, these entities contribute significantly to the archiving and preservation of scientific knowledge, functioning as custodians of intellectual heritage and maintaining a repository for future research endeavours. Additionally, some publishers actively promote open access initiatives, fostering the more inclusive and accessible dissemination of scientific information. In essence, the multifaceted contributions of scientific publishers play a vital role in shaping a collaborative and dynamic research environment. In

Table 14, we summarise the services that respondents/publishers listed in the survey as services they provide to the authors.

**Table 14. Extra services provided by publishers**

| Type of service | Details |
|---|---|
| Editorial and Production Services | Peer Review: Many publishers emphasise the importance of rigorous peer review conducted by experts in the field, ensuring the soundness and quality of the research.<br>Editing and Typesetting: Services include copy editing, language editing, formatting, and typesetting to ensure high-quality presentation and readability.<br>Image Licensing: Publishers often handle image licensing and ensure compliance with copyright standards.<br>Rights Cleaning: This involves managing copyright and ensuring that publications adhere to ethical and legal standards. |
| Metadata Management and Dissemination | Metadata Services: Publishers provide services related to metadata management, including metadata creation, maintenance, and delivery to enhance discoverability.<br>Dissemination: Assistance in distributing publications to scientific indices, high-visibility platforms, and databases for increased exposure. |
| Marketing and Promotion | Marketing and Promotion: Publishers engage in marketing and promotional activities to raise the visibility of individual articles and the hosting platform. This includes promotion through media, booksellers, and specialised press.<br>Publicity and Marketing: Publishers offer professional marketing, sales, and fulfilment services to enhance the visibility of publications. |
| Platform Maintenance and Accessibility | Platform Services: Investment in hosting platforms with tools for authors to quantify the reach and impact of their research at an article level.<br>Accessibility: Publishers invest in platform accessibility, recognising the practicality for researchers in having a dedicated and accessible resource in their discipline. |
| Support throughout the Publishing Process | Continuous Support: Publishers provide dedicated and consistent support from submission to publication, ensuring that authors, reviewers, and editors receive excellent customer service.<br>Ethical Policies: Alignment with ethical policies, checking for plagiarism, and ensuring correct statements about data availability and contributor roles. |
| Financial and Institutional Support | Financial Support: Publishers invest in hosting platforms and develop new models to advance open access (OA), promoting both the hosting platform and individual articles.<br>Institutional Support: Some publishers act as institutional publishers, providing support for formal quality assurance, peer review, and metrics. |
| Educational and Counselling Services | Publishers offer education and resources for authors, including counselling on various aspects and stages of academic publishing. |

| | |
|---|---|
| Quality Assurance and Reputation Building | Quality Assurance: Publishers contribute to quality assurance through editorial support, reputable platforms, and adherence to publication standards.<br>Reputation: The reputation of journals is highlighted as a valuable aspect, contributing to the trust placed in published content by readers and authors. |
| Specialised Services for Historical Sources | Some publishers highlight their expertise in producing critical text editions of historical sources, providing support with specialised libraries, and efficient typesetting and printing processes tailored to historical and archaeological research. |

*Source: publishers' survey, Q31: "As scientific publishers, what extra services do you provide to authors that enhance the value of their publication compared to self-publishing?", n=52.*

**Some publishers foresee changes to the services they provide.** As the introduction of the EU-wide SPR is seen as a potential disruption to the traditional business models of journal publishing, some expressed concerns about how the legislation could undermine proven business models and reduce the perceived value of their services. Publishers anticipate that the introduction of an EU-wide SPR might result in increased fees for services, with authors potentially having to pay for the implementation of the new right. In addition, some responses suggest that the introduction of the right could accelerate the move toward a fully Gold open access publishing model.

Some respondents are concerned about **potential negative impacts on cultural diversity, economic efficiency, and freedom of expression, expressing concerns about how the legislation might affect private publishing houses and the sustainability of the system**. Publishers expressed concerns about the potential infringement on the contractual freedom of authors and publishers, with an EU-wide SPR legislation possibly limiting copyright and contractual choices.

On the other hand, a handful of publishers expressed a commitment to maintaining their high-quality service, which is often personalised and discipline-specific. They emphasised the importance of not compromising service quality, even if revenue might be affected. **In addition, open access publishers, particularly those already using CC-BY licences, stated that an EU-wide SPR would not impact their services significantly.**

### 1.2.4. The current copyright policy and the challenges faced by stakeholders

*Copyright policies and challenges*

The surveys of RPOs and publishers identified a complex landscape of copyright policies, ownership, and the challenges faced within the realm of scientific knowledge.

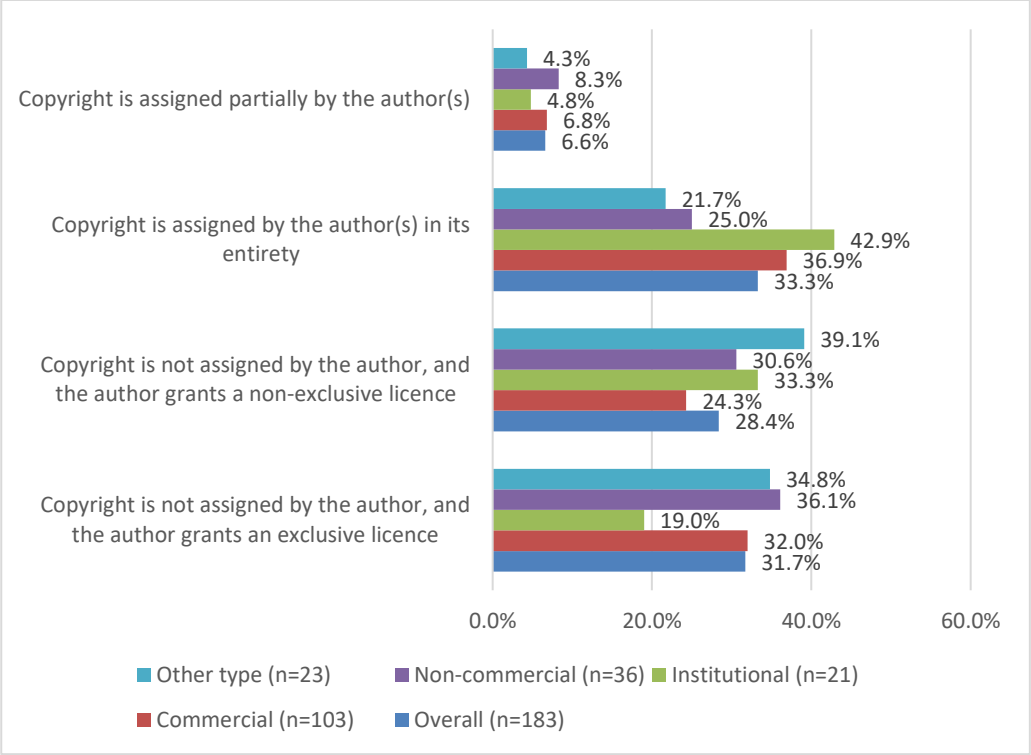
**Copyright policies within RPOs and publishers**

Among the surveyed RPOs, 47.3% indicated they had a uniform copyright policy across the organisation, with 12.3% having a policy that varies across faculties/departments/units within their organisation and 40.4% having no such policy (Q15, RPO survey).

When examining publishers' contractual practices regarding their approach to publishing agreements (see Figure 23), it was found that **33.3% of publishers require that authors assign copyright in its entirety,** 28.4% do not require assignment of copyright but instead have the author grant a non-exclusive licence, 31.7% adopt a model where copyright is not assigned, and the author grants an exclusive licence, and 6.6% require that copyright is partially assigned by the author (Q18 Publishers' survey).

**Commercial and institutional publishers predominantly adopt the model where publishers require that authors assign copyright in its entirety (36.9% and 42.9%, respectively).** Non-commercial publishers, in contrast, adopt practices which require that the author grants an exclusive licence (36.1%).

**Figure 23. Contractual practice identifying the organisation's approach to publishing agreements**




*Source: Compiled by the study team using the data from publishers' survey, the question in the survey was "Which contractual practice identifies your organisation's approach to publishing agreements?".*[83]

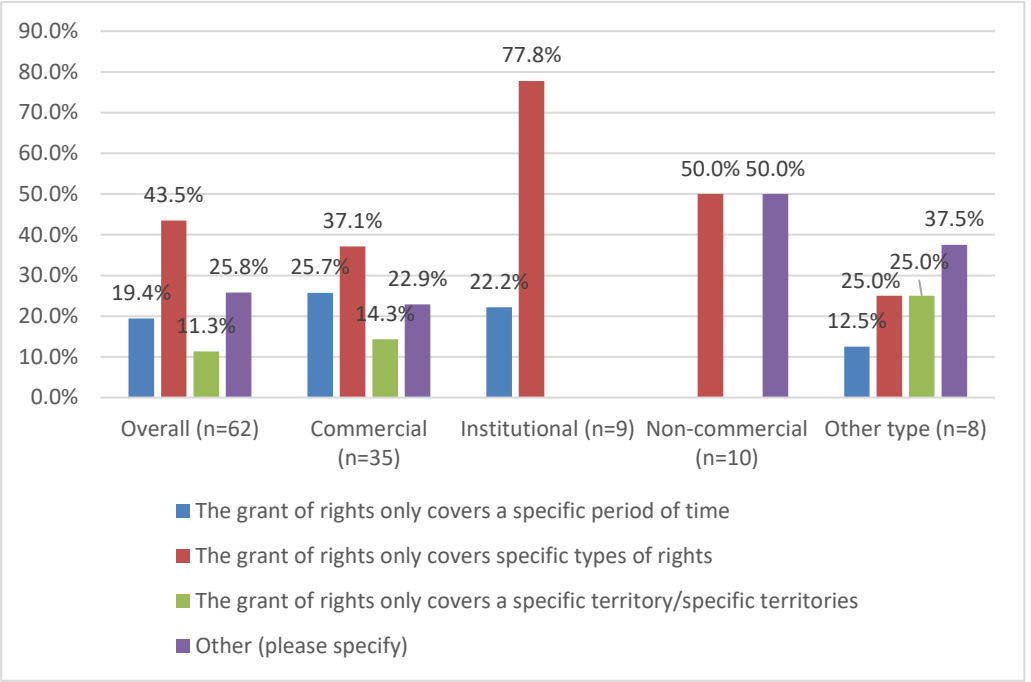
Publishers who reported that they require authors to either partially or fully relinquish copyright were further investigated regarding the details of cases where authors retain rights (refer to graph 24, Q20 Publishers' survey). **The survey results indicate that, on the whole, the most common approach among publishers is to grant only for specific types of rights (43.5%).** Opting for rights covering only a specific period of time was selected by 19.4% of publishers, and 11.3% selected that the grant of rights only covers a specific territory[84].

After examining the **practices of different types of publishers**, it is evident that **the predominant approach among all publishers is limiting the grant of rights to a specific type of rights.** Commercial publishers exhibit this practice at 37.1%, institutional publishers at 77.8%, and non-commercial publishers at 50.0%.

83 "Other" type of publishers include all other non-specified groups of publishers. Among our respondents, among others, they were NGOs, Museums, Private foundations, etc.

84 Publishers, responding to this question, also had an option to insert their own "other" answer option. The analysis of "other" find in the annex 5, under question 20.

**Figure 24. The instance(s) the author retains rights**




*Source: Compiled by the study team using the data from publishers' survey, the question in the survey was "In case the grant of rights from the author to your organisation remains limited, please specify in which instance(s) the author retains rights".*

Furthermore**, in one interview with a commercial publisher, it was indicated that smaller publishers (those that are not the biggest 5 scientific publishers) cannot offer open access as they do not have a big enough budget to keep the content open for researchers. This is caused by two challenges: piracy and tight library budgets.** First of all, as mentioned in the interview, if the researcher has no subscription, then some researchers go to piracy platforms. Second, the library has a limited budget, and usually, it is taken by the big five publishers. Consequently, the library has a very small budget to distribute among the rest of the publishers, and more often than not, they do not subscribe to the small publishers. The suggestion mentioned in the interview is to introduce a fair price for all publishers.

During an interview with a representative from an RPO, a **forward-looking prediction emerged.** The interviewee anticipated a **forthcoming trend where researchers would increasingly collaborate between themselves and transition toward non-commercial publishing houses.** Emphasising that the impact factor remains a significant but not exclusive factor, the interviewee suggested that this shift could accelerate rapidly. Notably, they pointed out that obtaining a journal identification number and orchestrating the DOI identifier process is relatively straightforward, with the administrative costs being present but significantly reduced compared to traditional avenues. This perspective underscores the potential for a dynamic transformation in the scholarly publishing landscape, driven by collaborative efforts and a revaluation of established norms.

*Ownership Dynamics*

**Ownership of copyright emerged as an important factor.** The survey highlighted a near-equal split, with 50.3% of RPOs positioning the organisation as the original copyright holder. Conversely, 49.7% attributed the primary rights ownership to the researchers themselves, emphasising the diverse approaches prevalent within organisations (Q16, RPOs survey).

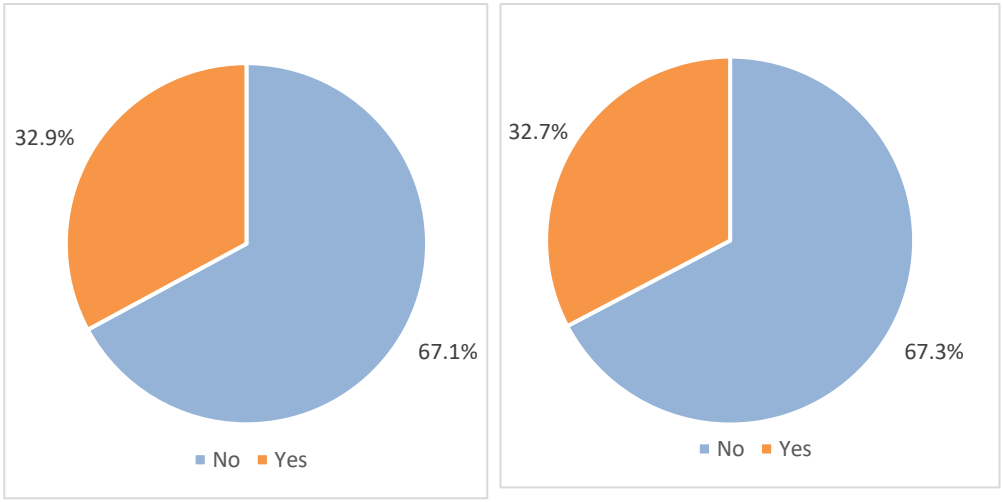
**Transfer of Rights and open access**

**Only 15.0% of RPOs facilitated a non-exclusive transfer of rights from researchers to the institution**, aiming to provide open access to scientific publications. Only 2.6% of RPO respondents indicated that they restrict any transfer of rights from researchers to scientific publishers, as this would result in a potential barrier to dissemination (Q17, RPO survey).

**Challenges encountered by the research community and publishers**

A total of 32.9% of RPO respondents noted that they face specific challenges due to copyright law when **trying to access and use publicly funded R&I results and data for research purposes** (Q18, RPO Survey). Similarly, 32.7% of RPOs stated that they face specific challenges when **trying to make publicly funded research and innovation (R&I) results and data available in open access due to copyright law** (Q20 RPO survey). See Figure 25.

**Figure 25. Challenges due to copyright law (n=353) (on the left) and challenges related to publicly funded R&I results and data (n=395) (on the right)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Overall, does your organisation face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes?" (left) and "Overall, does your organisation face specific challenges when trying to make publicly funded research and innovation (R&I) results and data available in open access due to copyright law?" (right).*

Challenges encountered by RPOs emerged in the interviews conducted. For example, it was clear that licensing contracts create a power imbalance between rightsholders and educational establishments.

One organisation **emphasised the necessity of implementing measures similar to consumer protection for educational institutions and researchers.** The interviewees stressed the hindrances posed by eBooks, citing publisher control and technological barriers, urging for flexible exceptions aligning with global standards.

Furthermore, some universities highlighted discrepancies between national and EU laws, **pointing out potential conflicts within EU law itself concerning fundamental rights outlined in the Charter of Fundamental Rights of the European Union**[85]. The respondent indicated that "I do, however, find conflict in EU law itself, even in the charter of fundamental rights: Art. 11 freedom of information, Art. 13 freedom of arts & sciences, Art. 14 right to education, Art. 17 right to property, including IP. These rights must be but are not balanced". This imbalance raised concerns about the practical exercise of these rights within the EU framework, especially in relation to copyright.

In contrast, **interviewed publishers disagreed on the note that the copyright law should contain an open-ended clause permitting the use of copyright-protected knowledge resources for all kind of research purposes. Publishers cited concerns over its complexity and the potential lack of clarity for researchers**. They underscored the significance of explicit, well-defined exceptions within copyright law that comply the three-step tests outlined in the Berne Convention.

*Some interviewed publishers indicated that **while they generally support current copyright legislation, particularly highlighting the 2019 Directive on Copyright in the Digital Single Market (CDSM), they said there were challenges with its implementation.** The main **difficulties seem to revolve around the application and execution of the regulations rather than the rules themselves**. They noted that transparency issues hinder their ability to enforce existing rights, especially in the context of AI and the use of copyrighted content. The challenge lies in verifying whether AI models respect opt-out provisions and appropriately handle scientific content during training. There is a concern about the lack of traceability or a clear chain of evidence regarding how AI models use this content, leading to issues of citation, attribution, and understanding of the training methods. This opacity within AI models presents a significant hurdle in enforcing copyright laws and ensuring compliance rather than a fundamental flaw in the legislation itself. The interviewees emphasised that the challenge primarily lies in the effective implementation, transparency, and behaviour of market actors in this context.*

**Impact on researchers**

**The repercussions of the copyright nuances discussed above heavily impacted researchers' access to crucial knowledge resources.** Some 80% encountered obstacles in accessing copyright-protected knowledge resources due to inadequate subscriptions by their research organisations. This issue was also raised during the interviews.

Some 43.3% of researchers faced barriers stemming from a lack of permission from rights owners. Additionally, concerns over copyright led to 20.7% of researchers refraining from text or data mining, while 15.6% withheld knowledge sharing due to these concerns. (Q18, researchers survey).

85 https://www.europarl.europa.eu/charter/pdf/text_en.pdf

Reasons for being unable to obtain permissions for access (Q19, researchers survey) included being unable to pay required access fees (55.8%), not knowing how to contact rightsowners (25.1%), and rightsowners not giving permission (11.7%). In free-text responses on what the researchers did in such situations, some used illegal means (e.g. Sci-Hub), some sought help from the university library, while others just used alternative sources (Q20, researchers survey).

A range of other access issues associated with copyright relating to access and cost, OA and publishing, permissions and reuse, institutional and legal complexity, and teaching and knowledge transfer were also noted and are summarised in Table 15 (Q21, researchers survey):

**Table 15. Challenges due to copyright legislation (open-ended survey responses)**

| |
|---|
| Access and cost issues |
| • The cost of accessing journal papers/articles for micro-SMEs is prohibitively high.<br>• Accessing old publications without paying fees is challenging.<br>• Difficulty accessing papers that do not belong to the subscribed group.<br>• Limited access to papers due to the annual budget for open access charges running out.<br>• Uncertainty about accessing paywalled journal or conference papers, especially when working from home.<br>• Challenges with open access fees of prestigious journals.<br>• Publishing in Gold OA and budget constraints toward the end of the year |
| Open Access and publishing |
| • Concerns about the unlimited embargo for publications without a fee.<br>• Difficulty in engaging stakeholders and sharing research due to copyright concerns and industrial partners' reluctance to publicise case studies and reports. |
| Institutional and legal complexity |
| • Lack of clarity and transparency in copyright legislation, especially for junior scholars.<br>• Non-Disclosure Agreements (NDAs) slowing progress and complicating knowledge transfer.<br>• Challenges in coordinating access to copyrighted data with different requirements.<br>• Balancing the line between using materials within academic affiliations and industry research.<br>• Legal uncertainties and administrative overhead associated with copyright, both restricted and open access. |
| Permissions and reuse |
| • Concerns about the unlimited embargo for publications without a fee.<br>• Difficulty in engaging stakeholders and sharing research due to copyright concerns and industrial partners' reluctance to publicise case studies and reports. |
| Teaching and knowledge transfer |
| • Difficulty sharing materials for teaching, including posting electronic articles in e-learning environments.<br>• Challenges in sharing knowledge resources co-created with other researchers. |

*Source: Compiled by the study team using data from the researchers survey. The question 21 in the survey was, "Apart from the situations described in the previous question, have there been any challenges that you have faced/are facing currently due to the current copyright legislation?".*

A researcher working in the ecology field indicated that the data are not reproducible because of the nature of how they are collected. The problem is that the data are either not shared or there is no request for them to be shared. This led to a situation where researchers cannot reproduce the findings; however, even if the data are shared, it is very important to have surroundings on how it was collected (e.g. what was the sex of the animal, what was the body weight, etc.). Another example was obtaining data where the limitation impacted the research outcomes. The researcher was working on the Horizon Europe project on West Nile virus, a potentially fatal viral disease in humans. The reservoir of the virus, where it lives, is in wild birds. The researcher wants to create an early warning system to forecast outbreaks and mitigate and channel reactions to outbreaks. It is important to know where the birds are and what their interactions with the environment are. For this, the researchers use the Ebirds platform, based in the USA, just because there is easy access to the data. To get access to the European Union, there is the possibility to get the data from the EU ring, but it is expensive to access this data. It is organised in a way that is country-specific; each country requests a separate payment for access. Furthermore, the example of NASA in the USA made all the remote sensing satellite information available to anyone free of charge, and scientists have been able to solve any related problems as they have access to data. In our case, the EU is too heterogeneous, and it is too hard to get stratified access to the data. Then, researchers choose to use the data outside the EU. However, this leads to the situation where the problems that persist in the EU remain unsolved.

**On potential policy changes to enhance the use of copyright-protected knowledge resources for research purposes.**

***RPOs' perspectives***

**As indicated in** Table 16, **the majority (90%) of RPOs voiced support (very strongly or rather accept) for the provision of further guidance to researchers regarding how existing copyright exceptions can facilitate text and data mining**. Moreover, a substantial **81.4% advocated** (very strongly or rather favour) that the copyright law should contain an open-ended clause that **generally permits the use of copyright-protected knowledge resources for all kinds of research purposes** (Q27, RPOs survey).

Additionally, **81.0% of RPOs highlighted the need for explicit provisions elucidating the circumstances permitting researchers to harness copyright-protected knowledge resources**. Some 78.7% supported the idea that lawful access to such resources by one research partner within a consortium should extend to all partners within the consortium, streamlining collaborative efforts (Q27, RPOs survey).

**Table 16. Public policy changes to support the use of copyright-protected knowledge resources**

| | Very strongly favour/ accept | Rather favour/ accept | Neither favour/ accept nor reject | Rather reject | Not support at all |
|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. (n=500). | 239 (47.8%) | 168 (33.6%) | 53 (10.6%) | 31 (6.2%) | 9 (1.8%) |
| Copyright law should contain specific exceptions and limitations covering specific types of use: provisions specifically explain the circumstances in which researchers can use copyright-protected knowledge resources. (n=498). | 203 (40.8%) | 200 (40.2%) | 59 (11.8%) | 29 (5.8%) | 7 (1.4%) |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions. (n=489). | 271 (55.4%) | 169 (34.6%) | 43 (8.8%) | 5 (1.0%) | 1 (0.2%) |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest. (n=491). | 232 (47.3%) | 169 (34.4%) | 54 (11.0%) | 30 (6.1%) | 6 (1.2%) |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. (n=479). | 196 (40.9%) | 181 (37.8%) | 71 (14.8%) | 20 (4.2%) | 11 (2.3%) |

*Source: RPO survey, Q27: "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research?".*

***Publisher Perspectives***

The survey of publishers revealed support **for further guidance for the researchers on the copyright exceptions (Q21, publishers survey)**.

Some 51.0% of publishers expressed a preference (very strongly/rather favour) for receiving additional guidance on existing copyright exceptions related to text and data mining (with 25.4% not supporting this policy change at all) (Q21, publishers' survey). This underscores a desire for enhanced clarity that specifically explains the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisations (42.7%, would very strongly accept or accept 49.2% would rather than reject or not support at all).

**Table 17. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research (all types of publishers)**

| | Very strongly favour/ accept | Rather favour/ accept | Neither favour/ accept nor reject | Rather reject | Not support at all |
|---|---|---|---|---|---|
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation. (n=61). | 9 (14.8%) | 17 (27.9%) | 5 (8.2%) | 7 (11.5%) | 23 (37.7%) |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders (n=59). | 16 (27.1%) | 14 (23.7%) | 7 (11.9%) | 7 (11.9%) | 15 (25.4%) |

*Source: Publishers" survey, Q21: "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?".*

The survey data reveal distinct preferences among low-, medium--, and high-revenue publishers regarding proposed policy changes aimed at supporting the use of copyright-protected knowledge resources for research.

Some 36.8% of low-revenue publishers would very strongly accept that the copyright law should contain an open-ended clause that permits the use for all kinds of research purposes, 5.3% would rather accept, and 36.8% would not support it at all. When it comes to medium-revenue publishers, 14.3% would very strongly accept the open-ended clause provision, and 42.9% would not accept it at all. As for high-revenue publishers, 71.4% would not support the open-ended clause permitting the use of all kinds of research.

With regard to further guidance concerning the TDM, 53% of low-revenue publishers would strongly or rather support this policy change, while 3 (17.6%) would be against it. A majority (75%) of medium-revenue publishers would strongly or rather support this policy change, and 0% would not support it at all. Conversely, 23.1% of high-revenue publishers would strongly support the change for further guidance, while 30.8% would not support it at all.

Concerning various types of publishers and the mentioned policies, the overall patterns mirror those of commercial publishers, who tend to support the possible policy change related to exceptions for text and data mining that further guidance should be provided (45.9% very or rather accept) but predominantly oppose the idea that copyright laws should include specific exceptions and limitations for particular types of use (with 60.9% either rejecting or not supporting it at all). In contrast, institutional publishers are in favour of all the suggested provisions, with acceptance rates ranging from 80% to 100%.

On the least-favoured policy changes, 71% of publishers rather reject or not support at all the possible policy change concerning that the copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. Looking at the level of revenues, 57.9% of low revenue publishers 57.2% of medium revenue and 85.7% high-revenue publishers rather reject or do not support at all this possible policy change. In addition, 70% of publishers expressed disagreement with the notion of granting researchers access to copyright-protected resources behind paywalls (breaking down by revenue, 56.2% of the low revenue publishers, 62.5% of the medium revenue publishers and 71.4% of high-revenue publishers disagree with this policy).

These **findings highlight the complexities and varying perspectives among stakeholders in advocating for policies that support broader access to copyrighted knowledge resources for research purposes.** While there is a notable consensus on some measures, others remain contentious, requiring further deliberation and exploration within the realms of policymaking and scholarly pursuits.

*The general research exception*

The insights gathered from both the survey responses and interviews demonstrate **a shared perspective among RPOs regarding the need for more extensive and harmonised research exceptions in copyright law across countries**. Further explanations and survey data on the research exceptions are provided in Section 1.5.2.

According to interview inputs, differentiating between commercial and non-commercial research within the European Union's (EU), copyright directives tends to create barriers. The distinction can be philosophically justifiable but raises concerns about imposing limitations on future creativity and innovation. Uncertainties arise, especially within universities, where the lines between commercial and non-commercial research are not always distinct. This ambiguity risks hindering innovative ventures that could evolve from research initiatives.

Furthermore, the interviews highlighted **concerns about Article 4 CDSMD, indicating challenges in the treatment of commercial and non-commercial aspects, potentially leading to confusion and restrictions**. Additionally, the absence of clear formulations regarding technological protection measures poses obstacles to swiftly accessing knowledge resources.

Interviewed stakeholders stressed the necessity for a more central consideration of the impact on research and education in EU legislation. They **advocated for exemptions in Article 17 CFR to exclude open access repositories and educational platforms to safeguard research pursuits.**

Some stakeholders noted the **importance of education and research exceptions**, citing issues related to contracts and technological protection measures that often override these exemptions. Europe's copyright regimes were highlighted as lagging behind more modern systems globally, hindering adaptation to rapid technological advancements.

Overall, **the collective perception indicates the need for clearer, more inclusive research exceptions within copyright law.** Stakeholders emphasised the importance of harmonising regulations, with consideration to the impact on research and education, and moving towards more accommodating licensing frameworks to facilitate fair access to knowledge resources.

*Non-commercial use requirement*

**Diverging opinions and complexities emerged among RPOs and publishers concerning copyright laws covering non-commercial research and public-private partnerships**. Researchers were asked if they could choose how others use their research data. A majority (47,0%), reported having some freedom to choose between a few standard licences, such as Creative Commons-By or Creative Commons Non-Commercial (Q55, researchers survey). Furthermore, the researchers were asked to evaluate, on a scale from 1 to 10, the importance of certain provisions, assuming they were implemented in their country (Q25, researchers survey). The provision stating that "The legislation would make it clear that users of my research output can use it freely for all purposes. The use of my open access publications would not be limited to non-commercial use" resulted in a median 8, indicating that most of the researchers would favour the implementation of this provision.

RPOs were provided with various situations and were asked how frequently these occur in their organisations. One scenario involved researchers refraining from using copyright-protected resources because they collaborated with industry partners, and they believed that the use permissions allowed by copyright law no longer applied, as these permissions only covered non-commercial use (Q24, RPOs survey). The responses varied, with 14.1% stating that this situation is very frequent (weekly or monthly), 25.6% finding it somewhat frequent (once every 3-6 months), and the majority, 60.3%, indicating that it is not frequent or does not happen at all.

Turning to another aspect, the survey asked both RPOs and publishers about their views on whether copyright laws should cover not only non-commercial research but also partnerships involving public and private entities (Q27, RPOs survey). A notable share (68.2%) of RPOs expressed approval or a leaning toward accepting this potential change in policy. On the other hand, when publishers were asked the same question, 27.2% showed a positive stance, while 64.4% preferred to reject or not support the idea. Breaking it down by the type of publishers, 15.4% of commercial publishers, 83.3% of institutional publishers, and 44.4% of non-commercial publishers were in favour of this policy change.

In addition, in the open-ended responses, some RPOs mentioned that the term "non-commercial use" is not clear. An example of such a response is provided below:

> *Identifying non-commercial and commercial research isn't straightforward. This means that any copyright laws targeting non-commercial research may not help the organisations they're supposed to. For instance, a publicly-owned university hospital conducting research may need to charge for patient care or special diagnostic services for other healthcare providers. As a result, it might be seen as a commercial entity, or at least worry about being perceived that way.*

Views diverged among publishers, with some advocating for a focus on non-commercial uses to maintain the research-oriented nature of copyright exceptions. Others called for expanding copyright exceptions not only to cover non-commercial research but also public-private partnerships. **Concerns were expressed about open access in commercial contexts, highlighting potential conflicts between researchers and commercial publishers.**

*The TDM provisions*

Surveys conducted with RPOs and publishers showed **that 51% of publishers and 90% of RPOs believe that researchers should be provided with additional guidance on text and data mining exceptions within copyright laws (Q21, publishers survey and Q27, RPOs survey).**

These survey insights confirm concerns shared in interviews. Stakeholders highlighted persistent hurdles and the need for further guidance on copyright exceptions on text and data mining, Delayed implementation of TDM exceptions, notably in countries like Belgium, illustrated ongoing challenges in implementing and adhering to legislation.

The RPO survey respondents expressed concerns regarding the TDM in specific countries.

*One notable issue highlighted is the lack of specificity in the German copyright act's text and data mining clause regarding the extent to which a corpus can be made available for general reuse within the scientific community. Additionally, there was a collective call for explicit permission to reuse content after text and data mining, emphasising the importance of clarity in facilitating such post-mining reuse.*

Another set of concerns revolved around **the limitations imposed on scientific research by current copyright directives and data protection regulations (GDPR)**. Respondents expressed the view that restrictions tied to research results and data protection laws present significant challenges, hindering effective machine learning and robust analysis of large datasets.

This was also voiced in the recent Policy Paper #15[86] by COMMUNIA on using copyrighted works for teaching the machine:

> *Recommendation 2: The EU should enact a robust general transparency requirement for developers of generative AI models. Creators need to be able to understand whether their works are being used as training data and how, so that they can make an informed choice about whether to reserve the right for TDM or not. (p.5, 2023)*

In interviews discussing Article 3 of the CDSM, there was apprehension regarding TDM provisions for scientific research.

*One RPO interviewee highlighted the ongoing challenge of understanding the scope of Article 3 and its application, expressing a reluctance among researchers to use platforms like CrossRef due to concerns over academic and scientific freedom. There's a hesitance towards platforms that might monitor or collect researchers' activities.*

*Moreover, according to interviewees from the RPOs,* ***there is a general ambiguity surrounding TDM exceptions in the context of artificial intelligence (AI).*** *Interviewees stressed the need for clarity in European law regarding TDM exceptions, especially in relation to creating open access models and foundation models, specifically for generative AI. The consensus was the necessity for clearer regulations that clearly delineate permissible actions, fostering an environment where everyone understands the boundaries of their actions within TDM.*

**The RPO interviewee stated that rules need to be more flexible for different research groups**. Globally, according to the interviewee, the EU's stance on copyright laws in comparison to leading nations like Japan and China spotlights the need to align legislative frameworks with technological advancements.

86 https://communia-association.org/policy-paper/policy-paper-15-on-using-copyrighted-works-for-teaching-the-machine/

*One researcher highlighted the difficulties encountered with CAPTCHA, a security measure. While circumventing CAPTCHA could grant access, it also raises concerns about violating technological protection measures deemed illegal in certain jurisdictions like Belgium. This situation forced the researcher to forego access to essential valuable data for their research.*

Nevertheless, despite the current challenges, there is growing recognition of the need for more interpretative leeway within legislative reforms to accommodate diverse research organisations.

*On developing more specific research exemptions*

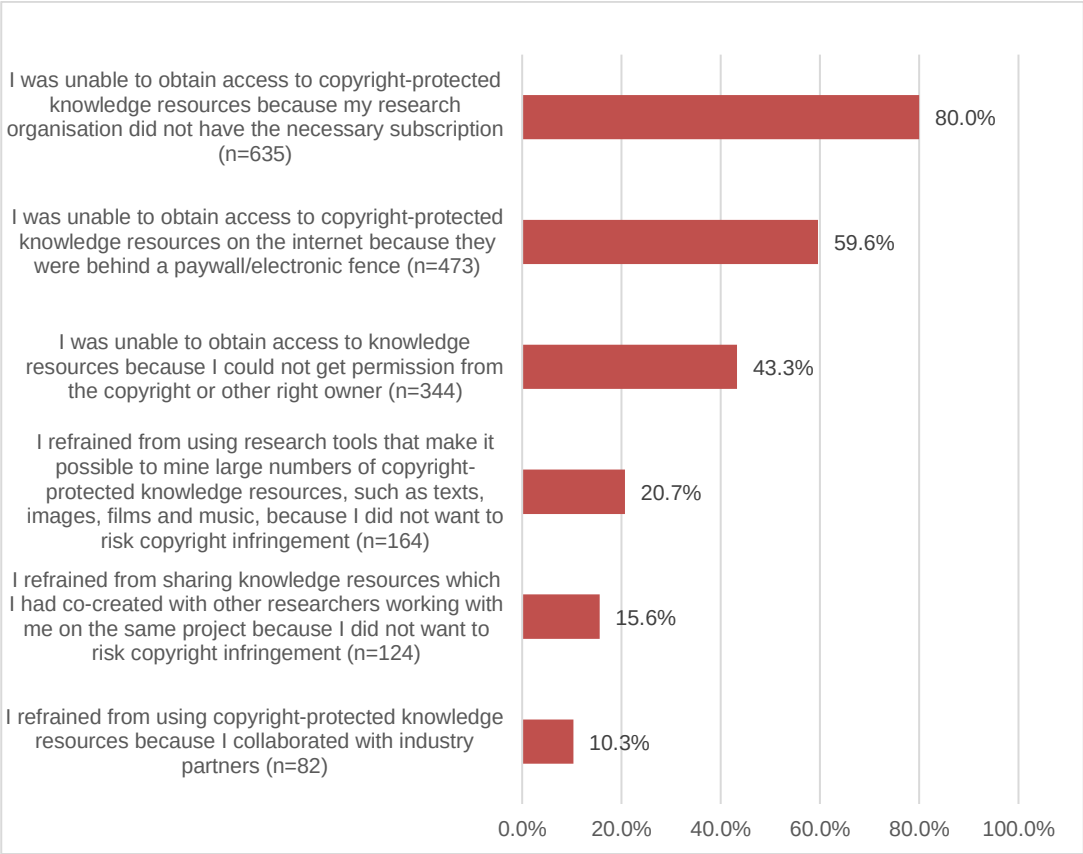
The results from the consultation activities indicate that researchers are faced with multiple challenges, such as limited access to copyright-protected resources due to subscription issues, internet paywalls, and difficulties obtaining permissions from copyright owners. These **challenges underscore the necessity for clearer and more extensive exemptions that enable researchers to access, use, and share copyrighted materials for scientific investigation and research purposes without facing legal constraints.**

Figure 26 illustrates various situations researchers encounter in their careers (Q18, researchers survey). The study presented six situations, allowing respondents to choose multiple options.

The most prevalent situation, chosen by 80.0% of respondents, was researchers being unable to access copyright-protected knowledge resources due to the lack of a subscription by their research organisation. Another common scenario, selected by 59.6% of researchers, involved the inability to access copyright-protected knowledge resources on the internet because they were behind a paywall or electronic fence.

Additionally, 43.3% of respondents indicated facing a situation where they could not obtain access to knowledge resources because they were unable to secure permission from the copyright or other rights owner. In situations where researchers opted not to use research tools enabling the mining of large numbers of copyright-protected knowledge resources, the percentages were as follows: refraining from such tools (20.7%), abstaining from sharing knowledge resources due to copyright infringements (15.6%), and avoiding the use of copyright-protected knowledge resources due to collaboration with industry partners (10.3%).

**Figure 26. List of barriers for researchers to access and share copyright-protected material**




*Source: Compiled by the study team using data from the researchers survey, the question in the survey was Q18: "Overall, have you ever faced one of the following situations in your career?".*

The patterns in situations encountered in researchers' careers are similar for both SPR and non-SPR countries. It is important to note that SPR is a right but not an obligation; thus, similar patterns are more likely. In both SPR and non-SPR countries, the most prevalent situation is the inability to access copyright-protected knowledge resources due to a lack of necessary subscriptions by the research organisation (84.0% and 77.8%, respectively). Following this, researchers commonly faced the challenge of being unable to access copyright-protected knowledge resources on the internet because they were behind a paywall or electronic fence (70.5% and 53.8%). Another shared situation was the difficulty in obtaining access to knowledge resources due to the inability to secure permission from the copyright or other right owner (42.5% and 43.7%, respectively). Situations where researchers refrained from using or sharing data, copyright-protected resources, or research tools were less frequently reported in both SPR and non-SPR countries.

In the open-ended answers, the respondents from RPOs expressed their view that all the exemptions should be ensured, not limiting to TDM or e-learning, as contracts "could nullify the effects of the exemptions, unless it is specifically forbidden by law". One interviewee also reported the specific situation in Croatia:

*In Croatia, there is a system that allows for certain uses without requiring payment or permission, particularly in the context of education and research, some usage by heritage institutions, and accommodations for impaired individuals. Additionally, the country operates a system involving collecting societies, which gather remuneration either from the government for specific uses like public lending or private copying or from private businesses for activities such as commercial copying or other diverse uses of works. This established system has the potential to support various alternatives, including those related to the utilisation of works in generating artificial intelligence results, for instance.*

Interviews with an RPO stakeholder revealed concerns about the complexities of interpreting research exceptions. For instance, the example of a thesis that used images from a press publisher, which led to compensation requests.

*In a specific case, there was an incident involving a master's thesis published in open access that contained images from a press publisher, resulting in the publisher asking for compensation without taking legal action against the university. This situation might become more significant in the future, considering the increasing use of AI to identify online content. In Belgium, a company previously known as Permission Machine, now Visual Artists, acts as copyright trolls using reverse image searches to identify copyrighted images and threatens legal action against website owners for infringement claims, even if the owners hold proper licences. There's concern that this tool might be part of a broader strategy in the future, which is worrying for researchers.*

The **interviews with various publishers and their representative organisations indicated a cautious stance regarding the idea of introducing an open-ended clause in copyright law to facilitate broader access to copyrighted knowledge resources for research purposes**. They acknowledged the necessity for further clarification, particularly concerning provisions related to public-private partnerships in research contexts.

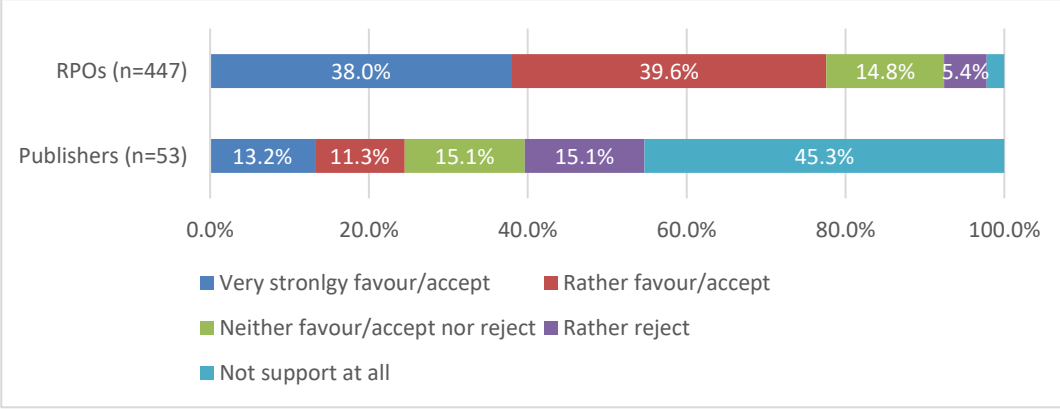
While indicating a willingness to reconsider specific provisions for improved understanding and guidance, they expressed concern about the potential consequences of such a change. **The publishers argued against the proposal of an open-ended clause, fearing it could lead to adverse effects on their business model.**

Publishers emphasised the importance of existing contracts between publishers and authors, where the transfer of copyright allows publishers to exploit the author's work for mutual benefit. They suggested that introducing a clause allowing widespread free access for research purposes might harm publishers financially, limiting their ability to support authors and produce high-quality publications. This could potentially lead to authors resorting to self-publishing, similar to current practices in open access publishing, resulting in a significant impact on the publishers' ability to offer their services to authors and maintain the quality of scientific publications.

*On umbrella licensing solutions*

Both RPOs and publishers were queried about their **inclination towards potential public policy changes supporting the use of copyright-protected knowledge resources for research (see Figures 27 and 28).** One specific option involved **exploring umbrella licensing solutions to facilitate research use** (Q27 for RPOs and Q21 for publishers). For **RPOs, a substantial number of respondents (77.6%) were inclined to accept the policy change**, while a minority, 7.6%, were against it. As for **publishers, 24.5% expressed a willingness**, whether strong or moderate, **to accept this possible policy change**, while 60.4% leaned towards rejection or non-support. Breakdown by publisher type revealed that **only 12% of commercial publishers were open to acceptance**, contrasting with 77% expressing rejection or non-support. **In contrast, 86% of institutional publishers were supportive, with 14% not supporting at all**. As for the breakdown by the level of revenues, support for the **potential public policy changes supporting the use of copyright-protected knowledge resources for research** was expressed by 33.7% of low-revenue publishers, 14.3% of medium-revenue publishers, and 16.6% of high-revenue publishers (selecting very strongly accept or rather accept).

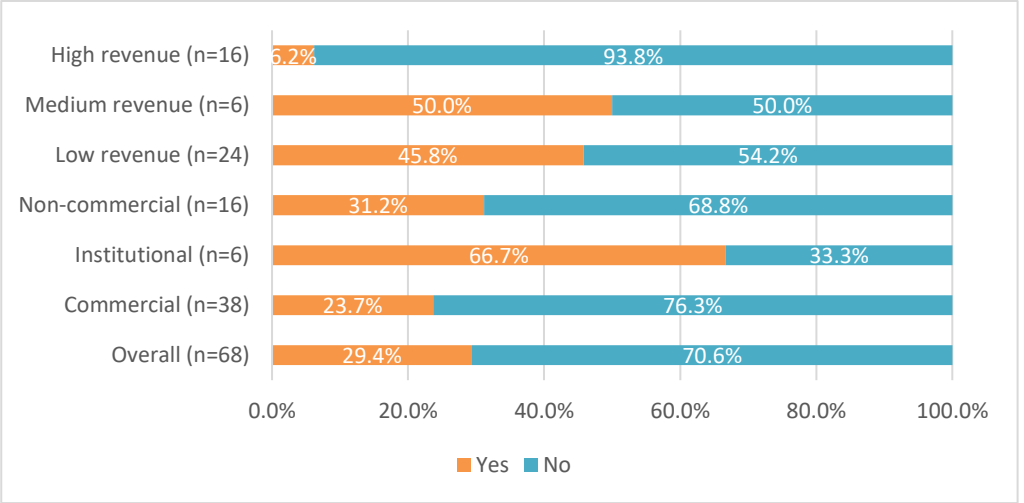
**Figure 27. Inclination towards potential public policy changes supporting the use of copyright-protected knowledge resources for research**




*Source: RPOs and Publishers' surveys, Q27 and Q21, Question: "Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research" and sub-question: "Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use)".*

As regards umbrella licensing solutions, as an alternative to the introduction of EU-wide SPR legislation, divergent opinions emerged among publishers in the open-ended answers. One publisher expressed a clear stance against such an option, stating that their company, which relies entirely on paid subscriptions, would not derive any benefits from it. This individual emphasised the potential downsides, citing concerns about increased bureaucracy and a reduction in subscription revenue. On the other hand, another perspective acknowledged the potential efficacy of umbrella licensing but underscored a crucial condition for success. According to this viewpoint, for umbrella licensing to be viable, payment agreements must be individually negotiated with each publisher rather than consolidated under a single publishing umbrella organisation. The concern was that such consolidated agreements may not ensure a fair distribution of payments, particularly disadvantaging smaller publishers in the process. Additionally, in the survey, publishers were questioned about their perspective on specific licensing agreements as an alternative to implementing EU-wide SPR (Q28, publishers' survey). The overall results presented in Figure 28 indicate that 70.6% of publishers expressed a preference for not adopting these alternatives, while 29.4% found them acceptable. Among commercial publishers, 76.3% were against, with 23.7% in favour. Institutional publishers exhibited a more balanced perspective, with 33.3% against and 66.7% in favour. Non-commercial publishers leaned towards reluctance, as 68.8% were against it, while 31.2% found the alternatives acceptable. **These findings underscore the varying attitudes among publishers regarding alternative licensing arrangements, emphasising the importance of considering diverse preferences in the development of related policies.** When the high-revenue publishers were asked about the reasons for their perspective on this particular question, some of them mentioned that the current licencing agreements are sufficient and efficient for the parties involved. They also noted that such changes affect freedom of publication and their business model.

**Figure 28. Specific licensing acceptable to organisation as an alternative to introducing an EU-wide SPR**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was Q28: "As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for open access publishing), could be acceptable to your organisation?".*

During interviews with RPOs, various perspectives surfaced regarding alternative solutions to licensing. One participant highlighted the impediments posed by paywalled publications, citing an example from climate change research where crucial information was inaccessible to the public due to paywalls. Another respondent underscored the importance of research funders mandating CC-BY-4.0 licensing, advocating for a transition away from traditional academic publishers toward more open journal models. One RPO emphasised the need for clear and mandatory legislation, particularly concerning Collective Licensing (CCL) models, which garnered positive recognition within the research community. Additionally, there was support for harmonised SPR across the EU, with the caveat that legislation should meticulously define covered materials and avoid conflicts with existing collective licensing models.

One RPO highlighted concerns related to the Database Directive 96/9/EC, impacting statutory reporting in the electricity sector under the Insoe transparency platform, which is under the legislation. The discussion extended to the adoption of licensing models, specifically the successful integration of Creative Commons CC-BY-4.0 in cases like the Bundesnetz Agentur's SMART site. The respondent also touched upon ongoing litigation, such as the DFF vs Bavaria case involving energy system data. Concerning the adoption of open licences in scientific organisations, he pointed out the challenges faced by projects releasing primary data, with varying organisational attitudes toward adopting CC-BY 4.0, often driven by concerns about protecting data portals, such as IIASA. For instance, IIASA (International Institute for Applied System Analysis) released a scenarios database for climate futures, and they used a model adopting CC-BY 4.0, but they had the database protection, and this is no longer an open licence. The respondent also highlighted emerging issues related to licensing mixed content material, like Jupiter notebooks, and stressed the need for combined licensing approaches for semantic standards capturing a systems view.

In interviews with publishers, diverse perspectives on licensing solutions emerged. One group proposed umbrella licensing solutions, considering extended collective licences (ECL) as an alternative to corporate exceptions. It was indicated that ECL works so well in the Nordic countries, where it grew holistically out of market conditions, and it was not the top-down approach. However, it was indicated that the publishing market works differently in different countries and that collective licencing is normally good for secondary uses, but for primary uses, publishers prefer the direct licence with their customers, allowing them to better tailor offers to the needs of their customers.

Another group, focusing on broader concerns, highlighted the importance of hearing diverse voices, especially from smaller publishers. The emphasis on preserving diversity in the publishing market and navigating legislative challenges around data privacy, copyright, and open access was stressed. Additionally, the importance of a global perspective, considering Low- and Middle-Income Countries (LMICs), was underscored to facilitate collaborative research.

## 1.3. Overview of plausible policy options and areas in need of improvement

*The content of this Section has been authored by Kacper Szkalej.*

With regards to the literature review, the overview of national implementation practices, and the collected quantitative and qualitative data, two plausible avenues for legislative and non-legislative interventions seeking to address access and reuse issues arising from the EU copyright *acquis* emerge. The following overview is, therefore, divided into two Parts. Part 1 (1.3.1) itemises potential options for interventions in the area of open access publishing, focusing in particular on the potential introduction of a harmonised legal framework for a secondary publication right (SPR). Part 2 (1.3.2) offers a more general overview of potential elements of the EU *acquis* in the area of copyright and related rights that could be improved to make the EU copyright framework fit for research. The presented options are subsequently evaluated in 1.4 and 1.5 to formulate concrete proposals for legislative and non-legislative interventions.

Before embarking on the identification of potential interventions, it is important to note from the outset that the option of adopting soft law instruments such as recommendations has limits following institutional and constitutional considerations. Although such instruments offer flexibility for addressing particular issues and may invite addressees to adopt or follow a certain way of conduct and, in that way, contribute to better coordination of national policies, pursuant to Article 288 TFEU, they are not binding[87]. They operate as an instrument to exhort and persuade without generating rights or obligations[88].

### 1.3.1. Open access Interventions – Secondary Publication Right (SPR)

*Policy Option SPR-01: scientific output covered*

**Policy Option SPR-01:** covering a broad range of scientific output, including not only articles but also writings and other contributions more generally – regardless of the publication outlet

87 The Commission's autonomous power to issue recommendations follows from Article 292 TFEU.

88 Case C-16/16 Belgium v Commission, para 26. See also generally Opinion of Advocate General Michal Bobek in Case C-16/16, paras 87-108 and 166-171. Soft law or administrative practice may however produce legal effects against the Commission; see for example Case T-472/12 Novartis v Commission, para 67; Case T-376/12, Greece v Commission, para 108; Joined Cases T-61/00 and T-62/00, APOL, para 72, and Opinion of Advocate General Jan Mazak in Case C-527/07, para 37.See also European Commission, Better Regulation Toolbox, July 2023 which sets out various legal devices ("tools") which the Commission can rely on when preparing new initiatives and proposals or when managing and evaluating existing regulation. Whilst a significant body of academic texts analyse the functions and effects of soft law, a summarising overview has been prepared by the European Parliament; see generally D Batta,, Better Regulation and the Improvement of EU Regulatory Environment: Institutional and Legal Implications of the Use of "Soft Law" Instruments, DG Internal Policies, Legal Affairs, PE.378.290, March 2007.

The question of which scientific output a potential secondary publication right should cover is essential. A handful of Member States have already introduced a SPR – Germany (2013), the Netherlands (2015), Austria (2015), France (2016), Belgium (2018) and Bulgaria (2023)[89]. The introduction of an SPR regime has also been on the legislative agenda in Italy[90]. An examination of existing SPR regimes in EU Member States shows that with regard to the knowledge resources falling within the scope of SPR rules, all five countries limit the right to articles published in journals. However, a common definition of articles and relevant journals has not evolved yet. In all existing national systems, SPRs are understood to be limited to articles rather than including books. Germany and Austria require 'a scientific contribution' to a collection, France requires 'scientific writing', while Belgium requires a 'scientific article'. The Netherlands and Bulgaria, on the other hand, require respectively merely 'a short work of science' or 'work of scientific literature' and may be seen as being most open-ended[91]. When contemplating a European intervention in this area, it must be noted that this divergence of national approaches can **cause specific problems and make it difficult to rely on SPR-based Open accessibility of scientific output across Member State borders**:

- In addition to conceptual limitations to specific forms of output, such as scientific articles, differences between Member States also exist regarding outlets used for publications, such as journals and other periodicals. While Germany and Austria require a scientific contribution to a collection that is published at least twice a year, French law requires scientific writing published in a periodical published at least once a year. Belgian law requires a scientific article without specifying any frequency of the periodical. Dutch and Bulgarian law, while merely requiring a short work of science or a work of scientific literature respectively, do not impose any other requirement on the type of publication[92].

- SPR confinement to a narrow category of scientific output, such as an article in a scientific journal, would disregard modern and increasingly diversified practices in the academic sector, not only limiting the right to the particular form of research output but potentially also making other forms of scientific output unattractive to researchers, research institutions and (private) research partners. The collected data indicates that as much as 92.4% of RPOs consider that an SPR regime covering a broad range of scientific output would either rather increase (46.6%) or strongly increase (45.8%) provision of immediate open access to publicly funded research[93]. Additionally, as much as 91.2% of respondents operating in an SPR Member State that limits its scope to articles published in journals indicate that they see a need to also cover other scientific outputs than articles published in journals, either to a large extent (57.4%) or to some extent (33.8%)[94].

89 Bulgaria implemented an SPR regime on 1 December 2023. Consequently, it was not considered in the surveys.

90 See the so-called "Gallo's bill". The bill was not approved during the The Legislature XVIII of Italy: d.d.l. S. 1146 "Modifiche all'articolo 4 del decreto-legge 8 agosto 2013, n. 91, convertito, con modificazioni, dalla legge 7 ottobre 2013, n. 112, nonché introduzione dell'articolo 42-bis della legge 22 aprile 1941, n. 633, in materia di accesso aperto all'informazione scientifica" <https://www.senato.it/leg/18/BGT/Schede/Ddliter/51466.htm>.

91 Section 1.1.1; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024); C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 34; Caso and Dore, Academic copyright, Open access and the "moral" second publication right (2022) EIPR 44(6) 332, 336-337.

92 C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 34.

93 Annex 5, RPO Survey, Question 31.

94 Annex 5, RPO Survey, Question 32.

- Publishers provided mixed responses to the prospect of a broad range of scientific output. While 61.9% believe this would result in a fundamental reshaping of their business model, 11.9% indicate some changes would be required, and 26.2% indicate it would not necessitate substantial changes[95]. Drawing on experiences from the Netherlands, where the coverage is broadest, the only suggestion from publishers (one instance) concerning the existing framework concerned clarifying the *version* of scientific output to be covered (which is addressed separately as SPR-03)[96]. As to specific reservations to any of the existing SPR regimes, of 59 responses, only one expressed a preference for the applicability of the regime to articles without also covering other types of publications[97].

- Considering the fundamental right to research following from Articles 11 and 13 of the Charter[98], it is important to ensure that copyright rules offer sufficient room for open, exploratory research processes and support research autonomy. Confining research-related provisions to specific resources, such as specific types of publications, can hardly be reconciled with this overarching consideration. To the extent to which the configuration of SPRs in Member States appears problematic from this perspective, it is important to find other ways of reconciling copyright protection (Article 17(2) of the Charter)[99] with the right to research.

- The principle of equal treatment enshrined in Article 20 of the Charter requires that comparable situations must not be treated differently and that different situations must not be treated in the same way unless such treatment is objectively justified[100]. An SPR regime that is confined to a very narrow category of output inevitably treats differently researchers, but also publishers, and risks preventing the rights and freedoms following from the Charter from being given practical meaning while insufficiently accounting for expectations and practices within a discipline or diversity of research data. Concerns of this kind are reflected in the researchers' survey. Commenting on the French SPR, a researcher shares the following thoughts: "*Typically in computer science (my field of research), conferences lead to the advancement of the state of the art in an important proportion. Therefore, proceedings of such conferences and the extended paper versions of highest interests results are published in "special issues" that are out of the scope (arguably) of the 'periodical publication occurring once a year at least'*"[101].

A feasibility analysis of potential interventions in this area should consider the inclusion of a broad range of scientific output under a potential harmonised secondary publication right regime.

*Policy Option SPR-02: public funding requirement*

**Policy Option SPR-02:** relaxing the requirement of public funding, in the sense of setting a low threshold, such as 50% (or less) of public funding

95 Annex 5, Publishers' survey, Question 24.

96 Annex 5, Publishers' survey, Question 43.

97 Annex 5, Publishers' survey, Question 44.

98 Cf. M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 12-15; C. Geiger/B.J. Jütte, "The Right to Research as Guarantor for Sustainability, Innovation and Justice in EU Copyright Law", in: T. Pihlajarinne/J. Mähönen/P. Upreti (eds.), Rethinking the Role of Intellectual Property Rights in the Post Pandemic World: An Integrated Framework of Sustainability, Innovation and Global Justice, Cheltenham: Edward Elgar 2022, forthcoming; C. Geiger/B.J. Jütte, "Conceptualizing the Right to Research and its Implications for Copyright Law, An International and European Perspective", American University International Law Review 38 (2023), forthcoming.

99 Cf. D.J.W. Jongsma, Creating EU Copyright Law – Striking a Fair Balance, Helsinki: Hanken School of Economics 2019, 163-168; J. Griffiths/L. McDonagh, 'Fundamental Rights and European IP Law – the Case of Art 17(2) of the EU Charter', in: C. Geiger (ed.), Constructing European Intellectual Property Achievements and New Perspectives, Cheltenham: Edward Elgar 2013, 75; C. Geiger, 'Intellectual Property Shall be Protected!? Article 17(2) of the Charter of Fundamental Rights of the European Union: A Mysterious Provision With an Unclear Scope', European Intellectual Property Review 31 (2009), 113.

100 See for example Case C-260/22 *Seven.One Entertainment Group* v *Corint Media*, para 45.

101 Annex 5, Researchers' survey, Question 32.

The manner in which research is funded constitutes another essential building block of an SPR regime. The landscape among those Member States that have already introduced an SPR is almost fully aligned. All of the relevant Member States, except the Netherlands and Bulgaria, require at least 50% public funding. In the case of the Netherlands and Bulgaria, public funding is required either entirely or only partly without any particular threshold being provided[102]. When contemplating a European intervention in this area, it is necessary to observe that the consistent trend across EU Member States expressing **a more restrictive approach may cause specific problems and imbalances:**

- Funding arrangements, and particularly the modalities of public-private partnerships, can vary between academic disciplines. Encouraged by funding schemes in EU Member States that even require substantive contributions of non-academic research partners, research may be carried out increasingly in collaboration with the private sector. Indeed, quantitative data indicates that as much as 90.5% of RPOs are involved in research projects in which researchers collaborate with partners in the private sector[103]. Too high a percentage of public funding will thus exclude the results of privately funded research from SPR regimes and reduce the effectiveness of SPR rules as tools to foster open access and open science goals.

- Considering the overarching objective to realise open access and support self-archiving policies, an overly restrictive public funding requirement may also discriminate against researchers that have no other means of financing their research, for example, in applied sciences where cooperation with the industry may play a central role. In this respect, the principle of equal treatment is as important. The collected data highlight that in the case of 26.5% of RPOs, public-private partnerships constitute 50% or more of the research activities carried out at their respective organisations. In the case of 7.5%, that share amounts to more than 90%[104].

- The collected data indicate that as much as 84.0% of RPOs consider that an SPR regime extending over research with 50% or less public funding would either rather increase (45.5%) or strongly increase (38.5%) provision of immediate open access to publicly funded research[105]. Individual responses from researchers in the SPR Member States align with the preference for a lower public funding requirement[106].

102 Section 1.1.1; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024); C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 34.

103 Annex 5, RPO Survey, Question 11.

104 Annex 5, RPO Survey, Question 12.

105 Annex 5, RPO Survey, Question 31.

106 Annex 5, Researchers' survey, Question 45 (Belgium).

- While the present component concerns research funding as a prerequisite for the applicability of a potential SPR, the publishers' survey highlights that 57% of publishers consider that an SPR requiring 50% or less public funding would result in a fundamental reshaping of the business model, 16.3% say it would require a change but not fundamental, and 26.7% consider it would not require any substantial changes[107]. Among commercial publishers, 65.9% responded that such a design of an SPR would result in fundamental reshaping of the business model, while 19.5% believe that it would require some changes. Somewhat similarly, 60% and 15% of non-commercial publishers consider it would require a fundamental reshaping of the business model or require some changes, respectively. In the case of 25%, no substantial changes would be required. In the case of institutional publishers, the distribution is reversed with 69.2% considering that it would not require any substantial changes and 15.4% equally considering that some changes or a fundamental reshaping of the business model would be required. While the data do not distinguish between SPR and non-SPR Member States, responses from publishers operating in Member States where an SPR regime already exists highlight simultaneously that the SPR has no or little impact on their organisation in the case of 55.6% and moderate impact in the case of 27.8%. The distribution is more equal among commercial publishers, in which case the data amount to 44.4% and 40.7%, respectively. However, in the case of institutional and non-commercial publishers, the SPR has no or little impact for 72.7% and 53.8% respectively, and moderate impact in the case of 9.1% and 23.1%. For those respondents who consider they do not belong to any of these categories, 100% informed that the SPR has no or little impact[108].

A feasibility analysis of potential interventions in this area should consider relaxing the requirement of public funding.

*Policy Option SPR-03: version of scientific output*

**Policy Option SPR-03:** covering version of record, no confinement to author accepted version or earlier versions

As to the version of research output falling within the scope of SPR regimes, practices vary between Member States. The German, Austrian, and French SPRs are explicitly limited to author accepted manuscript (AAM). The Belgian SPR, in making reference to 'manuscript', is likewise understood to refer to the AAM version[109]. The Dutch SPR does not specify a version. Commentators suggest, however, that, while the publisher is not obliged to make available the version of record (VoR), authors with access to the VoR may invoke the Dutch provision and make the VoR available[110]. The more recent Bulgarian SPR is similarly viewed as not being confined to a particular version of the output[111]. Problems that can be envisaged in this area when contemplating a European intervention concern **publishers' exploitation interest and the risk of substitution effects**:

- Determining the publication version falling within the scope of an SPR regime is necessary to balance a publisher's interests against open access and knowledge dissemination policies.

107 Annex 5, Publishers' survey, Question 24.

108 Annex 5, Publishers' survey, Question 35.

109 C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 35.

110 D. Visser, 'The Open access provision in Dutch copyright contract law' (2015) 10(11) JIPLP, 872.

111 Section 1.1.1; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024).

- At a general level, 66.3% of publishers consider that an SPR that covers VoR would result in a fundamental reshaping of their current business model. In comparison, 27.9% consider that it would not require any substantial changes. In the case of commercial publishers specifically, 82.9% consider that fundamental changes to the business model would be necessary, while 14.6% consider it would not require any substantial changes[112].

- Copyright management strategies vary. In addition, the adoption of different strategies to manage and clear copyright is relatively equal among publishers, according to the collected data. In the case of 28.4% of publishers, copyright is neither assigned by the author nor does the author grant an exclusive licence. In the case of 31.7%, copyright is equally not assigned, but the author grants an exclusive licence. In the case of 33%, the copyright is assigned by the author in its entirety, while in the case of 6.6%, the copyright is assigned partially. In the case of commercial publishers specifically, the distribution is relatively similar, with 24.3% indicating that copyright is not assigned nor does the author grant an exclusive licence, 32% indicating that the author grants an exclusive licence while not assigning copyright, and 36.9% and 6.8% indicating complete or partial assignment of copyright respectively[113]. Other categories follow roughly the same pattern. 30.6% of non-commercial publishers indicate that copyright is neither assigned nor does the author grant an exclusive licence. 36.1% indicate that the author grants an exclusive licence, while 25% and 8.3% indicate complete or partial assignment of copyright, respectively. In the case of institutional publishers, 33.3% indicate no assignment and non-exclusive licence, 19% no assignment but exclusive licence, but 42.9% and 4.8% complete or partial assignment, respectively. In the case of respondents who consider that they do not belong to any of these categories, 39.1% indicate no assignment and no exclusive licence, 34.8% no assignment but exclusive licence, and 21.7% and 4.3% complete or partial assignment, respectively.

- When multiple copyright management strategies are adopted, the predominant practice among publishers, in case of 47.4%, is non-assignment of copyright and grant of a non-exclusive licence by the author, followed by complete assignment of copyright by the author, in the case of 42.1%. The third most widely used approach involves partial assignment of copyright by the author (10.5%). Grant of an exclusive licence by the author in such situations seems to not be practised at all (0%)[114].

- In the case of business models based on article processing charges (APC), it may seem legitimate to allow researchers to use the VoR for SPR purposes. In this case, the publisher has already received a remuneration.

- From the perspective of research practices, it must be considered that the VoR is the final version of the published and financed research. Other versions cannot guarantee that the draft has undergone final scrutiny prior to publication, regardless of whether it was accepted with or without corrections, nor do they include typesetting, which is essential for proper referencing and verification as part of the scientific process. Having several versions of the same article circulate may make it difficult to determine which version is final, especially if post-publication changes have to be made. The VoR is also essential for citation purposes and accurate references to research results. Such concerns over versioning and the scientific record are echoed by individual publishers[115].

112 Annex 5, Publishers' survey, Responses to Question 24.

113 Annex 5, Publishers' survey, Question 18.

114 Annex 5, Publishers' survey, Question 19.

115 Annex 5, Publishers' survey, Question 23.

- Aligning with a preference for the VoR, 75.4% of researchers indicate that they made available open access to the final published peer-reviewed version, as opposed to the final peer-reviewed manuscript accepted for publication, a preprint (that has not gone through peer review), or a different version, in which cases the share of responses was 15.7%, 6% and 3% respectively. A comparable distribution can be observed between SPR and non-SPR countries, in respect of which 82.9% and 72.7%, respectively, made available the final published version, while 8.6% and 19.2%, respectively, the final peer-reviewed manuscript accepted for publication[116].

- The collected data further indicate that 86.7% of RPOs see a need to extend the SPR regime in their country to the version of record. Of these, 56.2% see a need to a large extent, while 30.5% see it to some extent[117]. More broadly, 78.1% of respondents consider that a harmonised SPR that covers the version of record would rather increase (34.8%) or strongly increase (43.3%) the provision of immediate open access to publicly funded research[118]. Individual responses from researchers in the SPR Member States align with a preference for the version of the record[119].

A feasibility analysis of potential interventions in this area should consider the version of the record as the object of a potential harmonised Secondary Publication Rights regime.

*Policy Option SPR-04: embargo periods*

**Policy Option SPR-04:** minimising embargo periods, in the sense of requiring no or only a short period, such as 6 months.

Embargo periods constitute a particularly vital aspect of any intervention in the area of SPR. There are noticeable differences relating to embargo periods between the SPR regimes in relevant Member States. Under the German and Austrian SPR legislation, the embargo period is one year after the first publication, regardless of the academic discipline. Under the French SPR approach, the beneficiary may rely on the SPR when the publisher makes the article available free of charge by digital means or after a maximum of 6 months for natural sciences and 12 months for humanities and social sciences. The same embargo periods are relevant under the Belgian SPR legislation. The Belgian regime, however, recognises that the embargo may be shorter on the basis of contractual stipulations or longer by virtue of the law. Under the Dutch SPR approach, beneficiaries may make use of the SPR 'after a reasonable period', whilst the Bulgarian SPR does not impose any embargo period.[120] As in the case of the VoR publication discussed above, problems that can be envisaged in this area when contemplating a European intervention concern **publishers' exploitation interest and the risk of substitution effects**:

- Similar to the question of which publication version the SPR should cover, the question of embargo periods requires the balancing of a publisher's commercial interest in controlling access to the published version against open access and knowledge dissemination policies. The issues are also interrelated: which version the beneficiary of the SPR should be entitled to make available and how the research was financed may be impact factors that affect the balancing of interests.

116 Annex 5, Researchers' survey, Question 9.

117 Annex 5, RPO Survey, Question 38.

118 Annex 5, RPO Survey, Question 31..

119 Annex 5, Researchers' survey, Question 29 (Germany),and 45 (Belgium).

120 Section 1.1.1; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024).

- Further assessment factors can follow from other considerations. The Dutch SPR regime, for instance, can be understood to provide the most far-reaching flexibility to account for various circumstances. It is understood to establish a nexus between embargo periods and the form of research financing – the length of the embargo period is deemed inversely proportional to the share of public funding[121]. A similar degree of flexible, tailor-made application is not possible in SPR systems that set forth an exact statutory embargo period or distinguish between different disciplines. In the case of the latter, in addition, the principle of equal treatment mentioned above in relation to SPR-01 and SPR-02 becomes relevant. An SPR regime with an embargo period that distinguishes between disciplines inevitably treats researchers and publishers differently. Although this principle does not preclude different treatments, factors that could be envisaged to be relevant for a compatibility assessment based on objective factors include the use, and value, of article processing charges (APC), which may be as low as zero or as high as EUR 5 000[122], copyright management strategies adopted by publishers, or indeed the form of research funding. Market-based factors such as APC or copyright strategies, however, make a compatibility assessment a moving target as publishers may waive fees or change their strategy. These might also not precisely reflect different disciplines as they result from decisions designed to implement a business strategy. The proportion of public financing may, on the other hand, set in motion another compatibility assessment as it risks treating researchers engaged in private–public partnerships differently (see above SPR-02). Moreover, interdisciplinary research output combining natural sciences or engineering with social sciences or humanities will likely be very difficult to qualify if such a need were to arise for embargo period purposes.

- Although the collected data from publishing organisations are scarce, among those 10.9% of respondents that favour an EU-wide embargo period that is the same across all disciplines, 50% indicate 12 months as the shortest acceptable embargo period, while 25% indicate respectively no embargo period or 'Other'[123].

- As in the case of SPR-04, at least in the case of business models based on article processing charges (APC), it may seem legitimate to allow researchers to rely on the SPR without an embargo period. In this case, the publisher has already received a remuneration.

- Having regard to the copyright management strategies as highlighted in SPR-03 above, at least in the case of about a third of cases, which neither involve assignment of copyright nor the grant of an exclusive licence to the publisher, an embargo period of any duration potentially renders the granted licence exclusive in practice for the entire duration of the embargo period. The same effect is produced in those situations where multiple strategies are used by publishers, in which case approximately half rely on the grant of a non-exclusive licence as the predominant copyright management strategy.

- Considering practices among researchers, 59.5% indicate that they made their publication available open access immediately after publication on the journal/platform's website, while 24.6% before publication. Only 13.5% state that they made the publication open access after the end of the embargo period[124]. A comparable distribution can be observed between SPR and non-SPR countries, in respect of which open access immediately after publication was markedly dominant and made by respectively 50% and

121 Proposal for the introduction of the secondary publication right to Dutch copyright law ("Taverne Amendment"), Dutch Parliamentary Dossier 33308, no. 11, 3 February 2015.

122 Annex 5, Publishers' survey, Question 14.

123 Annex 5, Publishers' survey, Question 27. The option 'Other' was answered by three respondents, one of which considered the question to not be relevant, and two of which provided 24 months as the shorted acceptable embargo period. Considering this result, n=11 which slightly affects the reported result (54.5%, 27.2% and 18.2% respectively).

124 Annex 5, Researchers' survey, Question 9.

62.8%, followed by 28.1% and 23.4% who made it available before publication. Providing open access after the end of the embargo period was similarly carried out by the least number of respondents in both cases, amounting to 18.8% and 11.7%, respectively.

- While the high proportion of responses by researchers implies a preference for effecting open access immediately, the reasons behind this are also important (non-Horizon funded publications). In this respect, two reasons stand out. Of as many as 425 respondents, 69.7% indicated that they believe in the principle that scientific knowledge should be widely accessible, while 64.6% wished to increase the exposure to their research[125]. These two reasons are shared to a similarly overwhelming degree among researchers in SPR and non-SPR countries, where respectively 79.1% and 65.6% indicated the first reason, while 67.2% and 63.6% indicated the second reason. Other reasons included permission by the publisher (28.4% generally, 31.3% SPR countries, and 27.1% non-SPR countries), requirements by research funder (27.9% generally, 23.1% SPR countries, and 30.2% non-SPR countries), and requirements by employers (13.6 % generally, 16.4% SPR countries, and 12.4% non-SPR countries). While these answers are not mutually exclusive, the noticeable consistency of answers concerning SPR and non-SPR countries clearly implies that open access is primarily driven by an actual desire to make research available, regardless of whether it is motivated by more or less altruistic goals.

- The collected data indicate further that 87.4% of RPOs consider that an SPR regime that permits publication without any embargo period or only contains a short embargo period, such as 6 months, would either rather increase (34.7%) or strongly increase (52.7%) provision of immediate open access to publicly funded research[126]. Additionally, the research performing organisations operating in the SPR Member States with a twelve-month embargo period or with an embargo period of between 6 and 12 months indicate in either case a need to shorten the applicable embargo period (87.8% and 72.4% respectively)[127]. Individual responses from researchers in the SPR Member States align with a preference for short embargo periods[128].

Against these considerations and especially the fact that most SPR regimes have relatively long embargo periods while responses and practices by stakeholders indicate that short or no embargo periods have the highest effect on open access, a feasibility analysis of potential interventions in this area should consider short embargo periods, such as 6 months or no embargo period, as the default option.

*Policy Option SPR-05: uses covered*

**Policy Option SPR-05:** providing for a right to open access publication covering all types of uses, no confinement to specific forms of use, such as use for non-commercial purposes

125 Annex 5, Researchers' survey, Question 11.

126 Annex 5, RPO Survey, Question 31.

127 Annex 5, RPO Survey, Question 35 and 36.

128 Annex 5, Researchers' survey, Question 29 (Germany) and 37 (Netherlands).

With regard to uses covered by SPR regimes, practices vary between the Member States that have introduced an SPR system. While the German, Austrian, French and Bulgarian SPRs only cover use for non-commercial purposes, the Dutch and Belgian SPR approaches do not specify any purpose, requiring only, as does the French SPR, that the work be made available free of charge[129]. When contemplating a European intervention in this area, it is necessary to observe that this **divergence of approaches and use regulations can cause several problems**:

- Similar to the type of work and publication covered (SPR-01 above), narrow confinements are prone to introduce inflexibility and definitional issues that risk causing uncertainty nationally and fragmentation across Member States that can pose obstacles to cross-border accessibility;

- Confining SPR to non-commercial use seems outdated and overly restrictive in light of (national) funding schemes: in current research practice, there is a tendency to encourage researchers to collaborate with private partners. European and national funding schemes for research may even require the involvement of private partners and make it a condition that these partners provide a part of the budget[130]. Considering these developments, a non-commercial use requirement is likely to raise doubts about the applicability of the SPR when researchers in a project, including industry funding and public-private partnerships, seek to rely on knowledge resources that have been made available open access under SPR terms. In this respect, the collected data indicate that the majority of researchers consider legislation that makes clear that users of their research output can use it freely for all purposes without a non-commercial use requirement is important to them. More concretely, the median ranking score on a scale of 1 to 10 of how important such a provision is to them is 7, where 19.2% of researchers give it a maximum score of 10 (very important) and 11.9% and 14.3% near[131]. Echoing this is an explicit recommendation from an RPO commenting on the German SPR: Taxpayers' money is used to fund research from research funders that aids public-private partnerships, knowledge transfer and commercial use so commercial prohibitions (unless perhaps directly competitive) should be prohibited[132].

129 Section 1.1.1; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024); C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 34.

130 M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 21.

131 Annex 5, Researchers' survey, Question 25.

132 Annex 5, RPO Survey, Question 53.

- Viewing a non-commercial use requirement as a mechanism protecting the legitimate commercial interests of publishers (in that the requirement prevents the beneficiary of the SPR from competing with the commercial publisher), the requirement will likely fail to capture the dynamics of academic publishing by presuming that the commercial value of a published article is attributable to exclusivity with regard to individual publications and other research output – instead of recognising that business models shift to the provision of aggregated information resources and refined databases with search and other functionalities[133]. In line with this tendency, the academic publishing industry is increasingly experimenting with business models based on subscription fees for broader data resources and article processing charges (APC) covering individual publications. The presumption that a strict non-commercial use requirement is necessary may thus prove to be no longer valid. Despite varying approaches taken by the Member States that have introduced an SPR, the business model and/or how publishers generate revenue in those Member States nevertheless does not differ at all from other countries in a significant majority of cases, particularly in the case of 77.8%. In the case of 3.7%, it differs only slightly, to some extent in the case of 11.1% and to a large extent in the case of 7.4%. Considering commercial publishers specifically, the data indicate a noticeably higher result than all the categories combined, as 88% of commercial publishers indicate that the business model/revenue generation does not differ. In the case of the remaining responses, the distribution is equal (4%) among commercial publishers[134].

- Viewing a non-commercial use requirement as a mechanism protecting the legitimate commercial interests of publishers (in that the requirement prevents the beneficiary of the SPR from competing with the commercial publisher), the requirement will likely fail to capture the dynamics of academic publishing by presuming that the commercial value of a published article is attributable to exclusivity with regard to individual publications and other research output – instead of recognising that business models shift to the provision of aggregated information resources and refined databases with search and other functionalities[135]. In line with this tendency, the academic publishing industry is increasingly experimenting with business models based on subscription fees for broader data resources and article processing charges (APC) covering individual publications. The presumption that a strict non-commercial use requirement is necessary may thus prove to be no longer valid.

- Having regard to the copyright management strategies as highlighted in SPR-03 above, at least in the case of about a third of cases, which neither involve the assignment of copyright nor the grant of an exclusive licence to the publisher, confining an SPR regime to specific uses potentially renders the granted licence exclusive in practice in relation to the use that would be excluded on *a contrario* reading (assuming that use falls within the scope of the non-exclusive licence). The same effect is produced in those situations where multiple strategies are used by publishers, in which case approximately half rely on the grant of a non-exclusive licence as the predominant copyright management strategy.

133 Cf. M. Senftleben/M. Kerk/M. Buiten/K. Heine, 'New Rights or New Business Models? An Inquiry Into the Future of Publishing in the Digital Era', International Review of Intellectual Property and Competition Law 48 (2017), 538 (538-561).

134 Annex 5, Publishers' survey, Question 37.

135 Cf. M. Senftleben/M. Kerk/M. Buiten/K. Heine, 'New Rights or New Business Models? An Inquiry Into the Future of Publishing in the Digital Era', International Review of Intellectual Property and Competition Law 48 (2017), 538 (538-561).

- The collected data indicate that 73.6% of RPOs consider that an SPR regime that is not confined to specific forms of use, such as use for non-commercial purposes, would either rather increase (33.9%) or strongly increase (39.7%) provision of immediate open access to publicly funded research[136]. Moreover, individual RPOs highlight the need for clear provisions enabling broad reuse that includes commercial use, specifying that public funds are used to fund research from research funders that aid public-private partnerships, knowledge transfer and commercial use[137].

A feasibility analysis of potential interventions in this area should consider a broad spectrum of uses covered by a potential harmonised Secondary Publication Rights regime.

*Policy Option SPR-06: licensing and remunerations schemes*

**Policy Option SPR-06:** developing umbrella licensing and remuneration schemes leading to long-term open access availability

As an alternative approach to the introduction of an SPR, it is, in principle, conceivable that the evolution of licensing and remuneration schemes could lead to a degree of open, unrestricted research output availability that is comparable to the results that can be achieved with an SPR regime. A number of publishers offer so-called "transformative agreements", which are aimed at transitioning towards open access. Although individual researchers see the benefits of such agreements, highlighting that they align with the principle that publicly funded research should be made accessible to the public and perceiving such agreements as making it easier to access scholarly content without a paywall or subscription fees and enhancing reusability (user licences permitting various levels of reuse for data mining and analysis, content adaption etc.), worldwide accessibility fostering collaboration and knowledge sharing,[138] there are also important concerns. When contemplating a European intervention in this area, it is worth observing that **approaches based on licensing and remuneration schemes can uphold traditional bargaining asymmetry problems** that make it doubtful whether this avenue can provide a meaningful alternative to the introduction of SPRs in the EU:

- Publishing contracts, drafted by the publishing sector and including access conditions for researchers and technical infrastructures for access control, are often the primary instruments for regulating access to protected knowledge resources. This can give the publishing industry the upper hand in their relationship with researchers and research institutions and lead to contractual access and reuse regimes that fail to support open access and open science goals.

- Terms and conditions for publication and access can prove to be unpredictable in the long term because they may be changed by the publisher as a result of mergers and acquisitions in the publishing sector, the implementation of new technology, a change of business strategies, etc.

136 Annex 5, RPO Survey, Question 31.

137 Annex 5, RPO Survey, Question 53 (Netherlands) and 55 (Germany).

138 Annex 5, Researchers' survey, Question 17.

- Contract terms regulating research access and publication can vary and be fragmented nationally or even locally per user (price/terms discrimination), including APC costs, entrenching the fragmentation of the internal research market. Individual responses from researchers highlight, for example, APC waivers or the possibility of using vouchers for APC costs[139]. Moreover, vouchers, as a resource, can be made scarce and, as highlighted by individual researchers, can cause competition within a group and lead to difficulties in deciding who will be able to use it[140]. Commenting on transformative agreements, another researcher highlights that while they rely on their university agreement to make several book chapters and articles open access, there is a delay of up to 18 months before they can be accessed[141]. A contractually agreed embargo period of this kind delays not only the perceived positive impact of such agreements but is also longer than any legislated embargo period under any of the existing SPR regimes;

- The existence of contractual arrangements that define open access policies/requirements currently varies. A minority of 43.3% of RPOs indicate that they have entered into such arrangements with publishers compared to 56.6% that have not[142]. On the publisher side, 54.9% indicate that they have entered into such agreements (of commercial publishers, 66% declare that they have)[143].

- Views over how challenging particular contractual aspects are to negotiate align to a very large extent between the majority of RPOs and publishers. Costs of open access publishing emerge clearly as the most challenging aspect, followed by, in descending order, subscription terms/costs to journals with restricted access, terms and conditions related to open access to publications, terms and conditions related to rights/ownership, and embargo periods for publishing in self-archives[144]. While the majority of RPOs regard the first two as being very challenging to negotiate, the remaining aspects are considered somewhat challenging by the majority of both RPOs and publishers, except the last one, which the majority of publishers regard as not challenging[145].

139 Annex 5, Researchers' survey, Question 11.

140 Annex 5, Researchers' survey, Question 17.

141 Annex 5, Researchers' survey, Question 17.

142 Annex 5, RPO Survey, Question 22.

143 Annex, Publishers' survey, Question 16.

144 In case of publishers terms and conditions relating to Open access are considered by a slight majority to be more challenging than subscription terms/costs to journals with restricted access.

145 Annex 5, RPO Survey, Question 22; Publishers' survey, Question 17.

- The opportunity to negotiate is not a guarantee for success as negotiations may also fail or indeed not take place at all. Recognising, as one researcher observes, that reuse of scientific material is very important for going beyond the state of the art[146] and indeed staying informed about it, differences relating to access can substantially impede research endeavours but also the envisaged impact of already published research as confirmed by open responses from researchers. For example, one researcher notes that "many colleagues from universities that do not invest in databases do not have access to the articles through these expensive databases, which is limiting their research. And our research published in these prestigious journals without open access has a smaller impact. So, it is important to have as many of the articles published as possible for open access". Commenting on transformative agreements, another researcher highlights the impact the asymmetry between countries has on research output: "These agreements allow institutions in countries with higher levels of funding to publish open access, but the options in less well funded countries within the EU are smaller. So, access to research from these countries often remains difficult while boosting access to research from already well-funded countries". Another researcher noted that negotiations can take place over longer periods of time, which may, of itself, affect access to scientific material. In particular long-term negotiations with a publisher that owned most of the journals in their field (electrochemistry) led to loss of access to the journals, resulting in the need to order every single article via intra-library loans for several years[147].

- Data collected from publishers indicate little support for umbrella licensing solutions in all but one case. A total of 70.6% of responding publishers indicate that specific licensing arrangements, such as extended collective licencing or lump sum remuneration regimes, would not be acceptable as an alternative to introducing an EU-wide SPR, 29.4% of publishers indicate it would be acceptable. A comparable distribution can be observed for the specific categories of publishers except in one case. For 76.3% of commercial publishers, the alternative would not be acceptable and would be acceptable to 23.7%; however, in the case of institutional publishers, 33.3% are against while 66.7% for. In the case of non-commercial publishers and publishers not falling into any previous categories, 68.8% and 75%, respectively, are against, and 31.2% and 25% are for[148].

- Responses from RPOs provide a diverse range of perspectives and considerations. The overarching challenge identified by some respondents is the pressure to publish as a measure of scientific excellence, leading to a continued preference for non-open access journals with higher impact factors. Several respondents expressed concerns about the current financial dynamics in scholarly publishing, emphasising the need for changes in the system where publishers and journals are compensated, often without compensating the reviewer. A recurring theme is the need for simplicity, transparency, and fairness in any alternative solution. While some voiced scepticism towards collecting societies (mentioning issues relating to transparency, effectiveness, and high fees), others highlighted the importance of clear and straightforward legislation, stating that it would be the only viable solution to address the complexities of the publishing landscape[149].

146 Annex 5, Researchers' survey, Question 17.

147 Annex 5, Researchers' survey, Question 17.

148 Annex 5, Publishers' survey, Responses to Question 28.

149 Annex 5, RPO Survey, Responses to Question 39 (open ended).

A feasibility analysis of potential intervention in this area as an alternative to a harmonised Secondary Publication Rights regime should consider the degree to which the development or promotion of licensing and remuneration schemes is capable of successfully addressing the publication interests and open access needs in the academic sector and offering support for researchers and research organisations seeking to ensure compliance with the EU open access and open science agenda.

### 1.3.2. Review of research exceptions – Copyright and related rights (CRR)

Considering the copyright *acquis* more broadly, several components can be considered for the purpose of exploring potential interventions to arrive at an EU copyright and related rights framework that supports the evolution of a single, borderless market for research, innovation and technology. Naturally, expanding the perspective to the broader context of the copyright *acquis* inevitably subsumes also other stakeholders in the copyright ecosystem than scientific publishers, such as authors of literary (non-scientific), musical, artistic, or audiovisual works, holders of neighbouring rights, database producers, or developers of computer programs. After all, the variety of scientific disciplines that exist and methods of analysis that scientific research can and does entail is capable of covering virtually any copyright-based industry. While specifically surveying each of these stakeholder groups would have gone beyond the established confines of the study, the final feasibility analysis in Section 1.5 will identify the policy options in relation to which further evidence gathering is advisable. It is, at the same time, important to underline that in the scientific research sector access and reuse of protected knowledge resources as a copyright problem transcends the ability to engage in mere consumptive use of such resources by researchers. It raises fundamental questions of *availability* in a fragmented internal market of knowledge resources which fit the needs of a research project, the *possibility* (the technical ability) *to carry out scientific analysis* that includes such resources or treats it as the object of the scientific inquiry, and the *performance of acts in preparation for and following* such analysis, all of which may involve copyright rules in different ways[150]. In this regard, previous studies and the overview of the literature, national implementation practices (Annex 1) and survey results offer reference points for exploring potential interventions in the following areas:

150 K. Szkalej, 'Copyright in the Age of Access to Legal Digital Content: A study of EU copyright law in the context of consumptive use of protected content', Uppsala University 2021, pp 35-36, advancing the adoption of an access perspective when analysing user interests against rightsholder prerogatives stemming from copyright law. Compared to a (traditional) "copyright exploitation" perspective, the access perspective does not lock the analysis to uses which prima facie fall within the ambit of exclusive rights, but allows observing the variety of acts and circumstances that amount to obtaining access to protected resources and is more sensitive towards economic (market) factors, such as contracting or the use of technology in content distribution ecosystems. It is thus better suited to capture intricacies on the content distribution chain, accounting for what users demand (desirability) and what rightsholders (can) supply (use of copyright prerogatives). The access approach has already been used by the European legislature to further harmonise the copyright sector; see Regulation (EU) 2017/1128 of the European Parliament and of the Council of 14 June 2017 on cross-border portability of online content services in the internal market (Cross-border Portability Regulation).

*Policy Option CRR-01: strengthening general research exception.*

With Article 5(3)(a) ISD, Articles 6(2)(b) and 9(b) DBD, and Article 10(1)(d) of the Rental, Lending and Related Rights Directive ("RLD")[151], the EU copyright *acquis* already contains provisions referring globally to use for purposes of "scientific research". These overarching provisions permit research use on certain conditions, such as the condition of use for non-commercial purposes. Despite the objective to facilitate scientific research, individual requirements of Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD can pose obstacles to the use of protected knowledge resources. Moreover, the general research exceptions are embedded in a more complex legal framework that contains additional complicating factors, such as the protection of TPMs following Article 6 ISD. As an additional exacerbating factor, some RPOs highlight that researchers have a poor understanding of what they are allowed to do under copyright law[152], with one RPO sharing the insight that researchers "sometimes pay a fee to include copyrighted material in a scholarly publication while they should not, because they are insecure due to the complex rules of the exception*".*[153] Many researchers confirm that they are uncertain about applicable rules, with one researcher going as far as to share the insight that they face "a permanent level of uncertainty about the legal use of knowledge resources"*.*[154] In light of the insights that can be derived from the study of literature, national implementation practices and survey results, the following reference points for potential legislative or non-legislative interventions can be identified:

*Policy Option CRR-01.1: developing a harmonised, mandatory, open-ended research exemption*

**Policy Option CRR-01.1:**

- **Introducing a fully harmonised, mandatory and open-ended exemption of scientific research that applies horizontally across the ISD, RLD, DBD and the Software Directive;**
- **Developing guidelines or recommendations seeking to approximate national research exceptions that have evolved under the EU copyright *acquis*.**

The conceptual contours of the general research exceptions themselves can pose barriers to the successful invocation of these provisions for scientific research. Several problems surface from relevant literature, national implementation practices, and surveys:

- Due to the optional nature of Article 5(3)(a) ISD and corresponding/comparable provisions in the RLD and DBD, the legal framework is fragmented, negatively impacting the state of harmonisation and the impact on open science at EU and national level.

151 Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property, Official Journal 2006 L 376, 28.

152 Annex 5, RPO Survey, Question 24 and 25.

153 Annex 5, RPO Survey, Question 24

154 Annex 5, Researchers' survey, Question 21.

- In the absence of general, fully harmonised research exceptions at the EU level, research provisions in the Member States may differ in relation to beneficiaries, the scope of permitted use, works covered, conditions of applicability, and safeguards against contractual override[155]. The fragmentation of national provisions may also concern, for instance, the spectrum of permitted acts (reproduction and/or communication to the public), envisaged purpose (teaching and/or research) and remuneration requirements (both as to remuneration being a condition for use and a basis for calculating the remuneration).

- The comparative study of national implementation practices also reveals that several Member States refrained from implementing the research component of Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD in their national laws, limiting the use privilege to teaching activities[156].

- One of the key uncertainties arising from Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD relates to the core of the permitted research use: it is unclear whether the illustration requirement in these provisions only concerns teaching or is intended to cover use for research purposes as well[157].

- Differences are also apparent between the EU manifestations of general research exceptions. While Article 5(3)(a) ISD covers both reproduction and making available to the public, Article 9(b) DBD only covers acts of reproduction ("extraction" in the terminology used in the context of the *sui generis* database right)[158].

- The Software Directive does not contain a scientific research provision comparable to Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD. It is unclear whether the existing rules on studying, testing and decompiling computer programs are sufficient for achieving open access and open science goals.

- The rapid development of algorithmic and generative AI tools and the increasing use of these tools in research contexts can make it necessary to add further clarifications of the copyright status of acts such as scraping, downloading, storing, aggregating, mingling and sharing protected knowledge resources. At the same time, additional specific rules may be unnecessary as long as the general research provisions in Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD render EU copyright law capable of keeping pace with the rapid evolution of new technologies and changing research approaches and methodologies.

- Open-ended provisions, such as Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD, may offer support for research autonomy in the sense of providing a basis for exploratory research projects and methodologies that fall outside approaches and categories addressed in more specific provisions. To reconcile copyright protection with the fundamental right to research following Articles 11 and 13 of the Charter, a broader, open-ended provision capable of covering scientific research in general seems particularly important[159].

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155 Annex 1, 178 (Arts 5-6 CPD), 178 (Art. 6 DBD), 180 (Art. 8 DBD), 181 (Art. 9 DBD); Sganga, C, Contardi, M, Turan, P, Signoretta, C, Bucaria, G, Mezei, P, Harkai, I, 'Copyright Flexibilities: Mapping and Comparative Assessment of Eu and National Sources' (January 16, 2023).

156 See further Annex I, 'State of harmonisation and its impact on Open Science', pp.189-190.

157 Annex 1.

158 Annex 1.

159 Cf. M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 12-15; C. Geiger/B.J. Jütte, "The Right to Research as Guarantor for Sustainability, Innovation and Justice in EU Copyright Law", in: T. Pihlajarinne/J. Mähönen/P. Upreti (eds.), Rethinking the Role of Intellectual Property Rights in the Post

- The principle of equal treatment enshrined in Article 20 of the Charter requires that comparable situations must not be treated differently and that different situations must not be treated in the same way unless such treatment is objectively justified[160]. An EU copyright *acquis* that is incomplete in the sense of providing a copyright exception for the benefit of researchers working with specific categories of protected material, such as text, images, sound, film, or databases, but not for others, concretely computer programs, risks preventing the rights and freedoms following from the Charter to be given practical meaning for those researchers working with such works while potentially insufficiently accounting for expectations and practices within a discipline or diversity of research data. Conversely, an incomplete *acquis* treats authors and holders of neighbouring rights and producers of databases differently from developers of computer programs. In this respect, it is essential to observe that the reuse and development of computer programs or systems is not necessarily limited to historically relevant fields typically associated with these activities, such as Engineering or Computer Science, but may also extend to Natural Sciences, especially in the case of once esoteric and now established fields such as bioinformatics or neuroinformatic, or any other field requiring an interdisciplinary approach involving informatics. In addition, in the era of AI, a renaissance of many disciplines seems to be taking place. Interestingly, Article 4 CDSM exempts acts of reproduction of computer programs for the purpose of TDM activities, but the arguably less-constrained Article 3 CDSM permitting TDM activities by research organisations for the purpose of scientific research does not. The Directive does not offer any guidance on this distinction, but Recital 84 confirms that the principles recognised by the Charter are observed and, therefore, that the Directive should be construed and applied in accordance with those principles. Considering that computer programs qualify as literary works for copyright purposes under international, EU and, inevitably, national law[161], just as traditional literature, maintaining a distinction in the *acquis* that carves out computer programs from scientific research may be difficult in an increasingly computerised research sector without an objective justification. While not specifically targeted in the surveys, highlighting challenges with making available research results and data that incorporates third-party material such as software, one RPO expresses the concern that Obtaining permissions and licences for such materials can be cumbersome and costly. Copyright laws vary internationally, and making R&I results globally accessible in open access requires navigating different legal frameworks and addressing potential conflicts[162]. Another RPO confirms explicitly that, at least in the numerical systems analysis domain, it is not possible to partition out software from a discussion over exceptions for science and education[163].

- The results of the RPO survey confirm that the research community attaches particular importance to open-ended, flexible-use privileges for scientific research. Answering Question 27, 47.8% of the respondents indicated a strong preference for an open-ended umbrella clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. Some 33.6% of respondents stated that they would support ("rather favour") the introduction of such a general clause. Responses from publishers are more polarised: 58.3% indicated that they would not support it at all, and 13.3% would rather reject it, while 21.7% indicated a strong preference for it and 5.0% that they would support it. A 1.7% of publishers indicate a neutral approach[164].

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Pandemic World: An Integrated Framework of Sustainability, Innovation and Global Justice, Cheltenham: Edward Elgar 2022, forthcoming; C. Geiger/B.J. Jütte, "Conceptualizing the Right to Research and its Implications for Copyright Law, An International and European Perspective", American University International Law Review 38 (2023), forthcoming.

160 See for example Case C-260/22 *Seven.One Entertainment Group* v *Corint Media*, para 45.

161 TRIPS, Art. 10; WCT, Art. 4; Software Directive, Art. 1.

162 Annex 5, RPO Survey, Question 21.

163 Annex 5, RPO Survey Question 27

164 Annex 5, Publishers' survey, Responses to Question 21.

Considering these points, a feasibility analysis of potential interventions relating to the conceptual contours of the general research provisions in the EU copyright *acquis* should include the further development of overarching general norms in the research area. The analysis should also determine the degree to which guidelines and recommendations for the proper application of general research exceptions to specific forms and methodologies of research, research tools and specific groups of beneficiaries might be capable of efficiently addressing norm fragmentation at the Member State level and support researchers and RPOs seeking to ensure compliance with both the EU copyright *acquis* and the open access and open science agenda.

*Policy Option CRR-01.2: Lawful access requirements*

**Policy Option CRR-01.2: Clarify lawful access requirements**

- **Clarify the potential of general research exceptions (not requiring subscription-based access) to serve as a basis for obtaining access to protected knowledge resources.**

EU copyright law sets forth several lawful access requirements in the context of research-related provisions as a precondition for applicability. For researchers to rely on the specific TDM rule laid down in Article 3 CDSMD, they must have "lawful access". Article 6(4) ISD limits the circle of researchers who can benefit from measures to remove obstacles posed by TPMs to those having "legal access". Evidently, these conditions can have a deep impact on use for research purposes. They function as gatekeeper requirements that can prevent the invocation of research-related provisions from the outset.

Considering the existence of research-related lawful access requirements in certain areas of the EU copyright *acquis*, including new lawful access guidelines in Recital 14 CDSMD, it is important to note that the general research exceptions referring globally to "scientific research" – Article 5(3)(a) ISD, Article 10(1)(d) RLD, Articles 6(2)(b) and 9(b) DBD – do not require access through a subscription or other contract. Nonetheless, the results of the researchers' survey indicate that researchers may refrain from the use of copyright-protected knowledge resources in the absence of subscriptions and licensing agreements concluded by their own research organisations. Answering Question 18, 80.0% of respondents identified a lack of subscriptions as a primary obstacle to accessing copyright-protected knowledge resources[165]. Hence, lawful access questions – including potential dependency on subscriptions – can pose obstacles to the use of protected knowledge resources in scientific research contexts. Placing this survey result in the context of previous studies, relevant literature and national implementation practices, the following reference points for potential interventions in this area come to the fore:

- The EU legal framework itself is fragmented and uncertain as several copyright exceptions are conditioned on seemingly related concepts that may be understood to refer to the bona fide character of the user, the status of the copy or the source from which the copy was obtained, changing each time the interpretation of the conditions for applying the relevant provision: lawful acquirer (Article 5(1) Software Directive), lawful user (Articles 6(1) and 9(1) DBD), person having a right to use the computer program (Article 5(2) Software Directive), licensee, person having a right to use a copy of the computer program, a person authorised to use a copy of a computer program on their behalf (Article 6(1)(a) Software Directive), legal access (Article 6(4) ISD), lawful access (Article 3(1) CDSMD), and lawfully accessible works (Article 4 CDSMD).

165 Annex 5.

- While Recital 14 CDSMD confirms lawful access in cases where a research organisation has a subscription covering its own researchers, it is unclear whether a subscription taken by one partner of a broader research consortium could be understood to cover not only the researchers attached to that partner organisation but also researchers of other partners in the consortium working on the same project[166].

- With regard to lawful access and subscriptions taken by cultural heritage institutions, similar legal uncertainty can arise from the reference to "persons attached thereto and covered by those subscriptions" in Recital 14 CDSMD. It is not entirely clear whether researchers can be deemed "persons attached" to a cultural heritage institution for the purposes of the lawful access test when they are mere users of library services and, thus, cannot be qualified as staff members of the cultural heritage institution itself.

- With regard to subscription-based access models, research organisations may have a tendency to focus on academic knowledge resources. Subscriptions taken by research organisations, thus, may fail to cover knowledge resources without a scientific orientation, such as fiction books, photo collections, music libraries, etc. With regard to these latter knowledge resources, the question arises whether researchers could invoke a general research exception not requiring subscription-based access, such as Article 5(3)(a) ISD, to obtain access. At the same time, while rightsholders associated with such knowledge resources were not specifically targeted in the surveys, a handful of responses from researchers and RPOs nevertheless highlight issues they encounter with such resources. According to one researcher, analysing popular music pieces is not possible because the service used does not allow downloading. Although the insight refers to the form of content access, what also transpires is the necessity to rely on such a specific service to acquire (lawful) access to such a knowledge resource even though a different form of access than the one offered is necessary for the project. Two RPOs, on the other hand, share the issue that access and processing of audiovisual content such as music and films remains problematic and challenging[167]. Referring to the converse situation, i.e. where lawful access already does exist to such resources because of an agreement, one RPO shares the insight that their researchers refrain from using research tools that make "it possible to mine a large number of protected knowledge resources such as texts, images, films and music "not because we do not want to risk copyright infringement, but because the standard agreement with the publisher specifically does not allow such use"[168].

- Lawful access requirements also raise issues that concern the interplay with contractual stipulations. Contractual practices (specific terms of use) may affect the interpretation of whether a use or a user is lawful. In C-666/18 *IT Development SAS* v *Free Mobile SAS*, the CJEU clarified that the breach of a clause in a copyright licence agreement amounts to infringement of copyright. This decision adds complexity to lawful access determinations, especially when:

  - a copyright exception can be overridden by contract;

  - a copyright exception has not been implemented in a Member State; or

  - the relevant use has only been licensed for a specific territory/Member State.

166 M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 44-45.

167 Annex 5, RPO Survey, Question 24.

168 Annex 5, RPO Survey, Question 24.

- Considering the CJEU ruling in C-527/15 *Stichting Brein (Filmspeler)*, it may be assumed that a researcher relying on a national transposition of the general research exception in Article 5(3)(a) ISD should not be permitted to make use of the copy for research purposes when it stems from a website providing access to unauthorised (illegal) content. However, it is less clear whether the same applies in situations where errors in rights clearance have taken place and the research use is carried out bona fide – relying on the validity of use permission.

- If a strict lawful access test is applied, requiring de facto a copyright analysis in every instance, the additional question arises as to whether research provisions requiring lawful access can remain effective even though the costs of ascertaining the lawful nature of all required sources may be prohibitively high (as in the case of web scraping or other forms of data collection).

- When a lawful version of protected knowledge resources is unavailable in a given national market, the question arises whether a general research exception not requiring subscription-based access, such as Article 5(3)(a) ISD, could provide a basis for use in the context of scientific research. The legal issue may also surface in those cases where the forms of access are different in different Member States. In this respect, 74.5% of commercial publishers inform that access to the same journals is uniform in all countries of operation, while 12.7% inform that access depends on the country, and in the case of 12.7%, it depends on other factors[169]. In the case of the latter (other factors), many open responses from publishers highlight that while access options are the same (the offer), actual access depends on existing agreements or initiatives. These can be local, regional or national (including subscriptions, transformative agreements, or Research4Life). One response highlights that it depends on the customer, the format of the journal, and the access model[170].

- It is unclear whether, in the case of cross-border collaborative research endeavours, a researcher is required to obtain a copy from an authorised source in each individual Member State. Such issues may, however, also take place in collaborations within the same Member State. Although a number of RPOs confirm that data sharing between research collaborators is problematic[171], in some cases, the situation may be clear as noted by one RPO: “The most current situation is that we are not able to share copyright-protected resources (images of works/objects) with researchers outside our institution because of copyright restrictions”[172].

- Separately from the narrow copyright issue, impediments to cross-border access, whether in collaborative endeavours or in the case of national unavailability of a knowledge resource, may challenge the realisation of the internal market.

169 Annex 5, Publishers’ survey, Question 6.

170 Annex 5, Publishers’ survey, Question 6.

171 Annex 5, RPO Survey, Question 25.

172 Annex 5, RPO Survey, Question 24.

- Exclusive rights and copyright exceptions constitute mechanisms through which fundamental rights and interests of rightsholders, users and the public interest find concrete expression and ensure that a balance can be safeguarded[173]. Those rights and interests include, in particular in the scientific research sector, the fundamental right to research and academic freedom following from Articles 11 and 13 of the Charter, incorporating freedom to choose the topic of research, the questions, the methods, and the materials to find the answers, and to present and disseminate the results. Academic freedom is what pushes developments in any scientific discipline forward. According to the CJEU, academic freedom has not only an individual dimension entailing freedom of expression and of action, freedom to disseminate information and freedom to conduct research and to distribute knowledge without restriction, but also an institutional and organisational dimension reflected in the autonomy of institutions[174]. Whenever institutions or researchers seek themselves to legal knowledge resources in order to legitimately make use of research exceptions, the market opportunity that presents itself to constrain or substitute the scope of those exceptions by defining in contracts or through technological means the exact parameters of access to or use of the knowledge resource risks preventing those rights and freedoms from finding concrete expression in the copyright system and preventing a balance from being struck and thus from being safeguarded.

Considering these insights into potential problems surrounding lawful access requirements, a feasibility analysis of potential interventions in this area should consider the adoption of measures that aim to clarify the potential of general research exceptions (not requiring subscription-based access) to serve as a basis for obtaining access to knowledge resources in a manner that supports research endeavours, considering especially the need to give expression to and safeguard a balance between different fundamental rights, the status of national and transnational collaboration practices, the use of library services by researchers without formal affiliation, or the need to access and use knowledge resources not necessarily covered by traditional subscriptions taken by research organisations (such as fiction books, photo collections, music libraries etc.).

173 C-476/17 *Pelham*, paras 59-60, C-469/*17 Funke Medien*, para 58, and C-516/17 *Spiegel Online*, para 43;

174 Case C-66/18 *Commission* v *Hungary*, paras 225 and 227. *See further* on academic freedom P. Maassen et. al., 'State of play of academic freedom in the EU Member States: Overview of de facto trends and developments', for the Panel for the Future of Science and Technology (STOA), DG for Parliamentary Research Services (EPRS), European Parliament, PE 740.231, 2023, pp 4-10; available at https://www.europarl.europa.eu/RegData/etudes/STUD/2023/740231/EPRS_STU(2023)740231_EN.pdf .

**Policy Option CRR-01.3: remove barriers posed by technological protection measures**

- **Adding all research-related copyright exceptions to the list in Article 6(4) ISD;**
- **Broadening the intervention option established in Article 6(4) ISD by entitling Member States to take appropriate measures in justified cases to prevent TPMs from interfering with access and use of protected knowledge resources for research purposes falling under an EU copyright exception;**
- **Excluding the applicability of subparagraph 4 of Article 6(4) ISD with regard to general research exceptions and other copyright exceptions that may become relevant in research contexts, including Articles 5(1), 5(3)(a), and 5(3)(d) ISD;**
- **Clarifying that the specific rules in Recital 14 CDSMD only serve the purpose of specifying evident cases of compliance with the three-step test in Article 5(5) ISD to enhance legal certainty for research use.**

The EU copyright *acquis* provides for the protection of TPMs employed by rightsholders to control and regulate access to protected knowledge resources. Articles 6 and 7 ISD can be characterised as the most prominent exponents of this layer of protection that has been added to the core protection of literary and artistic works and other protected subject matter, in line with international obligations established in the WIPO Copyright Treaty and the WIPO Phonograms and Performances Treaty. The use of TPMs raises challenges regarding both the practical consequences of the use of the technology on the market in relation to uses falling within the scope of research-related copyright exceptions and uses permitted in accordance with contractual arrangements. In practical terms, it is conceivable that a privileged form of use – falling within the ambit of a research exception – cannot be carried out in practice because a TPM is not sophisticated enough to grant researchers access (even though this would be necessary from the perspective of EU copyright legislation). More recent literature highlights that the use and protection of TPMs have the potential to pose significant obstacles to data access and data reuse required for research[175]. When contemplating potential interventions in this area, numerous distinct and often intricate problems identified in the literature, national implementation practices, and surveys must be considered:

- Technical conditions and infrastructures for access are unpredictable in the long term. As inevitable tools of business, they may be changed by the publisher/service provider as a result of mergers and acquisitions in the sector, a change of business strategy, etc. For this reason, the specific manner in which technology is used to control and regulate access to protected knowledge resources, for instance, to fragment technical conditions for research access nationally or locally per user (price/terms discrimination), merely constitutes a reflection of business decisions taken at the time. Beyond a capability to design systems in accordance with those decisions, it is, therefore, likely to offer limited guidance for formulating policy supporting the evolution of a single, borderless market for research, innovation and technology[176].

175 Annex 1, M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 26 and 28-29.

176 K. Szkalej, 'Copyright in the Age of Access to Legal Digital Content: A study of EU copyright law in the context of consumptive use of protected content', Uppsala University 2021, 155-156 and 421.

- EU copyright law does not require that technical conditions for access be designed in a way that gives researchers the opportunity to benefit from statutory research exceptions. Not surprisingly, calls from RPOs to improve copyright law to support research (and education) include protecting exceptions from technological override[177]. However, Member States often stand empty-handed when technological protection measures encroach upon statutory research privileges. Although Article 5(3)(a) ISD is itemised in Article 6(4) ISD to pave the way for Member State action, subparagraph 4 of Article 6(4) ISD hardly leaves any room for interventions when protected content is made available on agreed contractual terms[178]. This may be particularly onerous to RPOs that include copyright clearance and administration tasks in their budgets as the pre-emptive diligence and continuous oversight to clear copyright by obtaining necessary licences to not make copyright a concern for researchers (it is, however, a prerogative of the licensor to determine whether they wish to only offer standard form licences) will inevitably activate subparagraph 4 of Article 6(4) ISD. Moreover, in those situations, the design of the provision risks hindering research into cryptography and encryption technologies, over which the protection of TPMs should not extend as follows from recital 48 ISD.

- Responses to Question 18 in the researchers' questionnaire confirm obstacles posed by TPMs. 59.6% of researchers indicated that they were unable to access copyright-protected knowledge resources on the internet because these knowledge resources were behind a paywall or electronic fence. Similarly, the RPO survey confirms that paywalls and electronic fences pose particular difficulties. Answering Question 24, 39.6% of respondents indicated that their researchers were often (every week or month) unable to obtain access to copyright-protected knowledge resources on the internet because these knowledge resources were behind a paywall. Some 35.4% reported paywall problems every 3 to 6 months[179].

- Several provisions that may become relevant in research contexts, such as the temporary copying exception in Article 5(1) ISD and the quotation right in Article 5(3)(d) ISD, are not itemised in Article 6(4) ISD. As a result, legitimate acts of temporary reproduction and permissible quotations, even of lawful copies obtained from rightsholders, fall outside the prerogative available to Member States to ensure access to and use of protected knowledge resources should TPMs pose obstacles[180].

- Previous studies have concluded that Article 6(4) ISD is "extremely complex, vague and prone to interpretation", noting that national solutions vary considerably[181].

Against these considerations, the analysis should consider the TPM/research exception interface in Article 6(4) ISD. To ensure a consistent framework across the EU, researchers may need additional legal certainty to rely on general research exceptions, including in situations where research use may be subject to (standard) contractual terms and conditions applied in online environments.

177 Annex 5, RPO Survey, Question 74.

178 K. Szkalej, 'Copyright in the Age of Access to Legal Digital Content: A study of EU copyright law in the context of consumptive use of protected content', Uppsala University 2021, 304-307 discussing the provision in light of different access models.

179 Annex 5.

180 See on the consequences of excluding Article 5(1) from the interface created by Article 6(4) ISD K. Szkalej, 'Copyright in the Age of Access to Legal Digital Content: A study of EU copyright law in the context of consumptive use of protected content', Uppsala University 2021, 307-308.

181 L. Guibault et. al., 'Study on the implementation and effect in Member States' laws of Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society', Final Report Part I, IViR, 2007, 105; G. Westkamp 'The Implementation of Directive 2001/29/EC in the Member States', Part II, QMUL, 2007, 66.

*Policy Option CRR-02: non-commercial use requirement.*

**Policy Option CRR-02:**

- **Relax or abandon the requirement of "non-commercial purpose" in the copyright *acquis*.**
- **Adopting guidelines or recommendations clarifying the extent to which private partners can benefit from using privileges for scientific research and new knowledge and information resources (publications, data, etc.) evolving from this privileged use.**

Current research provisions in the EU copyright *acquis* – Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD – set forth the requirement of use for a "non-commercial purpose". Yet, the survey results indicate that 90.5% of RPOs are involved in research projects in which researchers collaborate with partners in the private sector[182]. As relevant literature, implementation practices, and surveys show, this focus on a non-commercial character of the research use can **cause problems**:

- Confining research exceptions to non-commercial use causes legal uncertainty[183] and seems outdated: in current research practice, there is a tendency to encourage researchers to collaborate with private partners.

- European and national funding schemes for research may even require the involvement of private partners and make it a condition that these partners provide a part of the budget[184]. Some collaborations may also involve global partnerships, including private parties outside of the EU.

- The gathered data highlight that policies targeting public–private collaborations vary widely among organisations[185]. Respondents also highlight numerous challenges, for example, uncertainties in navigating legal boundaries for access and reuse of data in non-traditional research contexts or avoiding materials with restrictive licences. In relation to sharing knowledge resources in particular, 39.7% of RPOs indicate that it is a very frequent (14.1%) or somewhat frequent (25.6%) occurrence that their researchers refrain from using copyright-protected resources because they collaborated with industry partners and felt that use permissions given in copyright law would no longer apply because these permissions only cover non-commercial use[186].

- In the case of cross-border use, 48.3% of RPOs indicate that it is a very frequent (19.6%) or somewhat frequent (28.7%) occurrence that their researchers are unable to share copyright-protected knowledge resources with research partners in other countries because the subscriptions of the organisation were limited to the researchers working at the organisation[187].

182 Annex 5, RPO Survey, Question 11.

183 C. Angelopoulos (2022), 'Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 14-15.

184 M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 21.

185 Annex 5, RPO Survey, Question 14.

186 Annex 5, RPO Survey, Question 24.

187 Annex 5, RPO Survey, Question 24.

- Responses from researchers align with responses from RPOs and highlight uncertainties related to the applicability of copyright exceptions, institutional and legal complexity related to coordination of access to copyright-protected data with different requirements, using materials within academic research venues and industry research venues, or sharing knowledge resources co-created with other researchers[188]. More specifically, 15.6% of researchers refrained from sharing materials which they had co-created with other researchers within the same project because of fear of copyright infringement, while 10.3% refrained from using materials because they collaborated with industry partners[189].

Considering these results, it cannot be ruled out that the non-commercial use requirement renders copyright exceptions for research purposes inapplicable in modern research settings that, in accordance with current funding schemes, include industry involvement and public–private partnerships. Moreover, with the proliferation of technology offices and commercialisation divisions at universities, research endeavours that may very well be carried out strictly within the confines of publicly funded research may later prove to offer exploitation options and lead to initiatives to commercialise the results of that research. This may expose researchers relying on research exceptions that only permit non-commercial use to significant legal risks because of unanticipated changes in circumstances. Confirming these concerns, the quantitative data evolving from the RPO survey indicates that:

- 68.2% of respondents are in favour or very strongly in favour of the statement that copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships[190].

- 81.4% of respondents are in favour or very strongly in favour of the statement that copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes[191].

Although the quantitative data also indicate, on the other hand, that 70% of publishers do not support at all or rather reject the first statement and, as mentioned in relation to CRR-01.1, 71% do not support at all or rather reject the second statement[192], against the above considerations and specificities of the research sector it seems appropriate to explore whether it is feasible to relax the non-commercial use requirement in the context of research activities.

*Policy Option CRR-03: Text and data mining provisions.*

**Policy Option CRR-03:**

- **Adopting guidelines or recommendations that address aspects of the TDM provisions that may lead to legal uncertainty and divergent approaches and practices across the Member States.**

188 Annex 5, Researchers' survey, Question 21.

189 Annex 5, Researchers' survey, Question 18.

190 Annex 5, RPO Survey, Question 27.

191 Annex 5, RPO Survey, Question 27.

192 Annex 5, Publishers' survey, Question 21.

The specific TDM provisions laid down in Articles 3 and 4 CDSMD are relatively recent additions to the EU copyright *acquis*. Therefore, the practical implications of these provisions are a matter of further research and assessment in the coming years. Considering previous studies and the overview of the literature, national implementation practices and survey results, it is nonetheless possible to indicate several issues that may require attention:

- Article 3 CDSMD regulates acts of reproduction (extraction in the terminology of the *sui generis* database right) for TDM purposes. However, specific regulation of acts of making available to the public – enabling the (cross-border) sharing of TDM datasets in broader research consortia or the research community more generally – is missing. This can lead to legal uncertainty and divergent approaches in Member States regulating this type of use at the national level (or refraining from doing so). Individual Member State approaches, including the right to make them available to the public, may fail to provide a clear framework for cross-border use[193].

- With the adoption of specific TDM provisions, questions have also arisen as to research uses falling outside the scope of the research provision in Article 3 CDSMD. Investigative journalism, for instance, has particular and undeniable societal relevance. As long as investigative journalism divisions of newspapers and other press publishers are not qualified as "research organisations" in the sense of Article 2(1) CDSMD, however, the specific use privilege in Article 3 CDSMD remains inapplicable[194]. The broader norm in Article 4 CDSMD poses particular difficulties as well. Investigative journalists are unlikely to obtain permission from rightsholders using the rights reservation option following Article 4(3) CDSMD. Modern forms of information gathering, such as TDM, however, have become increasingly important to journalistic work[195].

- The TDM provisions in Articles 3 and 4 CDSMD may fail to ensure wider access to data and, therefore, may be ineffective in facilitating the growth of new ML and AI applications. According to commentators, a key reason for this is the fact that reliance on the open-ended TDM provision in Article 4 CDSMD may be frustrated by the reservation of rights, contractual restrictions and the use of TPMs[196].

- More generally, it has been argued that the overly broad definition of TDM in the CDSMD may expand the scope of reproduction rights, trigger restrictive contractual practices and stretch the limits of copyright to the point of creating actual data ownership[197]. Ultimately, this issue relates to misalignments between outcomes envisaged by the legislator, legal compliance, and market preferences. As cited earlier in relation to CRR-01.2, according to one RPO, their researchers refrain from using research tools that make it possible to mine a large number of protected knowledge resources such as texts, images, films and music "not because we do not want to risk copyright infringement, but because the standard agreement with the publisher specifically does not allow such use"[198].

193 Annex 1, S. Flynn, L. Schirru, M. Palmedo, A. Izquierdo, 'Research Exceptions in Comparative Copyright' (2022) PIJIP/TLS Research Paper Series no. 75; M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 45-47.

194 Cf. T. Margoni/M. Kretschmer, "A Deeper Look Into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology", CREATe Working Paper 2021/7, Glasgow: CREATe Centre 2021, 5 and 10.

195 C. Beckett (2019), New Powers, New Responsibilities – A Global Survey of Journalism and Artificial Intelligence, London: London School of Economics, 24-26; C. Geiger/G. Frosio/O. Bulayenko (2019), "Text and Data Mining: Articles 3 and 4 of the Directive 2019/790/EU", Centre for International Intellectual Property Studies Research Paper 2019/08, Strasbourg: CEIPI, 5.

196 Annex 1, R. Ducato, A. Strowel, 'Limitations to Text and Data Mining and Consumer Empowerment: Making the Case for a Right to "Machine Legibility"', (2019), International Review of Intellectual Property and Competition Law, 50(6), 649-684, DOI: 10.1007/ s40319-019-00833-w.

197 Annex 1, T. Margoni, M. Kretschmer, 'A Deeper Look into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology', (2022), GRUR International, 71(8), 685-701.

198 Annex 5, RPO Survey, Question 24.

- Although Articles 3 and 4 CDSMD have been implemented almost verbatim by many Member States[199], material differences concern the beneficiaries of research freedoms based on Article 3 CDSMD. The comparative study reveals that while one group of Member States strictly follows the CDSMD in defining the notions of "cultural heritage institution" and "research organisation", another group of Member States refers to "research organisations" without offering any definition or providing examples of such organisations or explicitly itemising them[200].

- Few Member States encourage the different actors concerned (rightsholders, cultural heritage institutions and research organisations) to voluntarily establish codes of conduct and best practices for TDM research[201].

- Lawful use on which the application of Article 3 CDSMD depends and lawfully accessible resources on which the application of Article 4 CDSMD depends may cause legal uncertainty as to whether there is any practical difference between the two terms and how that affects the operability of the respective provisions generally as well as in light of contractual practices and use of TPMs to limit uses and to provide in machine-readable form information that TDM activities are prohibited.

- The results of the RPO questionnaire indicate that 90% of responding RPOs are in favour or very strongly in favour of the statement that further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the TDM exceptions[202]. Similarly, the majority of responding publishers (51%) are in favour or very strongly in favour of the statement that further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions for TDM and need not seek permission from copyright holders. Some 12% have taken a neutral position in respect of this policy option[203].

Considering these reference points for potential non-legislative intervention, it is conceivable to develop guidelines and recommendations that address aspects of Articles 3 and 4 CDSMD that may lead to legal uncertainty and divergent approaches and practices across the Member States. In addition, and with regard to Policy Option CRR-01, such interventions could also seek to clarify the "lawful access" requirement in Article 3 CDSMD, in particular with regard to subscriptions taken by research organisations belonging to a broader, transnational research consortium.

*Policy Option CRR-04: licensing solutions.*

**Policy Option CRR-04:**

- **Promoting umbrella licensing solutions leading to long-term open access availability;**
- **Developing guidelines or recommendations seeking to pave the way for umbrella licensing and standard remuneration schemes.**

199 Annex 1.

200 Annex 1.

201 Annex 1.

202 Annex 5, RPO Survey, Responses to Question 27.

203 Annex 5, Publishers' survey, Responses to Question 21.

As an alternative approach to reviewing copyright exceptions and related provisions in the copyright *acquis*, it is, in principle, conceivable that the evolution of appropriate licensing and remuneration schemes in the EU will lead to a satisfactory degree of knowledge resource availability for research purposes. While a number of publishers offer 'transformative agreements' that are aimed at transitioning towards open access, these agreements only concern limited categories of scientific output. Moreover, even if the proposed tool is the same compared to the SPR prong, the present CRR prong addresses and combines different themes and copyright issues, some of which are quite intricate and relate more directly to the various embodiments of access problems in the research sector. When contemplating an alternative, licence-based solution designed to facilitate access to and reuse of knowledge resources, taking into account all scientific disciplines, it is important to recognise that **approaches based on licensing and remuneration schemes can uphold traditional bargaining asymmetry problems** that make it doubtful whether this avenue offers a meaningful alternative to the broadening and strengthening of copyright exceptions for research use:

- Publishing contracts, drafted by the publishing sector and including access and (re-)use conditions for researchers and technical infrastructures for access control, are often the primary instruments for regulating access to protected knowledge resources. This can give the publishing industry the upper hand in its relationship with researchers and research institutions and lead to contractual access and reuse regimes that fail to support open access and open science goals.

- Terms and conditions for publication, access and other scientific use can prove to be unpredictable in the long term because the publisher may change them as a result of mergers and acquisitions in the publishing sector, the implementation of new technology, a change of business strategies, etc.

- Contract terms regulating research access can be fragmented nationally or even locally per user (price/terms discrimination).

- Unlike copyright exceptions, contractual arrangements are normally not designed to express the interests of users treated as a collective. Umbrella solutions that exist as an alternative to already adopted copyright exceptions, as opposed to a compliment, inevitably remove their core function in the copyright system of balancing opposing interests and possibly prevent fundamental rights protected by the Charter from finding concrete application.

- Views over how challenging particular contractual aspects are to negotiate align to a very large extent between the majority of RPOs and publishers. Costs of open access publishing emerge clearly as the most challenging aspect, followed by subscription terms/costs to journals with restricted access or terms and conditions related to open access to publications[204].

- The opportunity to negotiate is not a guarantee for success as negotiations may also fail or indeed not take place at all for specific services or knowledge resources, which may hinder the advancement of specific fields of research.

204 Annex 5, RPO Survey, Question 22; Publishers' survey, Question 17.

- Data on views on alternative approaches to introducing a European SPR regime may also provide some (limited) insights into the present policy option. Publishers, which only constitute one stakeholder group in the present, broader context of the copyright *acquis*, generally indicate little support for umbrella licensing solutions[205]. RPOs, which represent a much more diverse stakeholder group that covers virtually all scientific disciplines, call for simplicity, transparency, and fairness in any alternative solution. While some voiced scepticism towards collecting societies (mentioning issues relating to transparency, effectiveness, and high fees), others highlighted the importance of clear and straightforward legislation, stating that it would be the only viable solution to address the complexities of the publishing landscape[206].

A feasibility analysis of potential interventions in this area – in the sense of an analysis of licensing solutions as an alternative to copyright exceptions – should consider the degree to which initiatives that promote licensing are capable of addressing the potentially weaker bargaining position of researchers and research organisations seeking access to knowledge resources in their relationship with publishers and other rightsholders. For instance, such an assessment could include approaches seeking to apply standard remuneration schemes when the intended licence concerns use for the purpose of scientific research.

## 1.4. Results: estimated advantages and/or benefits

*The content of this Section has been authored collaboratively by Rūta Dėlkutė-Morgan and Tomaš Voronecki.*

The analysis in Task 3 of this assignment builds on survey and interview data collected. Following the methodology explained in overall methodology Section of this report, we present the results of the multi-criteria analysis. Three separate analyses were performed, addressing these clusters of policy options described below:

- Pillar 1. Policy field 1: Introduction of a harmonised secondary publication right;
- Pillar 1. Policy field 2: Alternative solutions;
- Pillar 2: Clarify/Review the Research Exceptions in the EU Copyright *Acquis*.

The analysis below represents all the evidence collected during the course of this study. Please note that this is not meant to replace an Impact Assessment but rather to inform the conversation regarding the proposed policy recommendations. Therefore, policymakers are advised to run an Impact Assessment study following the requirements set in Better Regulation, including a Cost-Benefit Analysis (with monetised costs and benefits), should they wish to further consider the implementation of these options.

The analysis below is structured into social impacts/impacts on science and economic impacts. Social impacts/impacts on science are mostly driven by the information stemming from surveys and interviews with RPOs and researchers. Economic impact, on the other hand, is mostly driven by information collected from publishers. Such a separation is observed due to the nature of publishers' operations (as they are largely economic operators) and the methodology chosen for this analysis (see more information on the methodology in overall methodology Section of this report).

205 Annex 5, Publishers' survey, Responses to Question 28.

206 Annex 5, RPO Survey, Responses to Question 39 (open ended).

Therefore, if policymakers decide to pursue any of the policy options presented in this study, they will have to conduct additional research on the overall economic impact (for the economy as a whole) of improving access and reuse of publications and data for scientific purposes. Such a study could also consider the value for the public and private sector of improved knowledge circulation in the single market as well as better conditions for applying AI tools in science.

### 1.4.1. Pillar 1: Open access Interventions – Secondary Publication Right (SPR)

*Policy field 1: Introduction of a harmonised secondary publication right*

In Table 18, we present all the evidence collected and measured against relevant criteria. The evidence covers the Introduction of a harmonised EU-wide Secondary Publication Right. Here, we include stakeholders' views and preferences regarding the introduction of an EU-wide SPR. It combines policy features SPR-01.1 through SPR-01.5, as specified in Task 2 of this assignment.

**Table 18. The evidence collected and measured against relevant criteria**

| Criteria | Scoring | Justification and evidence |
|---|---|---|
| **SOCIAL IMPACTS/IMPACTS ON SCIENCE** | | |
| IPR | ++ | **Researchers**: Even though SPR does not guarantee an open licence for research, constraining the effective exploitation of works shared under SPR it allows authors to retain control over their work and the way it is shared and reused. Survey respondents noted the effectiveness of SPR for research dissemination. |
| | - | **Publishers:** Some respondents to the publishers' survey are concerned about the potential negative impacts of SPR on cultural diversity, economic efficiency, and freedom of expression and about how the legislation might affect private publishing houses and the sustainability of the system. Publishers expressed concerns about the potential infringement on the contractual freedom of authors and publishers, with the legislation possibly limiting copyright and contractual choices. |
| Quality control | ++ | **Researchers and RPOs**: Granting SPR implies wider accessibility through the access to research with different means, which also widens the variability of versions, consequently weakening reliability, certainty and complicating quality control, nevertheless, if SPR covers VoR, such a problem would be addressed leading to positive outcomes in overall quality of available research. RPOs and researchers reported that the circulation of several versions harms the effective dissemination and exploitation of research. Surveyed researchers noted that only the version of record allows for effective exploitation of research because of issues with consistent citations and quotations with accurate page numbers. |
| | - | **Publishers:** Some publishers foresee an increase in costs for services or a decrease in service quality as a result of the introduction of the EU-wide Secondary Publication Right. Through a rigorous peer review process, publishers ensure the quality and scholarly integrity of disseminated knowledge. The value added by scientific publishers extends to comprehensive editorial efforts, including meticulous peer review and adept copyediting, which collectively enhance the precision and clarity of published works. Furthermore, publishers contribute significantly to the archiving and preservation of scientific knowledge, functioning as custodians of intellectual heritage and maintaining a repository for future research endeavours. |

| | | |
|---|---|---|
| Advancing scientific knowledge/innovation through the availability of research | +++ | **RPO**s: 84% of RPOs in a survey reported that setting a low threshold for public funding in SPR will increase the provision of immediate open access (related directly to SPR-01.2).<br>In the survey, 92.4% of RPOs reported that covering a broad range of scientific output will increase the provision of immediate open access, and 91.2 % see the need for this provision (directly related to SPR-01.1).<br>In the survey, 78.1% of RPOs reported that SPR covering version of record would increase the provision of immediate open access (directly related to SPR-01.4).<br>In the survey, 73.6% of RPOs reported that SPR covering all types of uses would increase the provision of immediate open access (directly related to SPR-01.5). |
| Creation of and access to diverse research and results | ++ | **Researchers**: Strict formulation does not allow the dissemination of scientific findings for disciplines with specific proceedings. Expanding SPR for other types of scientific output would allow for research dissemination in niche fields and the application of diversified research methods (directly related to SPR-01.1). |
| | -- | **Publishers:** Some respondents to the publishers' survey argued that Secondary Publication Rights, particularly for certain outputs like books, were a significant source of revenue that helped offset the original cost of publication. They cautioned that authors retaining all such rights could lead to some works not being published at all. |
| Collaboration Opportunities | +++ | **RPOs:** In the survey, RPOs expressed concerns regarding SPR applicability when collaborating with authors from countries without SPR. Nevertheless, introduction of EU-wide SPR would eliminate such a concern completely, as there would be no legal differences between countries of collaborating researchers/RPOs. |
| **ECONOMIC IMPACTS** | | |
| Sectoral competitiveness | - | **Publishers:** Some publishers particularly in disciplines with limited funding for gold open access, expressed concerns that SPR could undermine existing models, making it more difficult to generate income from subscriptions and transformative publishing agreements. The introduction of SPR was seen as a threat to publishers' ability to recoup investments in services to the community, including production, hosting, peer review processes, and maintaining ethical and scientific integrity. |
| Conduct of business | + | **RPOs:** The RPOs that did experience budgetary changes as a result of the SPR reported that the increase in budget allocated to cover open access publishing costs was more substantial than the increase in budget allocated to subscriptions to journals and costs related to access to knowledge in the survey. However, the majority of RPOs indicated that the effect of SPR was not financial – the size of the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs did not change. |

| | | |
|---|---|---|
| | - | **Publishers**: The majority of all publisher respondents from the SPR countries, regardless of revenue source, perceived little to no impact from Secondary Publication Right provisions. This suggests that a substantial portion of organisations do not consider these provisions to be a major factor affecting their operations. A moderate extent of impact is acknowledged by 20% of respondents, indicating that a portion of organisations recognise some influence of the Secondary Publication Right provisions, but it is not perceived as overwhelming. Publishers from countries that do not yet have SPR introduced are more negative, around a half of survey respondents believe that introduction of SPR will require at least some changes to their current business model. However, in these countries, the features of SPR are limited. This explains the difference in the outcomes reported by publishers in SPR countries and perceived impacts form publishers from non-SPR countries. |

*Source: Compiled by the study team.*

*Policy field 2: Alternative solutions. Developing umbrella licensing and remuneration schemes leading to long-term open access availability*

The evidence covers pillar 1[207], policy field 2: alternative solutions – Developing umbrella licensing and remuneration schemes leading to long-term open access availability. Here, we include stakeholders' views and preferences regarding Developing umbrella licensing and remuneration schemes leading to long-term open access availability (SPR-01.6, as defined in Task 2 of this assignment).

**Table 19. The evidence collected and measured against relevant criteria**

| Criteria | Scoring | Justification and evidence |
|---|---|---|
| **SOCIAL IMPACTS/IMPACTS ON SCIENCE** | | |
| Quality control | + | **RPO**s: RPO survey respondents noted the importance of careful review and a thoroughly documented publication in one place over numerous copies, with potentially varying quality and detail. |
| Advancing scientific knowledge/innovation through the availability of research | ++ | **RPOs and researchers**: Collective licensing agreements ensure immediate researcher accessibility to copyright-protected material. The immediate access helps accelerate the pace of research and innovation, according to RPO survey respondents. |
| | - | **Publishers:** There is a concern among publishers that pre-determined lump sums could have significant pressure on the diversity of scientific output, particularly in the humanities field. |
| Creation of and access to diverse research and results | + | **RPOs:** Alternative solutions would allow research organisations to make their research freely available to the public without having to negotiate individual licences with each copyright holder. |
| Collaboration Opportunities | 0 | *No evidence was found that changes proposed in this policy field would affect collaboration opportunities.* |
| **ECONOMIC IMPACTS** | | |
| Sectoral competitiveness | + | **RPO**s: In an open-ended survey question, RPOs suggested that collecting societies could improve their negotiation power when negotiating on behalf of a large group of stakeholders, particularly in situations involving extended collective licensing alternatives. |

207 Pillar 1: Open access Interventions – Secondary Publication Right (SPR).

| | | |
|---|---|---|
| Conduct of business | - | **RPO**s: RPOs noted concerns about the administrative burden caused by lump sum remuneration and the reputation of collecting societies. |
| | -- | **Publishers**: A majority (70.6%) of responding publishers indicated that specific licensing arrangements, such as extended collective licencing or lump sum remuneration regimes, would not be acceptable as an alternative to introducing an EU-wide SPR. |

*Source: Compiled by the study team.*

### 1.4.2. Pillar 2: Clarify/Review the Research Exceptions in the EU Copyright *Acquis*

The evidence presented in Table 20 covers the whole pillar 2[208]: research exceptions – Copyright and related rights. It combines all CRR policy options, as specified in Task 2 of this assignment.

**Table 20. The evidence collected and measured against relevant criteria**

| Criteria | Scoring | Justification and evidence |
|---|---|---|
| **SOCIAL IMPACTS/IMPACTS ON SCIENCE** | | |
| IPR | ++ | **Researchers**: The ability to choose how others can use their data were evaluated as an important factor by the researchers (8 in the scale of 10) (directly related to CRR-02). |
| | - | **Publishers:** Publishers emphasise the importance of existing contracts between publishers and authors, where the transfer of copyright allows publishers to exploit the author's work for mutual benefit. They suggested that introducing a clause allowing widespread free access for research purposes might harm publishers financially, limiting their ability to support authors and produce high-quality publications (directly related to CRR-04).<br>Publishers highlighted the significance of establishing a market through licensing and emphasised the willingness to grant licences for access to copyright-protected resources, particularly in scenarios involving overwhelming public interest (directly related to CRR-04). |
| Quality control | - | **Publishers:** Publishers suggested that introducing a clause allowing widespread free access for research purposes might harm publishers financially, limiting their ability to support authors and produce high-quality publications. This could potentially lead to authors resorting to self-publishing, akin to current practices in open access publishing, resulting in a significant impact on the publishers' ability to offer their services to authors and maintain the quality of scientific publications (directly related to CRR-04). |
| Advancing scientific knowledge/innovation through the availability of research | ++ | **RPO**s: Uncertainties arise, especially within universities, where the lines between commercial and non-commercial research are not always distinct. This ambiguity risks hindering innovative ventures that could evolve from research initiatives, and better guidance would certainly be beneficial and help address this issue (directly related to CRR-01).<br>There are concerns about the limitations imposed on scientific research by current copyright directives and data protection regulations (GDPR). Respondents expressed the view that restrictions tied to research results and data protection laws present significant challenges, hindering effective machine learning and robust analysis of large datasets. Having clear |

208 Clarify/Review the Research Exceptions in the EU Copyright *Acquis*.

| | | |
|---|---|---|
| | | guidance on how to navigate these issues would pose a clear benefit to RPOs. (directly related to CRR-03). |
| Creation of and access to diverse research and results | ++ | **Researchers**: Some 80% of respondents encountered obstacles in accessing copyright-protected knowledge resources due to inadequate subscriptions by their research organisations. Researchers raised concerns about different understandings of copyright laws and open access rules across universities that lead to varied practices. Furthermore, challenges like piracy and tight library budgets often overshadow concerns about copyright laws. The repercussions of the copyright nuances discussed above heavily impacted researchers' access to crucial knowledge resources. If the policy option successfully addressed this struggle, this could lead to major benefits for the researchers (directly related to CRR-01).<br>Concerns over copyright led to 20.7% of respondent researchers refraining from text or data mining (directly related to CRR-03).<br>80.0% of researchers were unable to access copyright-protected knowledge resources due to a lack of subscription by their research organisation. 59.6% of researchers report being unable to access copyright-protected knowledge resources on the internet because they were behind a paywall or electronic fence (directly related to CRR-04).<br>Clear guidance on TDM provisions, as well as more specific research exceptions, would benefit a considerable share of researchers. |
| | + | **RPOs and Researchers:** 14.1% of RPOs claimed that researchers very frequently refrain from using copyright-protected resources because they collaborated with industry partners, and they believed that the use permissions allowed by copyright law no longer applied, as these permissions only covered non-commercial use. The majority, 60.3%, indicate that it is not frequent or does not happen at all. Relaxing non-commercial use requirements would likely be beneficial but would affect a small fraction of RPOs and/or researchers (directly related to CRR-02). |
| | +++ | **RPOs**: 81.4% of surveyed RPOs advocated for the inclusion of an open-ended clause within copyright law, allowing broad access to copyright-protected resources for all research purposes (directly related to CRR-01).<br>90% of RPOs inclined towards providing researchers with additional guidance on text and data mining exceptions within copyright laws (directly related to CRR-03).<br>90% of RPOs voiced support for the provision of further guidance to researchers regarding how existing copyright exceptions can facilitate text and data mining (directly related to CRR-04).<br>RPOs emphasised the need for clear and mandatory legislation, particularly concerning Collective Licensing (CCL) models, which garnered positive recognition within the research community (directly related to CRR-05). |

| | | |
|---|---|---|
| **ECONOMIC IMPACTS** | | |
| Sectoral competitiveness | ++ | **RPO**s: 68.2% of RPOs expressed approval that copyright laws should cover not only non-commercial research but also partnerships involving public and private entities (directly related to CRR-02).<br>Globally, the EU's stance on copyright laws in comparison to leading nations like Japan and China spotlights the need to align legislative frameworks with technological advancements. If successful, the effects of the policy option might advance the EU's strategic positioning in the world (directly related to CRR-04). |
| | - - | **Publishers:** 27.2% of publishers showed a positive stance that copyright laws should cover not only non-commercial research but also partnerships involving public and private entities, while 64.4% preferred to reject or not support the idea. (directly related to CRR-02).<br><br>Interviews with various publishers and their representative organisations indicate a cautious stance regarding the idea of introducing an open-ended clause in copyright law to facilitate broader access to copyrighted knowledge resources for research purposes. The publishers argue against the proposal of an open-ended clause, fearing it could lead to adverse effects on their business model (directly related to CRR-04)**.** |
| Conduct of business | - - | **Publishers**: 25.5% of respondents expressed a willingness, whether strong or moderate, to accept this policy change, while 60.4% leaned towards rejection or non-support towards exploring umbrella licensing solutions to facilitate research use (directly related to CRR-05).<br>For publishers that rely entirely on paid subscriptions, umbrella licensing would not derive any benefits. The potential downsides are a potential increase in bureaucracy and a reduction in subscription revenue (directly related to CRR-05). |

*Source: Compiled by the study team.*

### 1.4.3. Conclusions and Feasibility Assessment

**Summary of results by stakeholder group**

Overall, the findings of the multi-criteria analysis show support for proposed legislative and non-legislative changes by researchers and RPOs. Some publishers, on the other hand, are rather concerned about the proposed changes. The sentiment is much more positive, though, from the perspective of the institutional and non-commercial publishers.

**Table 21. Summary of multi-criteria analysis by the type of stakeholder**

| Option | Impact on researchers | Impact on RPOs | Impact on Publishers |
|---|---|---|---|
| Pillar 1: EU-wide SPR | ++ | ++ | - |
| Pillar 1: Alternative solutions | ++ | + | - - |
| Pillar 2: Strengthening general research exception | ++ | ++ | - - |

*Source: Compiled by the study team.*

**Pillar 1: EU-wide SPR**. The impact on researchers and RPOs is driven by the positive attitudes towards proposed aspects of the EU-wide SPR. For example, researchers believe that expanding SPR for other types of scientific output would allow for research dissemination in niche fields and the application of diversified research methods. In addition, 84% of RPOs that responded to the survey reported that setting a low threshold for public funding in SPR will increase the provision of immediate open access. RPOs and researchers reported that

the circulation of several versions harms the effective dissemination and exploitation of research. Permission to share VoR under SPR may help to address the adverse effects of SPR on quality control (in cases when SPR is limited to only AAM). Surveyed researchers noted that only the VoR allows for effective exploitation of research because of issues with consistent citations and quotations with accurate page numbers. Finally, 78.1% of surveyed RPOs believe that SPR covering the VoR would increase the provision of immediate open access, and 73.6% of them believe that SPR covering all types of uses would also increase the provision of immediate open access.

The perception of publishers on the possibility of introducing an EU-wide SPR is less positive. A large share of publishers that come from countries without SPR legislation believe that various features related to the EU-wide SPR would lead to a substantial change in their business models. For example, 61.9% of scientific publishers indicated that a harmonised SPR covering a broad range of scientific output, including not only journal articles but also other research results enjoying copyright protection, would require a fundamental reshaping of their business model. However, when broken down by type of publisher, commercial publishers have the most negative perception. The inclusion of a broad range of scientific output in SPR regimes would result in a fundamental reshaping of the business model for 76.9% of commercial publishers, 14.3% of institutional, and 63.2% of non-commercial publishers. A similar trend is visible in other aspects of SPR considered in this study, where the vast majority of commercial publishers expect the implementation of an EU-wide SPR to lead to substantial changes in their business model; a smaller share of institutional and non-commercial publishers have this expectation.

Nevertheless, the current situation is that the majority of publisher respondents from the SPR countries, regardless of revenue source, perceive little to no impact from SPR provisions. This suggests that a substantial share of organisations do not consider these provisions to be a major factor affecting their operations. A moderate extent of the impact is acknowledged by 28% of respondents, indicating that a share of organisations recognise some influence of the SPR provisions, but it is not perceived as overwhelming. However, in these countries, the features of SPR are limited. This explains the difference in the outcomes reported by publishers in SPR countries and perceived impacts from publishers from non-SPR countries. It is likely that SPR, including multiple features as proposed in this study, would have a much bigger impact on publishers.

**Pillar 1: Alternative solutions**. The survey data analysis showed that 77.6% of RPO respondents indicated that they would strongly or rather accept initiatives to facilitate umbrella licensing solutions or lump sum remuneration regimes to make research use possible, while only 2.2% would not support this policy avenue at all. From the publishers' side, we saw little support for this policy option. A majority (70.6%) of responding publishers indicate that specific licensing arrangements, such as extended collective licencing or lump sum remuneration regimes, would not be acceptable as an alternative to introducing an EU-wide SPR. Similar to what was described above, there are important differences in how the effects of the alternative solutions are perceived by different types of publishers. While, alternative approaches based on umbrella licensing or remuneration regimes would not be acceptable to 76% of the commercial publishers, this percentage drops to 68% for non-commercial and to 33% for institutional publishers.

**Pillar 2: Strengthening general research exception**. The policy option is expected to bring benefits to the researchers through better access to diverse research results. For example, 80% of researchers responding to the survey encountered obstacles in accessing copyright-protected knowledge resources due to inadequate subscriptions by their research organisations. Researchers raised concerns about different understandings of copyright laws and open access rules across universities that lead to varied practices. Furthermore, challenges like piracy and tight library budgets often overshadow concerns about copyright laws. The repercussions of the copyright nuances discussed above heavily impacted researchers' access to crucial knowledge resources. If the policy option successfully addressed this struggle, this could lead to major benefits for the researchers. RPOs also expect benefits from the policy options stemming from the strengthened general research exceptions. For example, it would have positive benefits to innovation as the ambiguity regarding the distinction between commercial and non-commercial research now hinders innovative ventures. Also, RPOs noted that restrictions tied to research results and data protection laws present significant challenges, hindering effective machine learning and robust analysis of large datasets, meaning that guidance for TDM provision would lead to benefits regarding access to knowledge. Globally, the EU's stance on copyright laws in comparison to leading nations like Japan and China spotlights the need to align legislative frameworks with technological advancements. If successful, the effects of the policy option might advance the EU's strategic positioning in the world.

Most commercial publishers, on the other hand, see that some of the aspects of the stronger general research exception would lead to unwanted changes in their business model. For example, publishers emphasised the importance of existing contracts between publishers and authors, where the transfer of copyright allows publishers to exploit the author's work for mutual benefit. They suggest that introducing a clause allowing widespread free access for research purposes might harm publishers financially, limiting their ability to support authors and produce high-quality publications. This could potentially lead to authors resorting to self-publishing, similar to current practices in open access publishing, resulting in a significant impact on the publishers' ability to offer their services to authors and maintain the quality of scientific publications. Finally, there was also very little support for the umbrella licensing solutions, especially among the publishers that rely entirely on paid subscriptions, as they would expect an increase in bureaucracy and a reduction in subscription revenue.

**Summary of results by type of impact**

Regarding types of impact, all three clusters of policy options are expected to produce positive social impacts and impacts on science. On the other hand, EU-wide SPR and the options related to the exemption of specific types of research use might have negative effects for certain publishers. This observation is heavily driven by publishers' stance on the matter. While it is true that aspects such as enabling open access for research with commercial purposes would lead to some economic gains for researchers, this has to be taken with some caution. First, this would not be an immediate direct effect but rather a spillover effect if the commercial research turned into financial gains. Second, access to a wide variety of research aspects is covered under the "Social Impact/Impact on Science" Section. Nevertheless, the results in Table 22 are nuanced, and it is important to note that some of the economic aspects might also be considered as social aspects and vice versa.

**Table 22. Summary of multi-criteria analysis by the type of impact**

| Option | Social Impact/Impact on science | Economic impact |
|---|---|---|
| Pillar 1: EU-wide SPR | ++ | 0 |
| Pillar 1: Alternative solutions | + | - |
| Pillar 2: Strengthening general research exception | ++ | - |

*Source: Compiled by the study team.*

The publishers' views strongly drive the economic impact; hence, the policy fields that are not supported by the publishers turn to a negative value. It is important to note that the economic impacts, due to the sensitivity of the topic and the very sparse availability of the data, cannot be monetised. Therefore, when looking at the results of the multi-criteria analysis, we need to look at the whole picture and not isolate the social or economic impacts when making further policy decisions.

## 1.5. Need for legislative or non-legislative interventions in the field of copyright and related rights

*The content of this Section has been authored by Martin Senftleben.*

The literature review, overview of national implementation practices and survey results offer a solid basis for assessing, as a final step, the need to consider potential interventions – both legislative and non-legislative – in the field of copyright, related rights and *sui generis* database rights (collectively referred to as "copyright" in the subsequent overview of policy options, unless individual fields are explicitly separated). The following analysis of the policy options that have been identified in Section 1.3 provides this final assessment. It is aligned with the overarching question of how copyright protection could be reconciled with and contribute to the attainment of the goals formulated in priority action 2 of the ERA Policy Agenda 2022-2024, in particular, the overarching objective to arrive at a single, borderless market for research, innovation and technology across the EU.

More concretely, the following assessment focuses on obstacles to the accessibility and reusability of research output that have come to the fore in literature statements, national implementation practices and survey responses. It explores legislative and non-legislative measures that could be taken to resolve identified problems and establish a copyright framework that supports data access and reuse for research purposes. Section 1.5.1 discusses options for interventions in the area of open access publishing, in particular, the possibility of introducing a harmonised SPR. Section 1.5.2 offers a more general overview of elements of the EU *acquis* in the area of copyright and related rights, including *sui generis* database rights (CRR) that could be improved to make the EU copyright framework fit for research.

### 1.5.1. Open access Interventions – Secondary Publication Right (SPR)

As the following discussion will show, researchers and RPOs have expressed substantial support for legislative or non-legislative measures with regard to all SPR-related policy issues reflected in Policy Options SPR-01 to SPR-06. For the further development of initiatives in the framework of ERA priority action 2, this result offers important signposts.

However, it must also be mentioned that with respect to the effectiveness of existing SPR regimes in EU Member States, the researcher and RPO surveys yield mixed results. In several national contexts, it is difficult to demonstrate a measurable increase in open access availability of research output that can directly be attributed to the introduction of an SPR. The overview of national experiences and survey results offer several explanations for this finding. It is conceivable that existing SPR regimes constitute legal developments that have not yet become sufficiently known among researchers. While RPOs may be well aware of SPRs, the awareness among individual researchers may remain rather limited. Hence, it could be premature to draw conclusions as to the effectiveness of SPRs.

Turning to individual features of existing SPR regimes, it may also be said that certain elements of the current regulatory design in Member States with SPR rules could reduce the effectiveness and attractiveness of the adopted regimes in practice. First of all, existing approaches have remained limited to individual national contexts and individual configurations in the Member States concerned. To the extent to which fragmentation poses difficulties, an initiative at EU level – seeking to reach full harmonisation or encourage the approximation of national approaches – has added value in and of itself. It would provide one single legal framework that applies across EU Member States. An EU-wide initiative may also be an appropriate regulatory response to concerns about insufficient awareness among researchers. Establishing the SPR as a common element of the EU copyright *acquis*, it becomes possible to draw additional attention to the SPR and underline that the SPR can be invoked throughout the EU to enhance open access to research results in the interest of researchers and the general public.

Finally, individual precautions in existing SPR regimes can be identified as potential stumbling blocks: embargo periods and the absence of an entitlement to disseminate the final published version of research output may explain why open access benefits of existing regimes appear less strong than perhaps expected. However, it is important to note that these factors – embargo periods and exclusions of the final published version – may also explain why the economic impact of existing SPR regimes seems rather limited. According to the survey results, the SPR solutions adopted in several Member States have not deprived publishers of substantial sources of revenue. Potential substitution effects seem rather limited. This also means that a departure from embargo periods and the inclusion of final published versions in SPR regimes are likely to raise concerns among (commercial) publishers about the replacement of their initial first publications.

Therefore, policymakers in the area of SPRs must walk a fine line: potential changes to existing regulatory approaches at Member State level must be analysed in the light of both benefits for the research community and potential detriment to (commercial) publishers. Based on the results of the present inquiry, the following analysis describes reasons for adopting specific features of SPR regimes and potential concerns in more detail. It addresses each individual policy option identified in Section 1.3 and discusses legislative and non-legislative interventions that may be considered.

*Policy Option SPR-01: include a broad range of scientific output*

**Policy Option SPR-01:** covering a broad range of scientific output, including not only articles but also writings and other contributions more generally – regardless of the publication outlet

As already indicated in Section 1.3, an examination of existing SPR regimes in EU Member States shows, with regard to the knowledge resources falling within the scope of SPR rules, that the Member States tend to confine the scope of the SPR to articles published in journals, thereby defining articles and relevant journals differently. The divergence of national approaches can **cause specific problems and make it difficult to rely on SPR-based open accessibility of scientific output across Member State borders**.

The survey results underscore the research community's support for a more inclusive SPR regime. Answering Question 31, a significant majority of RPOs – 92.4% – consider that an SPR regime covering a broad range of scientific output would rather increase (46.6%) or strongly increase (45.8%) immediate open access to publicly funded research. Furthermore, 91.2% of RPO respondents in the Member States currently providing for SPRs acknowledge the necessity of extending the SPR regime to cover diverse scientific outputs and overcome the confinement to journal articles, either to a large extent (57.4%) or to some extent (33.8%). This RPO viewpoint reflects a growing recognition of the evolving and diverse nature of academic practices, calling for a policy that accommodates a wide range of scientific contributions and research outputs, irrespective of the publication outlet.

When it comes to scientific publishers' views, the survey results revealed that 61.9% of scientific publishers indicated that a harmonised SPR covering a broad range of scientific output, including not only journal articles but also other research results enjoying copyright protection, would require a fundamental reshaping of their business model. Some 11.9% of publishers indicated that this would merely require changes that would not be fundamental, while 26.2% of publishers stated that the inclusion of a broad range of scientific output would not require any substantial changes to their current business model. In terms of different types of publishers (commercial, non-commercial, institutional publishers[209]), the views differed significantly. The inclusion of a broad range of scientific output in SPR regimes would result in a fundamental reshaping of the business model for 76.9% of commercial publishers, 14.3% of institutional, and 63.2% of non-commercial publishers.

Regarding publishers' perspectives based on their revenue levels, the feedback was mixed. For low revenue publishers, the opinions were evenly split – 42.1% believed that including a wide array of scientific output would necessitate significant business model alterations, while another 42.1% thought it would not lead to major changes. For the medium revenue publishers, the results showed that 66.7% felt a need for fundamental restructuring, compared to 22.2% who saw no need for major adjustments. In the case of high-revenue publishers, a significant majority of 81.3% indicated the necessity for major business model transformations, whereas only 12.5% believed their current operations would not require considerable modifications.

These survey results must be placed in the broader fundamental rights framework in which copyright protection is embedded in the EU. Considering the fundamental right to research following from Articles 11 and 13 of the Charter of Fundamental Rights[210], it is important to ensure that copyright protection regimes – resting on Article 17(2) of the Charter[211] – offer a proper balance and sufficient room for open, exploratory research processes to support research autonomy[212]. Confining research-related provisions, such as SPR regimes, to specific types of research output, can appear problematic in light of this overarching consideration.

209 In the study survey, publishers are defined based on their interaction and role within the publishing industry, as identified through the use of OpenAlex and Apollo.io tools. The survey categorised publishers into three main types based on their operational and funding models: commercial, non-commercial, institutional publishers. In the survey, publishers self-selected their category, ensuring an accurate reflection of their business model and industry standpoint.

210 Cf. Senftleben, M, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 12-15; C. Geiger/B.J. Jütte, "The Right to Research as Guarantor for Sustainability, Innovation and Justice in EU Copyright Law", in: T. Pihlajarinne/J. Mähönen/P. Upreti (eds.), Rethinking the Role of Intellectual Property Rights in the Post Pandemic World: An Integrated Framework of Sustainability, Innovation and Global Justice, Cheltenham: Edward Elgar 2022, forthcoming; C. Geiger/B.J. Jütte, "Conceptualizing the Right to Research and its Implications for Copyright Law, An International and European Perspective", American University International Law Review 38 (2023), forthcoming.

211 Cf. D.J.W. Jongsma, Creating EU Copyright Law – Striking a Fair Balance, Helsinki: Hanken School of Economics 2019, 163-168; J. Griffiths/L. McDonagh, 'Fundamental Rights and European IP Law – the Case of Art 17(2) of the EU Charter', in: C. Geiger (ed.), Constructing European Intellectual Property Achievements and New Perspectives, Cheltenham: Edward Elgar 2013, 75; C. Geiger, 'Intellectual Property Shall be Protected!? Article 17(2) of the Charter of Fundamental Rights of the European Union: A Mysterious Provision With an Unclear Scope', European Intellectual Property Review 31 (2009), 113.

212 Cf. CJEU, 29 July 2019, case C-516/17, Spiegel Online, para. 54; CJEU, 29 July 2019, case C-469/17, Funke Medien NRW, para. 70.

Against this backdrop, the following interventions could be considered to include Policy Option SPR-01 in the EU copyright *acquis*.

*Legislative measures*

To overcome current differences between Member States – and the absence of an SPR regime in the majority of Member States – it is **advisable to introduce a fully harmonised, mandatory SPR regime at EU level**. In line with Policy Option SPR-01.1, this harmonised SPR regime at the EU level should cover a broad range of publication outlets and scientific output, including not only articles but also books and other writings that enjoy copyright protection. To the extent to which other conceivable forms of scientific output, such as data collections, enjoy copyright and/or *sui generis* database protection, and this protection causes access barriers comparable to the obstacles that led to the introduction of SPR regimes at the Member State level, these other forms of scientific output could be included in an EU-wide SPR regime as well.

In cases where research data do not attract copyright or *sui generis* database protection[213], the question arises whether – despite the absence of these forms of protection – the introduction of an SPR would be appropriate to remove access barriers. The broader discussion of data legislation in the framework of the present study sheds light on several existing regulatory approaches in the field of data. Before extending an SPR approach to data in general, it is thus important to explore interSections with other regulations.

*Non-legislative measures*

It is unclear whether non-legislative guidelines or recommendations could overcome the problems arising from divergent approaches in Member State legislation. As a step in the right direction, it is conceivable to **organise SPR stakeholder dialogues at EU level to discuss best practice guidelines and recommendations to support the evolution of harmonised approaches across EU Member States**. From the perspective of Policy Option SPR-01, best practice guidelines or recommendations should address the issue of different forms of scientific output and discuss avenues for arriving at a broad approach covering a wide spectrum of results of scientific work.

### *Policy Option SPR-02: relaxing requirement of public funding*

**Policy Option SPR-02:** relaxing the requirement of public funding, in the sense of setting a low threshold, such as 50% (or less) of public funding

All existing SPR regimes in the Member States, except the more elastic approach taken in the Netherlands and Bulgaria, require at least 50% public funding. Below this threshold, research output falls outside the scope of the SPR. In the case of further harmonisation of the SPR, it is important to note that the public funding requirement can substantially limit the effectiveness of SPR regimes. A **more restrictive approach may cause problems and imbalances** in the light of current funding arrangements and, in particular, the modalities of public–private partnerships. Encouraged by funding schemes that even require substantive contributions of non-academic research partners, research is increasingly conducted in collaboration with the private sector.

213 For instance, see the discussion of developments with regard to machine-generated data by Senftleben, M, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 49-52. See also the subsequent discussion of the Data Act.

Indeed, quantitative data indicate that as much as 90.5% of RPOs are involved in research projects in which researchers collaborate with partners in the private sector. **Too high a percentage of public funding is thus likely to exclude the results of research based on mixed public–private funding arrangements from SPR regimes and reduce the effectiveness of SPR rules as tools to foster open access and open science goals.**

The collected data indicate that as much as 84.0% of RPOs consider that an SPR regime covering research with 50% or less public funding would rather increase (45.5%) or strongly increase (38.5%) immediate open access to (partly) publicly funded research. When it comes to publishers, overall, 57% of scientific publishers indicated that the switch to a lower threshold (50% or less public funding) would require a fundamental reshaping of their business model, while 26.2% said that it would not imply significant changes. Regarding the type of publishers, a lower threshold would result in a fundamental reshaping of business models for 76.9% of commercial publishers, 14.3% of institutional publishers, and 63.2% of non-commercial publishers. Looking at the revenue level, a need for significant reshaping is expected by 41.0% of low revenue publishers, 55.6% of medium revenue publishers, and 76.5% in the case of high-revenue publishers.

Considering the overarching objective to realise open access and support self-archiving policies, an overly restrictive public funding requirement may also discriminate against researchers who have no other means of financing their research, for example, in applied sciences where cooperation with the industry may play a central role. In this respect, the survey data highlight that in the case of 26.5% of respondents, public-private partnerships constitute 50% or more of the research activities carried out at their respective organisations. For 7.5% of respondents, that share amounts to more than 90%. The following measures could be adopted to ensure that the public funding requirement does not place inappropriate constraints on the application of SPR regimes.

*Legislative measures*

Embarking on the development of a fully harmonised, mandatory SPR regime at EU level (see the foregoing discussion of SPR-01), **relaxing the requirement of public funding, in the sense of setting a low threshold, such as 50% (or less) of public funding** should be considered. As to the flexibility that is available for law-making in this area, it is important to note in line with relevant literature that there is an ongoing discussion on the nature of SPRs within the existing structures of copyright law. **In a nutshell, an SPR can be seen as an exponent of an author's economic and moral rights, a specific rule of copyright contract law, or a copyright exception**[214]**.** These conceptual questions can impact the policy space that is available for determining thresholds for public funding:

214 C. Angelopoulos (2022), Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, p. 37 [heading 4.2]. Cf. also R. Caso, 'Il diritto umano alla scienza e il diritto morale di aprire le pubblicazioni scientifiche. Open access, "secondary publication right" ed eccezioni e limitazioni al diritto d'autore', Rivista italiana di informatica e diritto. 5 (2023), 35-45.

- **Qualifying SPRs as copyright exceptions, the three-step test in international copyright law215 may become relevant and affect the design of a harmonised EU regime, potentially impacting the threshold of public funding.** However, the three-step test only plays a role if it can be demonstrated that a low percentage of public funding enhances the risk of incompliance with the test's assessment criteria. More specifically, it would be necessary to substantiate that, without a high degree of public funding, the application of SPRs causes a conflict with a normal exploitation of copyright-protected works or an unreasonable prejudice to legitimate rightsholder interests. Arguably, a high degree of public funding (taxpayers providing the financial resources for research) reduces the legitimacy of private exploitation interests because the publishable research output becomes available "for free" and a publisher's investment only concerns the preparation of the final publication and related marketing activities. However, an amalgam of public and private funding need not change the equation. If public–private resources are applied to finance a research project, concerns about a conflict with normal exploitation or an unreasonable prejudice can still be dispelled as long as the private funding does not come from the publisher seeking to commercialise the research output.

- An approach framing the **SPR as an author's inalienable right with economic and moral components or regarding the secondary publication entitlement as a specific rule of copyright contract law could *ab initio* remain unaffected by funding arrangements and the percentage of public funding.**[216] Arguably, an approach based on an author's economic and moral rights or an understanding of SPR regimes as specific rules of copyright contract law even offers flexibility to abandon public funding requirements altogether. As moral rights protect the author's personal bond to the work, a moral rights approach can also give the SPR an inalienable nature.

*Non-legislative measures*

Non-legislative guidelines or recommendations are unlikely to solve problems surrounding the public funding requirement. As already concluded in the context of SPR-01, a non-legislative intervention may nonetheless be a first step in the right direction. In addition to the spectrum of scientific output (see SPR-01 above), **SPR stakeholder dialogues at EU level could discuss best practice guidelines and recommendations seeking to prevent the evolution of overly restrictive public funding requirements in EU Member States**. However, a legislative intervention has much more potential to ensure appropriate solutions in this area.

*Policy Option SPR-03: cover version of record*

**Policy Option SPR-03:** covering version of record, no confinement to author accepted version or earlier versions

As explained in Section 1.3, existing Member State regimes take different approaches to the version of research output falling under the SPR regime. The German, Austrian, and French

215 Article 9(2) of the Berne Convention for the Protection of Literary and Artistic Works; Article 13 of the Agreement on Trade-Related Aspects of Intellectual Property Rights; Article 10 of the WIPO Copyright Treaty; Article 16 of the WIPO Performances and Phonograms Treaty. For an in-depth analysis of these provisions, see M.R.F. Senftleben, *Copyright, Limitations and the Three-Step Test – An Analysis of the Three-Step Test in International and EC Copyright Law*, The Hague/London/New York: Kluwer Law International 2004; C. Geiger/D. Gervais/M.R.F. Senftleben, 'The Three-Step Test Revisited: How to Use the Test's Flexibility in National Copyright Law', *American University International Law Review* 29 (2014), 581-626.

216 C. Angelopoulos (2022), Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, p. 37 [heading 4.2]. Cf. also R. Caso, 'Il diritto umano alla scienza e il diritto morale di aprire le pubblicazioni scientifiche. Open access, "secondary publication right" ed eccezioni e limitazioni al diritto d'autore', Rivista italiana di informatica e diritto. 5 (2023), 35-45.

SPRs are explicitly limited to the author accepted manuscript (AAM). The Belgian SPR, making reference to 'manuscript', is likewise understood to refer to the AAM version[217]. The Dutch and Bulgarian SPR might be understood to cover the version of record (VoR)[218].

The survey results confirm that the question of the publication version is controversial. From the perspective of research practices, there is a clear preference for an SPR regime covering the VoR. For the academic discourse, it is important to have the final version of published research available. Other versions cannot guarantee that the manuscript has undergone final scrutiny prior to publication, regardless of whether it was accepted with or without corrections. In addition, other versions do not include typesetting, which is essential for proper referencing and verification as part of the scientific discussion process. Having several versions of the same article circulate may make it difficult to determine which version is final, especially if post-publication changes have to be made. **The VoR is essential for citation purposes and accurate references to research results**. Not surprisingly, 86.7% of respondents answering Question 38 of the RPO survey saw a need to extend the SPR regime in their country to the VoR. 56.2% saw a particularly strong need, while 30.5% simply agreed that this would be a desirable development. More broadly, 78.1% of RPOs answering Question 31 considered that a harmonised SPR covering the VoR would rather increase (34.8%) or strongly increase (43.3%) immediate open access to publicly funded research. Individual responses from researchers in SPR Member States also indicate that the research community prefers the extension of SPR regimes to the VoR. In light of these results, the relevance of Policy Option SPR-03 can be confirmed.

However, exploring avenues for the extension of SPR regimes to the VoR, it is important to also consider a publisher's commercial interest in controlling access to the final published version. In the publishers' survey, 66.3% of publishers indicated that an SPR regime including the VoR would have a substantial impact on their business model. Looking at the answers of commercial publishers, one finds a clear statement against the extension of SPR regimes to the VoR. 82.9% of commercial publishers indicated that they would have to fundamentally reshape their current business model if the VoR was included.

In summary, it is advisable to take a balanced approach when exploring policy option SPR-03. On the one hand, it is clear that a harmonised SPR regime that includes the VoR would address the needs of the scientific community for accuracy and consistency. On the other hand, it is important to consider the commercial interests of publishers.

217 Angelopoulos (2022), Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, p. 35.

218 D.J.G. Visser, The Open access provision in Dutch copyright contract law, Journal of Intellectual Property Law and Practice 10 (2015), 872; A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024).

*Legislative measures*

Exploring implementation options that may enable secondary VoR publications at EU level, it is necessary to **balance a publisher's commercial interest in controlling access to the final published version against researchers' interest in open access to the VoR as a basis for the academic discourse**. An EU approach also requires an analysis of potential publisher contributions. With regard to the VoR, **publishers may have individual rights relating to the layout and typographical arrangement of published editions**. Considering the relatively low threshold for obtaining copyright protection, it cannot be ruled out that the creative choices made when developing the final layout of book or journal pages are sufficient to attract copyright[219]. It is also conceivable that national law explicitly provides for the protection of the typographical arrangement of published editions[220]. Moreover, an assessment of **compliance with the three-step test in international copyright law may be necessary when the SPR is seen as an exception to copyright** that falls within the field of application of the three-step test. No such additional assessment is necessary when, instead, the SPR is regarded as an exponent of an author's moral and economic rights, or as a rule of copyright contract law (see the discussion in the preceding Section on SPR-02).

The exploration of options to extend the SPR to the VoR should also include the discussion surrounding article processing charges (APC). APC payments may have a deep impact on the assessment, including the evaluation of an SPR regime permitting VoR publication in the light of the three-step test. In the case of business models based on APC payments, it may seem legitimate to allow researchers to use the VoR for SPR purposes. Arguably, the publisher has already received an appropriate remuneration in the form of the APC payment. This fact may tip the scales in favour of permitting secondary VoR publication.

Finally, it also seems important to assess business models in the publishing sector more broadly. To the extent to which the offer of databases and platforms with additional search (and potentially also generative co-creation) functions become central sources of income, the potential corrosive effect of individual VoR publications on the basis of an SPR seems rather limited. Arguably, SPR-based publications of books, articles and other writings are hardly capable of eroding the market for more complex database products with additional functionalities, even if the secondary publication concerns the VoR. The transition from traditional business models (with a focus on the commercialisation of individual works) to new business models (based on content platforms, community building and data analytics) leads to a shift in the assessment of substitution effects. Once an information platform and database infrastructure are developed, individual works – journal articles, books, etc. – merely constitute individual information items that are embedded in a much more complex information product[221]. The secondary publication of individual information items in VoR format is unlikely to enter into competition with the offer of a whole publication database and related platform infrastructure.

219 With regard to the requirement of free creative choices, see CJEU, 16 July 2009, case C-5/08, Infopaq/DDF, para. 45, stating that '[i]t is only through the choice, sequence and combination of those words that the author may express his creativity in an original manner and achieve a result which is an intellectual creation.' See also CJEU, 1 December 2011, case C-145/10, Painer, para. 89, asking whether '[t]he author was able to express his creative abilities in the production of the work by making free and creative choices.' At the national level, the application of this criterion can lead to a relatively low threshold for obtaining copyright protection.

220 C. Angelopoulos, Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 44, footnote 271, who refers to the protection regime in Ireland.

221 M.R.F. Senftleben/M. Kerk/M. Buiten/K. Heine, 'New Rights or New Business Models? An Inquiry Into the Future of Publishing in the Digital Era', International Review of Intellectual Property and Competition Law 48 (2017), 538 (557-558).

However, it is important to point out in this latter respect that the results of the current study do not yield specific insights into business models and shifting exploitation modes. As indicated, the data only reflect general standpoints and, in particular, a potential need to change business models. For the analysis of policy option SPR-01.3 in the light of current business models and changing exploitation modes in the publishing sector, it thus seems necessary to consider the limitations of the present study and conduct further research focusing on the outlined transition to databases and platform-based commercialisation of individual works in the publishing sector.

*Non-legislative measures*

Considering the different positions taken by researchers and publishers with regard to the question of VoR publication, **non-legislative guidelines or recommendations that could evolve from best practice roundtables with stakeholders are unlikely to solve problems in this area of SPR configuration**. If preference is nonetheless given to non-legislative initiatives, an intervention would have to aim at **structural, institutional changes, such as the creation of a publicly funded one-stop shop repository** that offers not only open access availability but also peer review for the academic community and replaces traditional functions of scientific publishing. The existing Open Research Europe[222] platform and the EU Open Research Repository[223] could offer a basis for this non-legislative approach.

### *Policy Option SPR-04: minimise embargo periods*

**Policy Option SPR-04:** minimising embargo periods, in the sense of requiring no or only a short period, such as 6 months.

As explained in Section 1.3, there are noticeable differences relating to embargo periods between existing SPR regimes in the Member States. Exploring policy avenues that could minimise or entirely remove embargo periods in SPR regimes, the following aspects of the literature review and the survey results seem particularly relevant:

Existing differences at Member State level: in countries that have implemented SPR regimes with an embargo period, these periods range from 12 months in countries like Germany and Austria to 6 to 12 months in France and Belgium. The Netherlands adopted a more flexible approach. Bulgaria has recently opted for the introduction of an SPR regime that does not provide for an embargo period[224].

RPO responses indicate a clear preference for reducing or abandoning embargoes. Survey results show that a significant majority of RPOs (87.4%) would support regimes with no or minimal embargo periods to enhance immediate access to publicly funded research. Open-ended answers that were provided in the survey framework shed light on the considerations underlying this preference. For instance, one RPO respondent indicated that SPRs seem to be:

222 https://open-research-europe.ec.europa.eu/

223 https://blog.zenodo.org/2024/03/20/2024-03-20-eu-open-research-repository/

224 A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', *Kluwer Copyright Blog*, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024).

"*much more protective of authors and more useful to the world of research. It is simple to implement and effective. It facilitates the dissemination of scientific knowledge and is more egalitarian because all research institutions will have the same rights. The agreements signed with publishers are the result of a balance of power between large research institutions and these same publishers, which leaves small institutions out in the cold. These negotiations constantly have to be renegotiated: it's a waste of time and energy for the research community. Research is mainly paid for by the public purse, and researchers are not paid for publishing their results or for evaluating the results of other researchers: as a result, their results must exist in a form that is rapidly open to all, which is what secondary rights will allow, with an embargo that is either non-existent or a maximum of 3 months.*"

However, it must not be overlooked that changes to existing embargo periods may have a deep impact on publishers' business models. Looking at the results of the publishers' survey, overall, 62.1% of publishers indicated that no or a minimal embargo would require a fundamental reshaping of their business model. Looking at the type of publishers, 71.4% of commercial, 23.1% of institutional, and 65.0% of non-commercial publishers indicated the need for a fundamental reshaping of their business model due to this change. Publishers also indicated in the open-ended answers that "*[a] different embargo period is appropriate for each publication and each discipline. A difference in between disciplines should be maintained and current embargoes shouldn't be reduced.*" Furthermore, in the open-ended questions, one publisher noted that "*[i]f VoRs (editors note – Version of Record) are made available, either immediately or after an embargo, it would greatly undercut our ability to recoup our investment in developing and publishing the work, which in turn would challenge our ability to fulfil our mission to publish and disseminate high-quality research worldwide... we would see this as an existential threat to our ability to successfully operate as a high-quality journals publisher, publishing trusted research.*"

Considering these survey results, SPR-04 can be seen, from the perspective of the research community, as an **important policy tool seeking to align SPR regimes more closely with open access goals, reflecting widespread support within the research community for greater and more immediate access to scientific findings**. From the perspective of publishers, however, embargo periods are of particular importance. They limit the **impact of SPR regimes on existing business models and the primary exploitation of research output**. Similarly to SPR-03 (secondary VoR publication), it is thus important to walk a fine line. The question of embargo periods requires the balancing of a publisher's commercial interest in full market exclusivity during a certain period of time against open access and knowledge dissemination policies.

*Legislative measures*

As in the case of VoR publication discussed in the preceding Section, there can be little doubt from the perspective of open access and open science objectives that **an SPR regime with a short embargo period is preferable**[225]. An EU approach minimising embargo periods, however, **requires a careful balancing of the divergent interests of publishers and researchers**. It also requires a careful analysis of potential legal requirements to be taken into account. For instance, an assessment of compliance with the three-step test in international copyright law may be necessary when the SPR is seen as an exception to copyright that falls within the field of application of the three-step test.

225 Moreover, an SPR regime with no embargo period would reflect some relevant international initiatives, such as the Plan S Rights Retention Strategy. See cOAlition S "Plan S Rights Retention Strategy": <https://www.coalition-s.org/rights-retention-strategy/>.

With regard to guidelines for law-making in this area, an individual researcher comment made in the context of Question 37 may be of particular interest. Addressing the flexible approach in the Netherlands - with Article 25fa of the Dutch Copyright Act permitting secondary publication after a "reasonable period" - the comment points out that "*maybe the 'reasonable period' in [Article 25fa] should be defined and arranged: how short or long is this, what is 'reasonable', and who determines this?*" This individual comment points in the direction of a **preference for a clearly defined embargo period, if any.**

When determining a potential embargo period, the discussion of APC payments under option SPR-02 has already shown that remuneration mechanisms, such as APC payments, can have a strong impact on the assessment, including the evaluation in light of the three-step test. In addition, it is important to analyse business models in the publishing sector more broadly and assess whether the transition to platform-based exploitation and the offer of databases with additional functionalities reduces the need for embargo periods relating to individual publications (see the preceding Section on SPR-03 and the limitations of the present analysis pointed out in that context).

*Non-legislative measures*

Non-legislative measures are unlikely to solve problems in the area of embargo periods. Initiatives at EU level, such as the organisation of stakeholder round-tables identifying best practices, seem incapable of changing and harmonising individual embargo regimes implemented in national legislation. They could only **encourage Member States to amend existing national embargo rules and follow a uniform (and potentially less strict) approach** in the law amendment process. Similarly, guidelines or recommendations could encourage Member States without an SPR regime to devise SPR rules providing for a short embargo period.

*Policy Option SPR-05: no confinement to non-commercial use*

**Policy Option SPR-05:** providing for a right to open access publication covering all types of uses, no confinement to specific forms of use, such as use for non-commercial purposes

While the German, Austrian, French and Bulgarian SPRs only cover use for non-commercial purposes, the Dutch and Belgian SPR approaches do not specify any purpose, requiring only, as does the French SPR, that the work be made available free of charge[226]. As explained in Section 1.3, this **divergence of approaches can cause several problems**. In the evolving landscape of academic publishing and research practices, collaborations with private partners are increasingly common, making a requirement of non-commercial use seem outdated and overly restrictive.

Research community preferences and the shifting dynamics in academic publishing, moving towards models based on subscription fees and APCs, support the removal of use limitations. Survey results indicate that a significant majority of RPOs (73.6%) and researchers favour a more inclusive SPR regime that supports a broad spectrum of uses, including collaborations with commercial partners, to enhance the availability and utility of research outputs.

226 A. Lazarova, 'Introducing a Zero-embargo Secondary Publication Right in Bulgaria', Kluwer Copyright Blog, 9 February 2024, available at: https://copyrightblog.kluweriplaw.com/2024/02/09/introducing-a-zero-embargo-secondary-publication-right-in-bulgaria/ (last visited on 20 February 2024); C. Angelopoulos, Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 34.

When it comes to publishers, 70.1% of scientific publishers noted that open access publications covering all types of uses would require a fundamental reshaping of their business models. For the different types of publishers, 83.7% of commercial publishers, 33.3% of institutional publishers, and 65.0% of non-commercial publishers indicated the need for a significant reshaping in case this feature would be implemented.

RPOs also indicated in the open-ended survey responses that the requirement of non-commercial use may cause difficulties in practice: "*[t]here is no clear distinction between non-commercial research and commercial research. Therefore, any copyright legislation aiming at non-commercial research may not benefit organisations that are the intended audience. For example, a publicly-owned research-conducting university hospital needs to charge for providing healthcare to patients or for special diagnostic services to other healthcare providers. So it could be considered to be a commercial entity or at least may fear to be in danger of being considered so.*"

As already pointed out in the context of other SPR-related policy options, the need for a careful balancing of researchers and publishers' interests is obvious. Seeking to implement SPR-05 against this background, the following regulatory avenues could be explored:

*Legislative measures*

From the perspective of open access and open science objectives, there can be little doubt that **an SPR regime should aim at a right to open access publication with no confinement to specific types of (re-)use, such as use for non-commercial purposes**. An EU approach, including open access publishing and covering all types of use, however, **requires a careful balancing of the divergent interests of publishers and researchers**. It may also require an analysis of compliance with the three-step test in international copyright law when the SPR is seen as an exception to copyright that falls within the field of application of the three-step test. Changing business models in the publishing sector – from a focus on individual works to the aggregation of whole work repertoires in databases and platform-based services – can play a crucial role in the assessment (see the discussion above in the Section on SPR-03).

*Non-legislative measures*

Non-legislative measures are unlikely to solve problems in the area of SPR-related use restrictions. They seem incapable of changing and harmonising individual national rules governing the use of publications that have become available on the basis of domestic SPR legislation. They could only **encourage Member States to amend existing use configurations and follow a uniform (and potentially less strict) approach when amending their SPR-related laws or adopting an SPR regime at the national level**.

*Policy Option SPR-06: develop umbrella licensing and remuneration schemes*

**Policy Option SPR-06:** developing umbrella licensing and remuneration schemes leading to long-term open access availability

In principle, umbrella licensing and remuneration approaches could serve as vehicles to achieve open access goals. The evolution of appropriate licensing and remuneration schemes may even lead to a degree of open, unrestricted access to research output that is comparable to the results that can be achieved with an SPR regime. However, as explained in Section 1.3, **approaches based on licensing and remuneration schemes can raise problems** that make it doubtful whether this avenue can provide a meaningful alternative to the introduction of SPRs.

In the context of the present study, **the survey design did not leave room for specifying individual types of licensing or remuneration regimes**. Instead, the survey questions concerning this policy avenue referred generally to "umbrella licensing solutions to make research use possible, such as extended collective licensing or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use)." At this aggregated level, the survey results only provide general indications and do not allow a more concrete identification of licensing or remuneration regimes that could find support. Further research seems necessary to obtain more detailed information.

At the general level at which SPR-06 was explored in the present study, **results from the publishers' survey indicate little support for umbrella licensing and remuneration schemes.** 70.6% of responding publishers indicate that specific licensing arrangements, such as extended collective licencing or lump sum remuneration regimes, would not be acceptable, while 29.4% of publishers indicate it would be acceptable. A comparable distribution can be observed for the specific categories of publishers. Approaches based on umbrella licensing or remuneration regimes would not be acceptable to 76.3% of commercial publishers, while this alternative would be acceptable to 23.7%. In the case of institutional publishers, 33.3% are against this alternative approach, while 66.7% are favourable to it. In the group of non-commercial publishers and publishers not falling into any previous categories, 68.8% and 75%, respectively, are against, and 31.2% and 25% are in favour.

**RPOs indicated that they would very strongly accept (38.0%) or rather accept (39.6%) initiatives to facilitate umbrella licensing solutions or lump sum remuneration regimes** to make research use possible, while only 2.2% would not support this policy avenue at all.

In conclusion, while umbrella licensing and remuneration schemes could theoretically provide open access, their **feasibility as a practical alternative to SPR regimes needs careful evaluation**, considering the various challenges and stakeholder perspectives that already came to the fore at the highly aggregated level at which this policy option was addressed in the context of the present study. If, despite these results, the implementation of licensing solutions and/or remuneration regimes is further explored, the following interventions could be considered:

*Legislative measures*

With the adoption of specific copyright contract rules in Articles 18 to 23 CDSMD, EU legislation has already established a first set of norms that seeks to regulate the relationship between individual authors and commercial exploiters of their works. It is conceivable to **develop a further set of rules that address the publication interests and open access needs in the academic sector and offer support for researchers and research organisations seeking to ensure compliance with the EU's open access and open science agenda**. In developing these rules, it could also be assessed whether it is possible to reduce the exclusive rights of publishers to mere remuneration rights. As a guiding principle for this assessment, the criteria of the three-step test known from international copyright law – in particular, the question of a potential conflict with normal exploitation and the risk of unreasonable prejudices to legitimate rightsholder interests – can yield important insights. The three-step test may offer more room for remuneration-based solutions than often assumed in the policy and law-making discourse[227].

227 Cf. C. Geiger/J. Griffiths/R.M. Hilty, 'Declaration on a Balanced Interpretation of the "Three-Step Test" in Copyright Law', International Review of Intellectual Property and Competition Law 39 (2008), 707.

*Non-legislative measures*

In principle, **non-legislative measures could pave the way for umbrella licensing and remuneration schemes at the national level**. With regard to existing experiences in this area, the rules on extended collective licensing, in particular, Article 12 CDSMD, and related approaches developed in the Nordic countries may offer reference points for the initiation of a stakeholder dialogue seeking to identify common ground for umbrella licensing solutions. The rules laid down in Directive 2014/26/EU on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market (CRM) may provide additional guidance. As to cross-border availability, experiences with the approach taken in the Marrakech Treaty could potentially serve as a source of inspiration[228].

### 1.5.2. Review of research exceptions – Copyright and related rights (CRR)

In line with the approach underlying the identification of policy options in Section 1.3, the EU copyright *acquis* is understood in a broad sense to encompass 14 Directives and two Regulations, harmonising several aspects of the regulation of copyright and related rights, including the *sui generis* database right:[229]

- Council Directive 93/83/EEC on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable transmission[230] (SCD);
- Directive 96/9/EC on the legal protection of databases[231] (DBD);
- Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society[232] (ISD);
- Directive 2001/84/EC on the resale right for the benefit of the author of an original work of art[233] (Resale);
- Directive 2004/48/EC on the enforcement of intellectual property rights[234] (IPRED);
- Directive 2006/115/EC on rental rights and lending right and on certain rights related to copyright in the field of intellectual property[235] (RLD);
- Directive 2009/24/EC on the legal protection of computer programs[236] (Software);
- Directive 2011/77/EU amending Directive 2006/116/EC on the term of protection of copyright and certain related rights[237] (Term Directive);

228 For an in-depth analysis of the Marrakesh rules, see L.R. Helfer/M.K. Land/R.L. Okediji/J.H. Reichman, The World Blind Union Guide to the Marrakesh Treaty Facilitating Access to Books for Print-Disabled Individuals, Oxford: Oxford University Press 2017. Cf. M. Trimble, "The Marrakesh Puzzle", International Review of Intellectual Property and Competition Law 45 (2014), 768.

229 See 'The EU Copyright Legislation | Shaping Europe's Digital Future' (European Commission, 4 May 2023) https://digital-strategy.ec.europa.eu/en/policies/copyright-legislation, accessed 11th August 2023.

230 Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission [1993] OJ L 248/15.

231 See Directive 96/9/EC.

232 See Directive 2001/29/EC.

233 Directive 2001/84/EC of the European Parliament and of the Council of 27 September 2001 on the resale right for the benefit of the author of an original work of art [2001] OJ L 272/32.

234 Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/45.

235 See Directive 2006/115/EC.

236 See Directive 2009/24/EC.

237 Directive 2011/77/EU of the European Parliament and of the Council of 27 September 2011 amending Directive 2006/116/EC on the term of protection of copyright and certain related rights [2011] OJ L 265/1.

- Directive 2012/28/EU on certain permitted uses of orphan works[238] (OWD);
- Directive 2014/26/EU on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market (CMOD);
- Directive (EU) 2017/1564 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled[239] (Marrakesh Directive);
- Regulation (EU) 2017/1563 on the cross-border exchange between the Union and third countries of accessible format copies of certain works and other subject matter protected by copyright and related rights[240] (Marrakesh Regulation);
- Regulation (EU) 2017/1128 on cross-border portability of online content services in the internal market[241] (Portability Regulation);
- Directive 2019/789 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmission of television and radio programmes (SCD II)[242];
- Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market[243] (CDSMD).

When referring to "copyright" in the following final assessment of potential legislative and non-legislative interventions, this reference should thus be understood as an umbrella reference to the whole body of legislation on copyright, related rights and the *sui generis* database right. The discussion also refers to the Digital Services Act and the proposed Data Act should these legislative instruments become relevant to the interventions under examination.

*Policy Option CRR-01: strengthening of general research exceptions*

Policy option CRR-01 concerns potential measures to strengthen general research exceptions in the copyright *acquis*. It comprises sub-options relating to the development of a fully harmonised, mandatory, open-ended research exemption (CRR-01.1), measures concerning the lawful access requirement (CRR-01.2) and the removal of barriers posed by technological protection measures (CRR-01.3). These sub-options are discussed in more detail in the following Sections.

238 Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works [2012] OJ L 299/5.

239 Directive (EU) 2017/1564 of the European Parliament and of the Council of 13 September 2017 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled and amending Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society [2017] OJ L 242/6.

240 Regulation (EU) 2017/1563 of the European Parliament and of the Council of 13 September 2017 on the cross-border exchange between the Union and third countries of accessible format copies of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled [2017] OJ L 242/1.

241 Regulation (EU) 2017/1128 of the European Parliament and of the Council of 14 June 2017 on cross-border portability of online content services in the internal market [2017] OJ L 168/1.

242 Directive (EU) 2019/789 of the European Parliament and of the Council of 17 April 2019 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes, and amending Council Directive 93/83/EEC [2019] OJ L 130/82.

243 Directive (EU) 2019/790.

*Policy Option CRR-01.1: develop harmonised, mandatory, open-ended research exemption*

**Policy Option CRR-01.1:**

**• Introducing a fully harmonised, mandatory and open-ended exemption of scientific research that applies horizontally across the ISD, RLD, DBD and the Software Directive;**

**• Developing guidelines or recommendations seeking to approximate national research exceptions that have evolved under the EU copyright *acquis*.**

As explained in Section 1.3.2, a first set of interventions could concern the general research exceptions (not confined to specific forms of, or tools for, conducting research) laid down in Article 5(3)(a) ISD, Articles 6(2)(b) and 9(b) DBD and Article 10(1)(d) RLD. In these provisions, the EU copyright *acquis* globally refers to use for purposes of "scientific research" and permits research use on certain further conditions, such as the condition of use for non-commercial purposes.

With regard to general provisions capable of covering a broad range of scientific research activities, the results of the RPO survey are of particular interest. Answering Question 27, 47.8% of the respondents indicated a strong preference for an open-ended umbrella clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes; 33.6% stated that they would support ("rather favour") the introduction of such a general clause. This is a **clear statement in favour of an open-ended, general clause capable of supporting scientific research in general** – without limiting the use to specific circumstances, such as specific research settings, research tools or research resources.

However, the publishers' survey presents a more divided perspective on policy option CRR-01.1, with a notable portion of commercial publishers expressing strong opposition to open-ended research exceptions and institutional and non-commercial publishers expressing support for this policy avenue. Overall, 58.3% would not support it at all, and 13.3% would rather reject CRR-01.1. In the group of commercial publishers, 75.7% would not support this policy option at all, and 10.8% would rather reject it. In the area of institutional publishers, a clear majority of publishers would support or strongly support CRR-01.1. Only 14.3% of institutional publishers signalled that they would rather reject this policy option. No institutional publisher voted categorically against CRR-01.1 ("not support at all"). For non-commercial publishers, the results reflect a majority of responses supporting or strongly supporting CRR-01.1. In comparison with institutional publishers, the results are less clearly in favour; 36.4% of non-commercial publishers would not support it at all, and 9.1% would rather reject the policy option.

This result highlights the **need for a careful balancing of interests between enabling scientific research and protecting the rights of copyright holders such as publishers surveyed in the study**. Moreover, further research is also necessary to understand the perception and impact in other rightsholder groups not covered by the present study, such as rightsholders in the general book and publishing industry, the music, audiovisual, database and software sectors etc.

Ideally, EU copyright policy fosters scientific research while safeguarding the legitimate interests of copyright holders, thereby reconciling the fundamental right to research (Articles 11 and 13 of the Charter) with copyright protection (Article 17(2) of the Charter). From this perspective, it is important to take note of the described **strong support in the research community for the development of an open-ended umbrella clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes**. As already pointed out in Section 1.3, open-ended research exceptions can render EU copyright law capable of keeping pace with the rapid evolution of new technologies and changing research approaches and methodologies. General provisions that offer support for a broad spectrum of research activities strengthen research autonomy in the sense of providing a basis for exploratory research projects and methodologies that fall outside approaches and categories addressed in more specific provisions. General provisions also constitute a central tool for enabling the research community to analyse and reflect on developments in the increasingly digital and algorithmic information society – with rapid changes in information technology and modes of communication. Against this background, the following interventions may be considered:

*Legislative measures*

The existing general provisions in Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD could be used as templates to create a **fully harmonised, mandatory research exemption** that must be implemented in a uniform manner in all Member States and that applies **horizontally across the ISD, RLD, DBD and the Software Directive**. In all these contexts, this provision should cover acts of reproduction (and corresponding concepts, such as extraction) as well as acts of making available to the public for the purpose of sharing research resources and research results in larger consortia (should these consortia reach a number of members that may be regarded as a relevant public in the sense of copyright law) and for the verification of research results. Moreover, **restrictions on the scope, such as confinement to use for illustration purposes, should be avoided** in order to establish a proper balance between copyright protection and the right to research. It must not be overlooked that the **three-step test laid down in Article 5(5) ISD adds further conceptual contours anyway**. In particular, the three-step test limits the ambit of operation of a general research exemption to cases that do not conflict with a normal exploitation of protected knowledge resources and do not unreasonably prejudice the legitimate interests of rightsholders[244]. Restrictive confinement of an overarching research provision to specific types of use, such as use for illustration purposes, is unnecessary against this background. To ensure that researchers can benefit from a general research exception across Member States without variations that may arise from contractual terms, it is also advisable to **follow in the footsteps of Article 7(1) CDSMD and ensure that the research provision cannot be overridden by contractual stipulations**.

In view of the limitations of the present research, it is important to note in the context of potential changes to the DBD and the Software Directive that CRR-01.1 may affect a broader spectrum of rightsholders and go beyond the group of scientific publishers that have been included in the survey underlying the current analysis. Thus, it is advisable to extend the research and study the views of, and the impact on, a broader spectrum of rightsholders, such as rightsholders in the general book and publishing industry, the music, audiovisual, database and software sectors etc.

244 With regard to certain limits that have already been drawn in CJEU jurisprudence, see in particular CJEU, 10 April 2014, case C-435/12, ACI Adam, para. 38-41, where the Court discussed the three-step test in the context of a private copying regime permitting the use of unlawful sources for the purposes of making a copy.

The results of the literature study and cross-country analysis conducted in the framework of the current research project (see 1.1.3) leave little doubt that it is advisable to implement a fully harmonised, mandatory research provision across the different fields of copyright, related rights and *sui generis* database protection. With regard to the latter branch of protection, one researcher answering Question 21 gave the following additional explanation in the open answer category: "*The sui generis rights on databases (due to the Database Directive 96/9) are a severe roadblock in my field, as a small number of old databases inhibit the development of newer, state-of-the-art resources for the same kind of reference data (no one wants to build/operate such resources, as they are afraid to be sued for IP infringement). The old databases see little maintenance, but enough that it might be considered a "significant investment" so that the IP can be basically extended in perpetuity*".

*Non-legislative measures*

Non-legislative measures seeking to identify best practices could be developed to encourage a more flexible application of existing general provisions that concern use for research purposes. For instance, it could be pointed out that Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD should not be misunderstood to only cover use for illustration purposes. Best practice guidance based on **positive experiences in Member States not setting forth an illustration requirement could also serve as a catalyst leading to a voluntary approximation of national legislation** when Member States amend their copyright laws within the existing EU framework. However, non-legislative measures cannot overcome restrictions and research problems following from conceptual differences in the EU *acquis*, such as the limitation of Article 9(b) DBD to acts of extraction which leaves the question of data sharing and making available unresolved.

It is also **unclear whether non-legislative measures can be an efficient tool to address the absence of a scientific research provision in the Software Directive**. In this regard, **further evidence gathering and analysis seem necessary to overcome the limitations of the present inquiry** that did not leave room for analysing the database and software ecosystems in more detail. Based on the current EU *acquis*, it is conceivable to argue, on the one hand, that the exceptions and decompilation rules in Articles 5 and 6 of the Software Directive are specific provisions that must be understood as the final word on the issue of research use of copyright-protected computer programs. This approach only leaves room for recommending that Articles 5 and 6 of the Software Directive should be applied flexibly – in a way that supports research use to the largest extent possible within the confines of the existing provisions. On the other hand, the qualification of computer programs as "literary works" in Article 1(1) of the Software Directive could serve as a basis for arguing that, as a corollary of this literary work status, the more general exceptions listed in the ISD, including the general research exception in Article 5(3)(a) ISD, should be understood to apply not only to traditional literary works but also – and *mutatis mutandis* – to computer programs that are assimilated by virtue of Article 1(1) of the Software Directive.

*Policy Option CRR-01.2: clarify lawful access requirement*

**Policy Option CRR-01.2: clarify the potential of general research exceptions (not requiring subscription-based access) to serve as a basis for obtaining access to protected knowledge resources.**

Policy option CRR-01.2 addresses the challenge of lawful access requirements in scientific research, a critical issue highlighted by researchers. The researchers' survey revealed that 80% of respondents face significant access barriers due to a lack of subscriptions to copyrighted knowledge resources. The RPO responses confirm this result. The answers to Question 24 show that RPOs are frequently (every week or month) confronted with situations where researchers are unable to obtain access to copyright-protected resources because of a lack of subscriptions (34.3%). A total of 35.6% of the respondents reported that problems arose from a lack of subscriptions every 3 to 6 months. Considering the total number of respondents and the relatively high percentage of answers indicating problems in this area, **the lawful access dilemma must be taken seriously from the perspective of the research community**.

Turning to the position of publishers, the responses to Question 21 show clearly that publishers may oppose interventions in the area of access requirements. Assessing a proposal to clarify that subscription-based access of one research institution should also cover consortium partners in a joint research project, 75.0% of commercial publishers indicated that they were strongly against this access practice; 11.1% of the commercial publishers opted for "rather reject". In the group of non-commercial publishers, 50.0% indicated strong opposition, and 25.0% stated that they would rather reject this approach. All institutional publishers, by contrast, were strongly in favour of this rule.

The feedback from the research community indicates that the issue of subscription-based access – and lawful, legitimate access avenues more generally – requires attention. As a first observation in this regard, it can be said that **dependency on subscriptions and potential dissatisfaction with the spectrum of knowledge resources that become available on this basis seems inherent in the copyright system**. As other intellectual property rights, copyright law offers exclusive rights and, thus, a legal position that allows providers of copyrighted knowledge resources, such as scientific publishers, to set and enforce the access terms that they prefer. If the research community wishes to escape this machinery of copyright law, researchers and RPOs would have to explore alternative publication modes to reduce the dependency on subscriptions that arises from the transfer of copyright to scientific publishers[245].

Looking at CJEU jurisprudence, however, it becomes apparent that the copyright equation is more complex than this general statement recalling the basic functioning of copyright as an intellectual property right. In *Pelham*, the CJEU examined how a fair balance could be established between the property rights of copyright holders and conflicting fundamental rights, in particular, freedom of expression and freedom of the arts. The CJEU emphasised that **the required balance had to be struck within the system of exclusive rights and limitations in EU copyright law**: *"[t]he mechanisms allowing those different rights and interests to be balanced are contained in Directive 2001/29 itself, in that it provides inter alia, first, in Articles 2 to 4 thereof, rightholders with exclusive rights and, second, in Article 5 thereof, for exceptions and limitations to those rights which may, or even must, be transposed by the Member States…"*[246]

245 Cf. Angelopoulos, C., Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access: exceptions and limitations, rights retention strategies and the secondary publication right, Independent expert report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, pp. 53-56.

246 CJEU, 29 July 2019, case C-476/17, Pelham, para. 60. Cf. CJEU, 29 July 2019, case C-516/17, Spiegel Online, para. 43 and 50-54; CJEU, 29 July 2019, case C.469/17, Funke Medien NRW, para. 58 and 65-70, where the Court uses the same formula. Cf. K. Szkalej, "Copyright in the Age of Access to Legal Digital Content: A study of EU copyright law in the context of consumptive use of protected content", Uppsala University 2021, pp 205-206; C. Geiger/E. Izyumenko, 'The Constitutionalization of Intellectual Property Law in the EU and the Funke Medien, Pelham and Spiegel Online Decisions of the CJEU: Progress, but Still Some Way to Go!', International Review of Intellectual Property and Competition Law 51 (2020), 282 (292-298).

Therefore, an appropriate balance between copyright protection (Article 17(2) of the Charter) and researchers' freedom of expression and freedom of science (Articles 11 and 13 of the Charter) must be found within the existing EU framework for the protection of copyright. In line with this CJEU approach, **copyright legislation can be expected to create sufficient room to safeguard not only the exclusive rights of copyright holders but also competing fundamental rights, such as freedom of expression and the freedom of sciences**. With regard to the use of copyrighted knowledge resources in the context of scientific research, it can be derived from the *Pelham* judgment that the room for guaranteeing the freedom of expression, the freedom of information and the freedom of science of researchers must be found within the copyright system of exclusive rights on the one hand, and exceptions and limitations on the other[247].

It is therefore advisable to take the signal from the research community – indicating problems arising from dependency on subscriptions – seriously and explore ways of creating more clarity about lawful, legitimate access to copyrighted knowledge resources for research purposes within the EU copyright *acquis*. **In fact, Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD do not require access through subscriptions or other contracts. These provisions also support other forms of legitimate access**, such as access to materials that have been published under open access arrangements or that are freely available on the internet (see the examples given in Recital 14 CDSMD). Article 40(4) and (12) DSA add further examples of legitimate access[248].

Taking this configuration of existing legislation as a reference point, it can be concluded first that **the concerns expressed by the research community with regard to dependency on subscriptions reinforce initiatives to introduce an EU-wide SPR regime**. The more copyrighted knowledge resources become available open access as a result of exercising SPRs, the more legitimate access opportunities can arise in addition to subscription-based access. At the same time, this interplay of subscription-based and SPR-based access confirms that, as pointed out in the preceding Section with regard to SPR policy options, the position of scientific publishers – and repercussions on existing business models – must be taken into account.

247 Cf. ECtHR, 10 January 2013, case 36769/08, Ashby Donald/Frankrijk, para. 38, and C. Geiger/E. Izyumenko, 'Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity Through Freedom of Expression', *International Review of Intellectual Property and Competition Law* 2014, 316, with regard to the necessity to offer room for freedom of expression and information.

248 EU legislation itself has added further examples of legitimate lawful access to the copyright *acquis* in the context of the new TDM rules. Recital 14 CDSMD reads as follows: "Research organisations and cultural heritage institutions, including the persons attached thereto, should be covered by the text and data mining exception with regard to content to which they have lawful access. Lawful access should be understood as covering access to content based on an Open access policy or through contractual arrangements between rightholders and research organisations or cultural heritage institutions, such as subscriptions, or through other lawful means. For instance, in the case of subscriptions taken by research organisations or cultural heritage institutions, the persons attached thereto and covered by those subscriptions should be deemed to have lawful access. Lawful access should also cover access to content that is freely available online." Hence, lawful access need not necessarily follow from subscriptions. Open access arrangements and free availability on the internet have been identified in the legislation itself as additional, legitimate access avenues.

As a second point, it must not be overlooked that **in the area of EU digital and data legislation, specific provisions have already been introduced to provide researchers access to knowledge resources for scientific research purposes**. The aforementioned Article 40 DSA is only one example. Article 5(1) of the Data Act makes it clear that users may request the sharing of data with a third party *"without undue delay, of the same quality as is available to the data holder, easily, securely, free of charge to the user, in a comprehensive, structured, commonly used and machine-readable format and, where relevant and technically feasible, continuously and in real-time."* Recital 33 adds the further clarification that *"[a] third party to whom data are made available may be a natural or legal person, such as a consumer, an enterprise, a research organisation, a not-for-profit organisation or an entity acting in a professional capacity."* EU legislation in the data field, thus, explicitly contemplates the possibility of users sharing data with researchers in the context of research projects. A further access avenue – data access for public bodies – rests on Article 14(1) of the Data Act which entitles public sector bodies to request data in situations of exceptional need. Recital 63 points out that *"[r]esearch-performing organisations and research funding organisations could also be organised as public sector bodies or bodies governed by public law."* Hence, researchers in public sector research organisations may be able to rely on Article 14(1) and obtain direct access via this avenue. In addition, Article 21(1)(a) of the Data Act allows public bodies that receive data on the basis of Article 14(1) to share these data *"with individuals or organisations in view of carrying out scientific research or analytics compatible with the purpose for which the data were requested."* In cases where a research institution is not organised as a public body itself, indirect data access may thus follow from a collaboration with an eligible public sector body.

Considering the overarching freedom of expression/freedom of science framework and these developments in digital and data legislation (see also the Analysis of EU Data and Digital Legislation from the Perspective of Research), **it seems consistent to explore room for specific access rules in the EU copyright *acquis* as well – in the sense of rules ensuring access for research purposes that does not depend on subscriptions or other rightsholder permissions**. Taking the outlined DSA and Data Act provisions as a reference point, such an access rule may concern situations where a strong public interest supports access for research. Article 40(4) DSA concerns data access *"for the sole purpose of conducting research that contributes to the detection, identification and understanding of systemic risks..."* The described Data Act rules for public sector bodies concern situations of "exceptional need", such as a need to respond to a public emergency or to fulfil a "specific task carried out in the public interest" (Article 15(1) of the Data Act). In this vein, the survey conducted in the context of the present study included questions addressing access to copyright-protected knowledge resources in cases where an "overwhelming public interest" justifies access for research purposes.

Answering the question whether copyright law should allow for researchers' access to copyrighted knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest (Question 27), **RPOs expressed very strong support (47.3%) or at least support (34.4%) for the introduction of access rights in cases of overwhelming public interest (n=491).** Only a small minority of RPOs (7.3%) was sceptical or against such an access rule. Answering the corresponding Question 21, **publishers (n=59), by contrast, expressed strong opposition (55.9%) or a rejection of such an access rule (13.6%)**. The concerns about access in cases of overwhelming public interest were particularly strong in the group of commercial publishers (68.4% strongly against and 10.5% against). Institutional publishers were strongly in favour of this access rule (83.3%) while non-commercial publishers were divided on this question (40%, (strongly) in favour; 60%, (strongly) against). In sum, it can be said that the research community would support the implementation of a specific, public interest-based access rule in copyright law, whereas this initiative would raise opposition among publishers, in particular in the group of commercial publishers.

As a third strategy to address concerns in the research community about a lack of subscriptions to carry out research tasks, it is conceivable to clarify the scope and territorial reach of use permissions following from subscriptions. In this regard, it must be recalled that **it is a central ERA Action 2 policy objective to pave the way for the free flow of knowledge across Member States.** In cases where a research organisation has taken a subscription and, thus, can offer researchers subscription-based access, the attainment of this objective may depend on how the circle of beneficiaries is drawn across Member State borders. More concretely, it could be clarified with regard to transnational research consortia that a **subscription taken by one consortium partner should also allow all other partners to rely on this subscription** as a basis for invoking research exceptions, such as the general exceptions in Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD. This guideline would be in line with the results of the RPO survey. 40.9% of the RPOs stated that they would be strongly in favour of this approach. 37.8% of the RPOs expressed support ("rather favour") for this clarification. In the case of cross-border use, 48.3% of RPOs indicated that it was very frequent (19.6%) or somewhat frequent (28.7%) that their researchers were unable to share copyrighted knowledge resources with research partners in other countries because the subscriptions of the organisation were limited to the researchers working at the organisation. However, as already pointed out above, it must not be overlooked that publishers' responses to Question 21 clearly show that commercial and non-commercial publishers may oppose this rule of extended access in research consortia. Hence, **the further exploration of this potential policy approach must navigate between clear support in the research community and potentially strong opposition among publishers.**

With regard to legislative and non-legislative interventions in the area of policy option CRR-01.2, the discussion yields three central insights: first, concerns in the research community about a lack of subscriptions for carrying out research tasks, reinforce the importance of considering the introduction of an EU-wide, harmonised SPR regime, as discussed in the preceding Section 1.5.1. Second, it would be consistent with legislative developments in the area of EU digital and data legislation to explore whether EU copyright law offers possibilities for adopting specific access rules when an overwhelming public interest justifies the creation of an additional access avenue that complements the standard model of subscription-based access. Third, potential problems arising from the requirement of subscription-based access in copyright law could be reduced by enlarging the territorial scope and circle of beneficiaries of existing subscriptions. In the case of transnational research consortia, this could mean that a subscription taken by one research partner is regarded as a lawful basis for all consortium partners to obtain access. However, the discussion has also shown that with regard to all three approaches, a cautious approach is necessary. The research community may be strongly in favour of these measures. By contrast, publishers, and in particular commercial publishers, have expressed deep concerns about these measures. Against this background, the following more concrete guidelines can be formulated:

*Legislative measures*

In principle, the general research provisions enshrined in Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD offer flexibility for developing a broader spectrum of norms that clarify different forms of legitimate access to copyrighted material for research purposes. **These provisions do not set forth a requirement of subscription-based access. Other forms of legitimate access can also be considered as long as these alternative access avenues comply with the three-step test** (see Article 5(5) ISD, Article 10(3) RLD and Article 6(3) DBD) and, accordingly, do not enter into a conflict with a normal exploitation and do not cause an unreasonable prejudice to legitimate rightsholder interests.

To implement the first approach identified above – measures that support access opportunities arising from the adoption of an EU-wide SPR regime as discussed in the preceding Section 1.5.1 – it can make sense to **point out the legitimacy of using open access publications and knowledge resources that are freely available on the internet.** Addressing these legitimate forms of access for research purposes, Recital 14 CDSMD already refers explicitly to open access publications and freely available online material as examples of copyrighted knowledge resources to which researchers have "lawful access" in the context of TDM research. This clarification enhances legal certainty for researchers. It could be extended to the general research provisions in Article 5(3)(a) ISD, Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD.

In the further exploration of the second policy avenue – the adoption of a specific access rule in cases of overwhelming public interest – it will be important to consider that Article 13 of the Charter seeks to safeguard research autonomy by stipulating that **"[a]cademic freedom shall be respected." Against this background, it is advisable to draw the conceptual contours of "overwhelming public interest" in a way that leaves sufficient room for non-instrumental, curiosity-driven research initiatives.** The aforementioned precursors in the DSA and the Data Act do not seem fully satisfactory from this perspective because they pre-define privileged research purposes and require research devoted to systemic risks (Article 40(4) DSA) or use in cases of exceptional need, such as a public emergency situation (Articles 14 and 15(1)(a) of the Data Act). As also pointed out above, however, the conceptual contours of "overwhelming public interest" must be traced in the light of the three-step test. This implies, for instance, that legitimate access based on "overwhelming public interest" should not have proportions that de facto erode normal modes of exploitation that generate the lion's share of publishers' income.

With regard to the third approach – the broad delineation of the scope and territorial reach of existing subscriptions – new copyright legislation could clarify that a **subscription taken by one consortium partner in a transnational research project should also allow all other partners to rely on this subscription** as a legitimate basis for use in the context of the research project. As indicated above, **the overarching objective to achieve a borderless internal market for research strongly supports cross-border availability within transnational research consortia**. The new cross-border rule for educational use in Article 5 CDSMD also confirms the feasibility and importance of legislative initiatives seeking to ensure the cross-border availability of knowledge resources. Nonetheless, it must not be overlooked that, **taken to extremes, a big transnational research consortium with numerous partners may benefit from one single subscription purchase**. It is thus foreseeable that a legislative intervention extending one subscription to all consortium partners may give rise to concerns about a conflict with a normal exploitation or an unreasonable prejudice to rightsholder interests (cf. Article 5(5) ISD, Article 10(3) RLD and Article 6(3) DBD).

However, **weighing all interests and the fundamental right to research involved, even a relatively large number of potential beneficiaries need not put an end to reliance on a subscription taken by one consortium partner**. From the outset, the regulation of use permissions in transnational research consortia could focus on scientific use that is required for the individual research project concerned. Hence, the extension of a subscription-based use entitlement to all consortium partners need not create a general substitute for subscriptions; it only supports lawful access in the context of a specific research project. It must also be considered that knowledge resources covered by the subscription of one consortium partner need not be of general interest to other consortium partners. A Portuguese university, for instance, seems unlikely to take a subscription to Dutch academic journals. In a transnational, comparative research project seeking to analyse journal publications across Member States, it may be important for a Portuguese research partner to have access to Dutch publications covered by subscriptions of the Dutch research partner in the project (and vice versa). This, however, need not imply that Dutch publishers lose substantial income with relevance in the three-step test analysis. Outside of the specific research project, the chances of selling subscriptions for Dutch journals to Portuguese research organisations may be rather limited. Hence, a market analysis may confirm that lawful access for all partners belonging to a transnational research project is unlikely to conflict with a normal exploitation or cause unreasonable prejudice to legitimate rightsholder interests.

Going beyond the case of transnational research collaboration, legislation could also clarify that **researchers using general library services or collaborating with general libraries or other cultural heritage institutions in research projects** – in the sense of libraries or other institutions not being their own research organisations – enjoy the freedom of using knowledge resources made available by these other libraries or institutions (even though these resources are not covered by subscriptions taken by their own research organisations). In particular, this confirmation of legitimate use for research purposes could concern **works not specifically created for academic use, such as fiction books, photo collections, music libraries, etc**. With regard to this latter type of work – not specifically made for research use – it seems safe to assume that research use will not trigger a conflict with a normal exploitation or an unreasonable prejudice in the sense of the three-step test. As the current survey results only cover scientific publishers, however, further research may be necessary to examine the position of a broader spectrum of rightsholders.

*Non-legislative measures*

As to non-legislative measures, two considerations seem central to potential initiatives seeking to support legitimate access in the context of general research provisions. On the one hand, the absence of a lawful access requirement in the general research provisions does not mean that researchers are free to use any access avenue that may be available. In the light of the three-step test laid down in Article 5(5) ISD, Article 10(3) RLD and Article 6(3) DBD, it is clear that a conflict with a work's normal exploitation and unreasonable prejudice to legitimate rightsholder interests must be avoided. The CJEU decisions in *C435/12 ACI Adam* and C-527/15 *Stichting Brein (Filmspeler)* leave little doubt about this. Hence, there is **no room for giving the impression in guidelines or recommendations that pirate websites offering illegal access to academic publications could constitute a proper basis for research use based on general research exceptions**[249].

On the other hand, the absence of a requirement for subscription-based access in the general research exceptions offers room for clarifying in guidelines or recommendations which modes of access may be deemed legitimate in addition to subscriptions taken by a researcher's own institution. The following situations could be considered in line with the above discussion of survey results:

With regard to transnational research collaborations, it could be clarified – not only in legislation but also in the context of non-legislative initiatives – that a **subscription taken by one consortium partner in a transnational consortium should also allow all other partners to rely on this subscription** as a legitimate basis for research use in the context of the joint project. The additional considerations relating to the three-step test (see the discussion of potential legislative interventions above) apply *mutatis mutandis*.

As also explained above in the context of legislative interventions, it could be clarified as well that **researchers using general library services or collaborating with general libraries or other cultural heritage institutions in research projects** – in the sense of libraries or other institutions not being their own research organisations – enjoy the freedom of using knowledge resources made available by these other libraries or institutions (even though these resources are not covered by subscriptions taken by their own research organisations). Again, the additional considerations developed above apply *mutatis mutandis*.

More generally, it could be clarified in the context of non-legislative initiatives that **further cases of lawful access can be assumed as long as a conflict with normal exploitation is avoided and legitimate rightsholder interests are not prejudiced in an unreasonable manner**. As already indicated above, the EU *acquis* offers starting points for identifying further cases of lawful access. open access and free online availability are mentioned in Recital 14 CDSMD. Article 40(4) and (12) DSA adds further confirmations of lawful access that seem relevant in cases where online platforms or search engine data attract copyright or *sui generis* database protection. These clarifications, however, are mere examples. Recital 14 CDSMD explicitly introduces the case of subscription-based access with the words "[f]or instance". Hence, there is room for non-legislative initiatives seeking to shed light on further situations in which legitimate access for research purposes can be assumed.

249 However, it is important to consider the nuances made by T. Margoni, "Saving Research: Lawful Access to Unlawful Sources Under Art. 3 CDSM Directive?", Kluwer Copyright Blog, 22 December 2023, available at: https://copyrightblog.kluweriplaw.com/2023/12/22/saving-research-lawful-access-to-unlawful-sources-under-art-3-cdsm-directive/.

*Policy Option CRR-01.3: remove barriers posed by technological protection measures*

**Policy Option CRR-01.3:**

**Technological protection measures:**

- **Adding all research-related copyright exceptions to the list in Article 6(4) ISD;**
- **broadening the intervention option established in Article 6(4) ISD by entitling Member States to take appropriate measures in justified cases to prevent TPMs from interfering with access and use of protected knowledge resources for research purposes falling under an EU copyright exception;**
- **excluding the applicability of subparagraph 4 of Article 6(4) ISD with regard to general research exceptions and other copyright exceptions that may become relevant in research contexts, including Articles 5(1), 5(3)(a), and 5(3)(d) ISD;**
- **clarifying that the specific rules provided in Recital 14 CDSMD only serve the purpose of specifying evident cases of compliance with the three-step test in Article 5(5) ISD to enhance legal certainty for research use.**

Policy option CRR-01.3 focuses on removing barriers posed by technological protection measures (TPMs) emerging from significant concerns highlighted in both researcher and RPO surveys. A total of 59.6% of researchers indicated that they were unable to access copyrighted knowledge resources on the internet because these knowledge resources were behind a paywall or electronic fence. More concretely, the results of the RPO survey confirm that paywalls and electronic fences pose particular difficulties. Answering Question 24, 39.6% of the respondents indicated that their researchers were often (every week or month) unable to obtain access to copyrighted knowledge resources on the internet because these knowledge resources were behind a paywall. 35.4% reported paywall problems every 3 to 6 months.

Not surprisingly, the paywall issue is high on the public policy agenda of RPOs. As the answers to Question 27 show, 47.3% of the respondents are strongly in favour of giving researchers access to copyrighted knowledge resources, even if they are behind a paywall, under strict public interest conditions defined by law. Of the remaining participants in this answer category, 34.4% indicated general support (“rather favour”) for enabling access despite paywalls under strict public interest conditions.

Considering the configuration of the rules relating to technological protection measures in the EU *acquis*, it is not surprising that the research community perceives paywalls and electronic fences as obstacles. According to Article 6(4) ISD, Member States shall take appropriate measures to ensure that researchers can benefit from the research exception laid down in Article 5(3)(a) ISD even if rightsholders employ TPMs. As Member State initiatives in this area have not become widespread, however, it is unclear to which extent this safeguard clause shields researchers effectively from the erosion of applicable statutory use permissions in national law[250]. Moreover, the Member State obligation only applies on the condition that a researcher has "legal access to the protected work or subject matter concerned."[251] With regard to this legal access requirement, the preceding discussion of lawful access avenues under the heading of CRR-01.2 offers important insights (see also the discussion of relevant survey results above). **As discussed, the introduction of a specific rule of legitimate access in cases of overwhelming public interest could provide an important addition to subscription-based access.** In the context of TPMs, this additional access entitlement could enhance the potential of Member State interventions to secure access for research purposes despite the use of paywalls and electronic fences. As a rule of legitimate access in cases of overwhelming public interest would satisfy the "legal access" requirement in Article 6(4) ISD, Member State interventions could effectively safeguard research access in these public interest situations.

However, it must also be considered that the fourth subparagraph of Article 6(4) ISD clarifies that **no obligation to safeguard the research exception arises when copyright-protected knowledge resources are made available on the internet on the basis of contractual agreements**. Paywalls and electronic fences, thus, enjoy a high degree of legal protection. In combination with online contracts, TPMs prevail over research freedom that could follow from Article 5(3)(a) ISD[252]. With regard to this configuration of TPM protection in Article 6(4) ISD, it is important to note that, with regard to scientific TDM research, **Article 7(2) CDSMD provides an alternative regulatory model. This more recent provision explicitly excludes the applicability of subparagraph 4 of Article 6(4) ISD.** This exclusion could thus be applied more broadly to prevent contractual arrangements from overriding Member States' obligations to facilitate access under research exceptions, including potential new rules on research access in cases of overwhelming public interest.

In the context of these proposals, it is important to point out that **the survey results revealed notable opposition from publishers, particularly commercial ones, against modifying the balance between research exceptions and TPMs.** Assessing potential policy developments in this area, 68.4% of commercial publishers answering Question 21 indicated that they were strongly against this access practice; 10.5% of the commercial publishers opted for "rather reject". In the group of non-commercial publishers, the results were more evenly distributed: 40.0% indicated strong opposition and 20.0% stated that they would rather reject this approach. The remaining 4 non-commercial publishers indicated that they were strongly – or rather – in favour of CRR-01.3. Almost all institutional publishers (83.3%) were strongly in favour of access despite paywalls in case of overwhelming public interest. 16.7% of institutional publishers would "rather reject" this approach.

Considering these mixed results in the research community on the one hand and among publishers on the other, it is clear that a balanced approach is necessary with regard to Policy Option CRR-01.3. The following interventions could be considered:

250 Cf. T. Margoni/M. Kretschmer, "A Deeper Look Into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology", CREATe Working Paper 2021/7, Glasgow: CREATe Centre 2021, 26; C. Geiger/F. Schönherr, "The Information Society Directive", in: I. Stamatoudi/P. Torremans (eds.), EU Copyright Law – A Commentary, 2nd ed., Cheltenham: Edward Elgar 2021, §11.109.

251 Article 6(4) ISD.

252 Cf. R.M. Hilty, "Das Urheberrecht und der Wissenschaftler", Gewerblicher Rechtsschutz und Urheberrecht – International 2006, 179 (187).

*Legislative measures*

As already indicated, EU copyright law itself already contains starting points for resolving problems that can arise from the application of TPMs. Article 6(4) ISD makes it clear that, in the absence of voluntary measures taken by rightsholders, Member States are expected to take measures to ensure that rightsholders make available to the beneficiaries of several copyright exceptions the means necessary to carry out the use falling within the scope of the relevant exception. Considering this existing regulatory approach, a first legislative intervention could seek to strengthen access and reuse of knowledge resources for scientific research purposes by **adding all research-related copyright exceptions to the list in Article 6(4) ISD**. Besides Article 5(3)(a) ISD, which is already enumerated, this could include, in particular, the temporary reproduction rule in Article 5(1) ISD and the right of quotation in Article 5(3)(d) ISD. As a second step – and in line with the considerations explained in the preceding discussion of lawful access issues (CRR-01.2) – it should be considered to **introduce legitimate access rules with regard to cases of overwhelming public interest as an additional category of "legal access" in the sense of Article 6(4) ISD.** In practice, this would mean that Member State interventions to secure research access under Article 6(4) ISD need not always depend on "legal access" following from subscriptions.

Article 7(2) CDSMD offers a reference point for an additional important step with regard to the relationship between research exceptions in the EU copyright *acquis* and online contracts accompanying TPMs. As explained, Article 7(2) CDSMD excludes the application of subparagraph 4 of Article 6(4) ISD – the aforementioned contractual override of research provisions, such as Article 5(3)(a) ISD – with regard to the new TDM provisions in Articles 3 and 4 CDSMD. This means that contractual stipulations can no longer exclude the entitlement of Member States to intervene in order to ensure access for researchers seeking to benefit from the new TDM provisions. Following this development in the CDSMD, it could be considered to **exclude the applicability of subparagraph 4 of Article 6(4) ISD not only with regard to Articles 3 and 4 CDSMD but also with regard to all other research-related copyright exceptions in the EU *acquis*, including Articles 5(1), 5(3)(a) and 5(3)(d) ISD.**

*Non-legislative measures*

While non-legislative interventions can hardly change the contract supremacy built into subparagraph 4 of Article 6(4) ISD, it is conceivable to take non-legislative measures, such as organising stakeholder roundtables and best practice meetings with Member States, to **ensure that Member States use the existing intervention obligation following from Article 6(4) ISD ("shall take appropriate measures…") more effectively[253] and intervene actively** to shield research use under the general copyright exception in Article 5(3)(a) ISD against overly restrictive TPMs. The inclusion of rightsholders in non-legislative measures may also lead to more voluntary action in favour of research freedoms. Considering the responses to Question 21 of the publishers' survey, however, it is doubtful whether publishers, and in particular commercial publishers, are willing to contribute to guidelines or recommendations seeking to reduce the impact of TPMs on research.

253 For a discussion of the lack of Member State interventions, see T. Margoni/M. Kretschmer, "A Deeper Look Into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology", CREATe Working Paper 2021/7, Glasgow: CREATe Centre 2021, 26; C. Geiger/F. Schönherr, "The Information Society Directive", in: I. Stamatoudi/P. Torremans (eds.), EU Copyright Law – A Commentary, 2nd ed., Cheltenham: Edward Elgar 2021, §11.109.

**Policy Option CRR-02:**

**• Relax or abandon the requirement of "non-commercial purpose" in the copyright *acquis*.**

**• Adopting guidelines or recommendations clarifying the extent to which private partners can benefit from use privileges for scientific research and new knowledge and information resources (publications, data, etc.) evolving from this privileged use.**

Current research provisions in the EU copyright *acquis* – Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD – set forth the requirement of use for a "non-commercial purpose". This requirement has become a source of legal uncertainty[254] and appears outdated, especially in light of the evolving nature of research practices that increasingly involve collaborations with private partners and public–private partnerships, often encouraged and even required by European and national research funding schemes. This trend raises doubts about the applicability of the aforementioned copyright exceptions when a research project includes industry funding or public–private partnerships. Furthermore, the potential commercialisation of research conducted within publicly funded institutions through technology offices and commercialisation divisions poses a risk of legal complications for researchers who initially relied on these exceptions under the assumption of non-commercial use.

In the researchers' survey, several researchers (10.3%) answering Question 18 indicated that they refrained from using copyrighted knowledge resources because they collaborated with industry partners. This result might point in the direction of public–private partnerships frustrating the invocation of research exceptions that require non-commercial use, such as Article 5(3)(a) ISD. Quite clearly, it cannot be assumed that all researchers participating in the survey had experiences with industry collaborations requiring access to copyright-protected material. Therefore, it seems safe to assume that not all participating researchers felt competent to answer this survey question. The RPO questionnaire offers further clarifications in this respect. Answering Question 24, the majority of RPOs (60.3%) stated that industry collaborations need not cause problems related to the non-commercial use requirement. At the same time, the RPO responses show that problems arising from the non-commercial use requirement are not unusual. 14.1% indicated that they had to deal with such problems every week or month ("very frequent"); 25.6% reported problems every 3 to 6 months ("somewhat frequent"). In relation to sharing knowledge resources, 39.7% of RPOs indicated that it occurred very frequently (14.1%) or somewhat frequent (25.6%) that their researchers refrained from using copyright-protected resources because they collaborated with industry partners and felt that use permissions given in copyright law would no longer apply because these permissions only covered non-commercial use. These findings confirm that **the non-commercial use requirement can be a source of legal uncertainty**.

Against this backdrop, it is not surprising that RPO responses to Question 27 reflect a robust preference for policy interventions, clarifying that copyright exceptions for research cover not only non-commercial research but also research conducted in the framework of public–private partnerships: 32.6% of the respondents were strongly in favour of this clarification, 35.6% indicated support for this intervention ("rather favour"); 22.7% took a neutral position. **A majority of RPOs would thus welcome measures that clarify the status of public–private partnerships**. This finding is in line with the observation that European and national funding schemes actively promote collaborations with industry partners. The non-commercial use requirement appears inconsistent when considering this research reality.

254 C. Angelopoulos, Study on EU copyright and related rights and access to and reuse of scientific publications, including Open access, Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 14-15

However, **publishers are predominantly against a departure from the traditional non-commercial use requirement.** Answering Question 21, 54.2% indicated strong opposition against changes; 10.2% would rather reject the inclusion of public-private partnerships. The opposition is particularly strong among commercial publishers – with 66.7% expressing no support at all for this policy choice and 7.7% indicating a rejection. Institutional publishers, by contrast, were strongly in favour of extending research exceptions to public–private partnerships (83.3%). Non-commercial publishers were divided on this question – with 55.5% indicating opposition and 44.4% signalling support.

Considering these divergent views in the research community and among publishers, a fine line must be walked when considering potential legislative or non-legislative interventions in the context of the non-commercial use requirement:

*Legislative measures*

Turning to legislative measures, it could be considered to **abandon the traditional requirement of use for a "non-commercial purpose" altogether**. Article 10(1)(d) RLD could serve as a template for this legislative intervention. This provision of the EU *acquis* globally exempts "use solely for the purposes of teaching or scientific research" – without limiting the scope of the use privilege to non-commercial research. In accordance with Article 10(3) RLD, the exemption of scientific research is subject to the three-step test. Hence, it applies in certain special cases which do not conflict with a normal exploitation of protected subject matter and do not unreasonably prejudice the legitimate interests of the rightsholder. The same solution could be adopted in the context of the ISD and the DBD: abandoning the non-commercial use requirement and relying on the three-step test as a tool to avoid overbroad inroads into exclusive rights, the EU copyright *acquis* could be amended in a way that offers room for public-private partnerships. The exemption of research use in Article 5(3)(a) ISD is already subject to the three-step test laid down in Article 5(5) ISD. A corresponding rule could be introduced in Article 9 DBD. Prohibiting conflicts with a normal exploitation of protected knowledge resources and unreasonable prejudices to legitimate rightsholder interests, the three-step test appears as an effective legal tool capable of preventing an excessive erosion of the market for protected works and other subject matter. **Arguably, a non-commercial use requirement in research-related provisions is redundant in the light of existing three-step test safeguards**.

Alternatively, the current **requirement of use for a "non-commercial purpose" could be replaced with a more flexible formula that leaves more room for collaborations with private partners** that may have a commercial orientation. The approach taken in the CDSMD could serve as a template for this alternative approach. Instead of confining the use privilege to non-commercial use, Article 3 CDSMD limits the circle of beneficiaries of the TDM provision for scientific research to "research organisations and cultural heritage institutions". Defining the term "research organisation", Article 2(1) CDSMD puts an emphasis on the non-profit nature of the scientific institution carrying out the research. Hence, an individual research project can aim at creating marketable knowledge as long as this research aspect does not change the overall non-profit nature of the institution as such[255]. Shifting the focus from the non-commercial character of the individual research use to the non-commercial nature of the research organisation behind the individual research project, the EU copyright *acquis* can create additional breathing space. In this vein, Recital 11 CDSMD points out that, *"[i]n line with the existing Union research policy, which encourages universities and research institutes to collaborate with the private sector, research organisations should also benefit from such an exception when their research activities are carried out in the framework of public–private partnerships."* Taking this regulatory model as a reference point, **the approach adopted in the CDSMD could be universalised and implemented across all research provisions in the ISD, DBD and the Software Directive**. The universal application of the CDSMD approach would also be in line with developments in the context of the DSA. With regard to data access for researchers, Article 40(8)(a) DSA already refers back to the definition of "research organisation" in Article 2(1) CDSMD. A first step in the direction of a broader application of the CDSMD approach has thus already been taken.

Broadening the CDSMD approach, it should also be considered to clarify the status of private partners involved in scientific research projects. In particular, it seems necessary to **clarify the extent to which private partners can benefit from use privileges for scientific research and new knowledge and information resources (publications, data, etc.) evolving from this privileged use**. In addition, it must not be overlooked that the focus on research organisations entails the **risk of neglecting the legitimate research needs of individual researchers who do not belong to an established research organisation** in the sense of Article 2(1) CDSMD. Investigative journalists can serve as an example[256].

*Non-legislative measures*

Non-legislative interventions could contribute to a modern understanding of the existing requirement of research use for a "non-commercial purpose". In particular, non-legislative measures could propose factors for assessing the non-commercial nature of research use. **These factors could make it clear that the involvement of private partners in a scientific research project, as partners and/or funders, need not tip the scales against a finding of non-commercial use**. For instance, it could be stated that a profit orientation need not be assumed as long as the use is carried out in accordance with scientific standards of academic independence and research integrity[257].

255 E. Rosati, Copyright in the Digital Single Market, Oxford: Oxford University Press 2021, 43; J. Griffiths/T. Synodinou/R. Xalabarder, Comment of the European Copyright Society Addressing Selected Aspects of the Implementation of Articles 3 to 7 of Directive (EU) 2019/790 on Copyright in the Digital Single Market, ECS 2022, 14-15, available at: https://europeancopyrightsociety.org/ (last visited: 22 January 2024); M.R.F. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 38-39.

256 Cf. T. Margoni/M. Kretschmer, "A Deeper Look Into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology", CREATe Working Paper 2021/7, Glasgow: CREATe Centre 2021, 5 and 10.

257 Cf. E. Rosati, Copyright in the Digital Single Market, Oxford: Oxford University Press 2021, 42-43.

**Policy Option CRR-03: Developing guidelines or recommendations that address aspects of the TDM provisions that may lead to legal uncertainty and divergent approaches and practices across the Member States.**

Policy option CRR-03 focuses on guidance relating to the TDM provisions in Articles 3 and 4 CDSMD to enhance awareness among the research community and establish a more uniform approach across Member States. Survey results highlight the beneficial effects of clarifications. Many researchers expressed hesitance in utilising TDM tools due to fears of copyright infringement, indicating a lack of awareness of the new TDM provisions. The researchers' survey shows that researchers have not yet explored the full potential of the new TDM provisions. Responses to Question 18 indicate that researchers (20.7%) may refrain from using research tools that make it possible to mine texts, images, films and music because they are afraid of copyright infringement. Answering Question 18, researchers were free to select multiple options. As TDM research does not play a role in the work of each researcher, **the percentage of researchers highlighting copyright difficulties in the field of TDM (20.7%) appears substantial enough to recommend non-legislative clarifications**.

RPOs have also shown strong support for guidance on these provisions. The results of the RPO questionnaire indicate that 90% of responding RPOs are in favour or very strongly in favour of the statement that further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the TDM exceptions.

Similarly, the majority of responding publishers (51%) are in favour or very strongly in favour of the statement that further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions for TDM and need not seek permission from copyright holders. 12% have taken a neutral position in respect of this policy option.

As the new TDM provisions in Articles 3 and 4 CDSMD do not cover acts of making available to the public, **it can be advisable to combine non-legislative initiatives in the area of TDM with corresponding initiatives addressing the use of general research exceptions, such as Article 5(3)(a) ISD** (see CRR-01 above). 15.6% of the researchers answering Question 18 indicated that data sharing raises concerns about copyright infringement. In contrast to the implementation of Article 3 CDSMD, solutions based on Article 5(3)(a) ISD are optional for Member States. These solutions may thus differ from country to country and pose obstacles to the work of transnational research consortia[258]. A non-legislative intervention seeking to identify best practices may have an important harmonising effect – in the sense of providing a convincing template for national approaches.

In sum, it could be considered to address the following aspects of the TDM provisions in the context of a non-legislative intervention:

258 Cf. M. Senftleben, 'Study on EU copyright and related rights and access to and reuse of data', Independent Expert Report commissioned by European Commission, Directorate-General for Research and Innovation, Publications Office of the European Union, 2022, 46-47.

- **Clarify the "lawful access" requirement in Article 3 CDSMD**. Recital 14 CDSMD mentions subscriptions covering a research organisation's own researchers as one example ("[f]or instance") of lawful access. The Recital also mentions lawful access following open access policies or free availability online. As these cases are merely examples given in Recital 14 CDSMD, it seems possible to specify further cases in which lawful access may be assumed. In particular, the following additional situations could be considered:

    - With regard to broader, potentially transnational research consortia, it could be clarified that a **subscription taken by one consortium partner should also allow all other partners to rely on this subscription** as a basis for demonstrating lawful access. This guideline would be in line with the results of the RPO survey. A total of 40.9% of RPOs stated that they would be strongly in favour of this approach; 37.8% expressed support ("rather favour") for this clarification. At the same time, it must not be overlooked that the publishers' responses to Question 21 clearly show that they may oppose this rule of extended access in research consortia. In particular, 75% of commercial publishers indicated that they were strongly against this access practice;

    - researchers using library services without being formally attached to the library as staff members;

    - knowledge resources not necessarily covered by subscriptions taken by research organisations, such as fiction books, photo collections, music libraries, etc.

- Clarify **potential differences between the "lawful access" requirement in Article 3 CDSMD and the requirement of "lawfully accessible" in Article 4 CDSMD** (see the results of the literature review in 1.1.3) highlighting the need for terminological clarity and consistency), in particular with regard to the question of whether "lawful access" and "lawfully accessible" implies the further requirement that freely available online sources be lawful sources[259];

- Clarify the **concept of "machine-readable means" in Article 4(3) CDSMD** and encourage stakeholder dialogues to arrive at commonly accepted **rights reservation practices**, including the use of contractual restrictions and TPMs;

- Address (the risk of) **divergent Member State approaches with regard to data sharing** rules based on general research exceptions, such as Article 5(3)(a) ISD (see CRR-01, see also the results of the literature review in 1.1.3), and seek to provide convincing guidelines for a harmonised and consistent application across the Union. As one researcher observed in the open answer category accompanying Question 21: "*I am currently developing a database which feeds from various sources and also from self-generated data. These sources have different use licences. I would like to be able to publish my database and make it open access, but I have great uncertainty about the steps I have to take to properly deal with the different cases and the copyright legislation involved.*" Another researcher observed: "*I am often unsure what I am allowed to share without risking copyright infringement because the legal terms are often difficult for me to fully understand their meaning.*";

259 Cf. T. Margoni, "Saving Research: Lawful Access to Unlawful Sources Under Art. 3 CDSM Directive?", Kluwer Copyright Blog, 22 December 2023, available at: https://copyrightblog.kluweriplaw.com/2023/12/22/saving-research-lawful-access-to-unlawful-sources-under-art-3-cdsm-directive/.

- Encourage the different stakeholders (rightsholders, researchers, RPOs and cultural heritage institutions) to voluntarily establish **codes of conduct and best practices** for the use of copyrighted knowledge resources in TDM research, including appropriate procedures for the application of Articles 3 and 4 CDSMD;

In addition, **it could be clarified whether and to what extent investigative journalists can rely on the rules for TDM research laid down in Article 3 CDSMD.** For instance, it is conceivable to reflect on whether, and in which circumstances, newspaper departments conducting their own investigations might be classed as "other entity" within the meaning of Article 2(1) CDSMD.

*Policy Option CRR-04: promoting umbrella licensing solutions*

**Policy Option CRR-04:**

- **Promoting umbrella licensing solutions leading to long-term open access availability;**
- **Developing guidelines or recommendations seeking to pave the way for umbrella licensing and standard remuneration schemes.**

Policy option CRR-04 explores the potential of umbrella licensing solutions and remuneration regimes to enhance access to knowledge resources for research purposes. As already pointed out in the context of SPR-06, the questionnaire design – covering various research-related issues – did not allow for a fine-grained analysis of different licensing or remuneration approaches. Therefore, **the results only reflect general trends and do not allow the identification of specific implementation models**. Should this policy option be deemed promising, it is strongly advisable to conduct further research, for instance, in the area of extended collective licensing, to obtain further insights into concrete options.

At the aggregated level at which CRR-04 could be studied in the present analysis, the policy option – including both umbrella licensing (such as extended collective licensing) and lump sum remuneration approaches – was introduced in the surveys as a potential alternative to expanding and strengthening copyright exceptions for research use. The survey results are mixed. **A minority of publishers favour such solutions, but a significant proportion, particularly in commercial publishing, are strongly against them.** Answering Question 21, 55.9% of commercial publishers indicated that they were strongly against measures in copyright law to facilitate umbrella licensing solutions, such as extended collective licensing or lump sum remuneration schemes; 20.6% of the commercial publishers opted for "rather reject". In the group of non-commercial publishers, the results were more evenly distributed. 42.9% indicated strong opposition. Two non-commercial publishers took a neutral position (28.6%). Two further non-commercial publishers indicated that they were strongly – or rather – in favour of CRR-04 (28.6%). The majority of institutional publishers (57.1%) were strongly in favour of umbrella licensing or lump sum remuneration approaches. Two institutional publishers (28.6%) would "rather reject" this approach; one institutional publisher took a neutral position (14.3%).

Turning to the research community, **a substantial number of RPOs expressed strong or moderate support for umbrella licensing solutions and lump sum remuneration schemes.** Answering Question 27 of the RPO questionnaire, 38.0% of the respondents indicated that they would be strongly in favour of umbrella licensing solutions and lump sum remuneration schemes; 39.6% indicated support ("rather favour"). This result suggests that, from the perspective of the research community, umbrella licensing solutions and lump sum remuneration regimes could play a role in achieving open access and open science goals if implemented appropriately.

Taking these results together, it can be said that Policy Option CRR-04 may constitute a policy alternative that, if implemented in an appropriate way, has some potential to further open access and open science goals. As pointed out, **further research seems necessary to shed more light on concrete policy avenues in this area.** The research design of the present inquiry does not offer sufficient detail to identify concrete licensing or remuneration systems that might be acceptable. Considering the EU copyright *acquis*, it is important to mention, in line with the discussion of SPR-06 above, that the rules on extended collective licensing, in particular Article 12 CDSMD, and related approaches developed in the Nordic countries may offer reference points for the initiation of a stakeholder dialogue seeking to identify common ground for umbrella licensing solutions. The rules laid down in Directive 2014/26/EU on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market (CRM) may provide additional guidance. As to cross-border availability, experiences with the approach taken in the Marrakech Treaty could potentially serve as a source of inspiration[260].

260 For an in-depth analysis of the Marrakesh rules, see L.R. Helfer/M.K. Land/R.L. Okediji/J.H. Reichman, The World Blind Union Guide to the Marrakesh Treaty Facilitating Access to Books for Print-Disabled Individuals, Oxford: Oxford University Press 2017. Cf. M. Trimble, "The Marrakesh Puzzle", International Review of Intellectual Property and Competition Law 45 (2014), 768.

# 2. CHAPTER 2 – DATA AND DIGITAL LEGISLATION

This chapter presents an analysis of EU Data and Digital Legislation from the Perspective of Research.

## 2.1. Introduction

The study's overall objective is to assess how the research ecosystem comprising of researchers and various types of research organisations is impacted by EU Data and Digital Legislation (EU DDL). In pursuing this ambitious objective, the starting point of the analysis and the reference policy framework is the establishment of a European Research Area in accordance with Art. 179 TFEU and as further specified in the ERA Policy Agenda 2022 – 2024, particularly Action 2. The enablement of open science, a data legislative framework fit for the research, the protection of academic freedom and the strengthening of research infrastructures are among the key values and objectives of this framework.

The scope of this study covers the following legal instruments: the *Open Data Directive* (ODD), the *Data Governance Act* (DGA), the *Digital Services Act* (DSA), the *Digital Markets Act* (DMA), the *Data Act* (DA), the *Artificial Intelligence* Act (AI ACT), and the *European Open Science Cloud* (EOSC). The legal nature of these instruments is varied and comprises five EU regulations (e.g. DGA, DSA, DMA, DA, and AI Act) which are directly applicable in the EU and one Directive (i.e. the ODD) which needs to be implemented in the national law of EU Member States. All of the legal instruments are comparatively recent, with five of them already in force when the study began, one regulation entered into force when the study was being carried out, and one, the AI Act, which is currently – in January 2024 – pending final adoption by the European Parliament. The EOSC is peculiar because it is neither a legislative instrument nor a purely regulatory framework but consists of multiple actions.

The study has two interconnected specific objectives. First, the study aims to identify in the covered legislative instruments the relevant provisions for researchers, research organisations, research infrastructures and research service providers, i.e. scientific repositories and scientific publishing platforms (hereinafter referred to as "researchers and research organisations"). Second, the study aims to analyse how researchers and research organisations can comply with the obligations and benefit from the rights they may have under these acts. This is done by gaining knowledge about the interplay between the legislative instruments covered in this study and by consolidating the analysis of the benefits and challenges emerging from EU data and digital legislation.

In order to comprehensively analyse the challenging tasks at hand, this study proceeds in three steps: First, it begins with an in-depth analysis of the relevant aspects of each of the covered legislative instruments relating to the research sector. Second, an analysis of the interplay among the different legal instruments of EU DDL (and copyright law) is conducted in order to progress towards a comprehensive and consolidated assessment of the impact of DDL on scientific research. In the third and last step, the main opportunities and challenges for research and research organisations are presented. In this final step, researchers and research organisations are assessed first in their role as beneficiaries of specific research-related provisions, and subsequently, they are assessed in their role as addressees of specific obligations. This systematisation should offer a complete overview of the role that researchers and research organisations may acquire in the research life cycle, taking into account the perspective of research organisations and researchers when it comes to the compliance with this new regulatory framework. The study concludes with a set of recommendations aimed at different stakeholders (law and policymakers, courts and administrative bodies, researchers and research organisations, and the private sector) on how to overcome barriers to research and to comply with obligations and rights from EU DDL.

### 2.1.1. Methodology

The study is based on a mixed methodological approach. As is standard in legal studies, the principal approach is a comprehensive literature review performed through desk research of legal, policy and academic sources. Next to the literature review, expert interviews and, to a lesser extent, surveys (additional data collection methods) have also been employed.

The **literature review** surveyed the whole body of DDL. This was done using the main legal databases as well as the official websites of the European Parliament, the European Commission, the Council and the CJEU. One of the covered legal instruments (i.e. the AI ACT) is still in the legislative process, which means that the analysis is based on the most recent textual proposals from the European Parliament and the Council. The sources identified through the literature review are compiled in the bibliography listed in the "References" Section.

Additional data collection methods consisted of **interviews** and **surveys**, which were employed to fill the gaps found in the literature and to collect additional insights from stakeholders. The strategy of using additional methods to supplement another method (e.g. interviews contributing to filling the gaps in the literature review) is also referred to as the triangulation of methods[261]. The approach is recognised as an "effective instrument for gaining an overall and holistic picture of the research object"[262] and "can be used as strategies for producing better knowledge in the research […] or as strategies for improving the quality of research"[263]. Below, we provide further information on how we implemented each method adopted in this study.

At the outset, the study team performed 6 exploratory interviews with policy officers from the European Commission and selected stakeholders representing research performing organisations and publishers. These exploratory interviews contributed to obtaining a general overview of the main topics and priorities within the policy, scientific and business communities involved in the research ecosystem and to better understand the 'lay of the land'[264].

As a mitigation strategy for the potential gaps in the literature on specific areas, given how recent the topic of DDL is, the study complemented the literature review with 18 **expert interviews**.

Regarding chapters 2.2-5.5, six (of the 18), expert interviews were also held as part of the study to complement findings from literature and the surveys. The main goal of these interviews was to obtain a better understanding of the open science 'landscape' for research data in the country cases, with a particular focus on the impact of the Open Data Directive and, to a lesser extent, on the Data Governance Act. For the Digital Services Act and the Digital Markets Act, no interviews were held, as the combination of literature and data from stakeholders' engagement (particularly for the DSA) was deemed sufficient to explore the DSA and DMA-related aspects of this study.

Further information on the methodology adopted in the interviews, the interview questionnaires, and the interviewees are listed in Annex 3, as well as in overall methodology Section of this report. In addition to the interviews, the study also used surveys to a lesser extent. Three different surveys were carried out during the elaboration of the study; these were aimed at (i) researchers, (ii) research performing organisations (RPOs) and (iii)

261 Verschuren, P.; Doorewaard, H., 'Designing a Research Project' (2nd Ed, Eleven, The Hague, 2010), 179.

262 Verschuren & Doorewaard, 2010, 179.

263 Flick, U. 'An introduction to qualitative research' (4th ed. Sage, 2009), 405.

264 2nd Interim Report, p. 16.

publishers. While these surveys were mainly designed for the part of the project dealing with copyright issues, the EU DDL analysis also benefited from this approach especially as regards the researcher and research performing organisations surveys. Further information on the methodology adopted in the surveys is presented in the overall methodology Section of this report.

Throughout chapters 2.2-2.5 reference is made to the outcomes of two of the surveys conducted as part of the overall project: the Researchers' survey and the Research performing organisations survey ('RPO Survey'). For an extensive discussion and analysis of these surveys, see Annex 5 'Synopsis of the Survey Programme Results'.

For the EU DDL part (chapters 2.2-2.5), the surveys primarily served to collect additional information on how researchers and research organisations deal with research data in light of the Open Data Directive's 2019 provisions on research data, which focuses on public research performing organisations and publicly funded research, as well as the DGA's provisions on data altruism. Only the answers from respondents who self-identified as (affiliated with) a (i) university/higher education institution or (ii) public research centre[265] were considered. The survey results here, therefore, differ from the results reported in the Synopsis report (Annex 5), given the focus in the analysis on impacts for publicly funded research. For context, below are respondent characteristics.

The same subset of survey data (the "RPO survey") is also referred to and discussed in the DSA and DMA chapters to support the analysis of the impact of these regulations (in terms of effects on scientific research, opportunities and challenges) on public RPOs and research. Particularly relevant, among other provisions, is Article 40(8)(b) DSA on research access, which requires vetted researchers to be affiliated with a research organisation as defined in the CDSM directive (i.e. universities or research institutes the primary goal of which is to carry out scientific research, "on a not-for-profit basis" or "pursuant to a public interest mission recognised by a Member State").

| **Researchers' survey** | **RPO survey** |
|---|---|
| • 401 respondents – university/higher education institution (44.6%)<br>• 158 respondents – public research centre (17.6%)<br>Total number of respondents affiliated with a university, higher education institution or public research centre: 559.<br><br>Total number of respondents of the Researchers' survey: 900[266]. | • 183 respondents – university/higher education institution (40.7%)<br>• 111 respondents – public research centre (24.7%)<br>Total number of respondents affiliated with a university, higher education institution or public research centre: 294.<br><br>Total number of respondents of the RPO survey: 450[267]. |
| **62.1% of the Researchers survey respondents indicated being affiliated with a university, higher education institution, or public research centre.** | **65.3% of the RPO survey respondents indicated being affiliated with a university, higher education institution, or public research centre.** |

For the analysis of three specific Member States (the Netherlands, Germany and Italy) in Section 2.2.1, the responses were analysed at the country level. The surveys were specifically targeted at producing additional information on research data (primarily Open Data Directive) for the country case studies. The number of respondents affiliated with a university, higher education institution or a public research centre are listed below.

265 Other possible answers to this question of the Researchers' survey were: SME, private research centre, large enterprise, public administration/government, incubator, start-up, or spin-off and other. See Question 3 of the Researchers' survey – data legislation part (Annex 5 – Synopsis report).

266 Question 3 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

267 Question 3 RPO survey – data legislation part (Annex 5 – Synopsis report).

| Researchers[268] | Number of respondents | RPOs[269] | Number of Respondents |
|---|---|---|---|
| Germany | 75 | Germany | 34 |
| Netherlands | 29 | Netherlands | 3 |
| Italy | 75 | Italy | 26 |

Considering the limited number of respondents, due care has been taken while interpreting the outcomes.

### 2.1.2. Structure of the study

In the **first part of this study (Sections 2.2-2.8)**, we individually reviewed each of the legal instruments pertaining to EU digital and data legislation, i.e. the ODD, DGA, DSA, DMA, AI Act, and DA, plus EOSC. The goal is to highlight the provisions and describe the rights and obligations of each legal instrument that could become relevant for researchers and research organisations. For the ODD and DGA, we also considered national implementations in three selected countries: Italy, Germany, and the Netherlands. Throughout chapters 2.2-2.8, some references are made to the survey results, with accompanying graphical elements provided by PPMI. For the Section about the EOSC, given its particular nature, we adopted a partially different approach where we examined existing studies and literature on the EOSC, as well as selected EOSC-related projects and/or initiatives that are relevant to this study.

Building on the analysis provided in the first part of the study and providing a more integrated approach to the relevant issues for researchers and research organisations, the **second part of the study (Sections 2.9-2.11)** provides an analysis of the multiple interactions among the surveyed instruments (Section 2.9), and consolidates the main opportunities and challenges for researchers and research performing organisations arising from the framework of EU Data and Digital Legislation and EOSC (Section 2.10).

Finally, the study provides a set of recommendations on the legislative and non-legislative levels, with the overarching goal of optimising the alignment of EU Data and Digital Legislation and EOSC with the need to promote scientific research (Section 2.11).

## 2.2. Open Data Directive

*The content of this Section has been authored collaboratively by Doris, Buijs; Mireille van Eechoud.*

The Open Data Directive (ODD) is the most generic instrument in EU law to regulate the use that can be made of data held by the public sector in Member States. It has gone through significant changes during its 20-year existence.

The EC first started promoting the reuse of public sector information (PSI) for commercial and non-commercial purposes as early as the late 1980s. Ultimately, regulation was put in place to ensure wider availability throughout the Member States. The 2003 Directive (2003/98/EC) on the reuse of public sector information has as its key principle that public sector bodies enable the reuse of information by businesses, NGOs, and citizens more broadly. Importantly, the Directive does not regulate access rights itself. It builds on access laws in Member States. The 2003 directive did not oblige public sector bodies to allow reuse; this only became mandatory (with some exceptions) with the revision of 2013. The

268 Solely including universities, higher education institutions and public research centres.

269 Solely including universities, higher education institutions and public research centres.

subsequent 2019 revision that resulted in the Open Data Directive further elaborated the mechanisms by which reuse must be facilitated and also set up a system for the (free) supply of 'high-value datasets'. Important for this study is that the ODD now also explicitly addresses research data.

The development over time shows that lawmakers have struggled with the position of research performing organisations, particularly as regards the scope of application to universities and their constituent parts (education, research, libraries). Research performing organisations and affiliated researchers can also have the role of reusers that can benefit from the reuse of information from other public sector bodies like ministries, statistics offices, company registers, etc.

The addition of a special provision on research data and "open access" policies for research data in the 2019 revision has added a dimension that is highly relevant to, but also complicates, the legal framework for sharing research data. The ODD was due to be implemented by the Member States by July 2021, but 19 Member States missed that deadline, which forced the EC to launch infringement actions. As of January 2024, not all Member States have implemented the ODD.

### 2.2.1. Key aspects

This Section sets out key aspects of the ODD with regard to the main principles that this instrument deploys to promote the reuse of public sector information and its scope of application in terms of institutions and information covered. Because of the nature of this study, particular attention is paid to the position of the various organisations that play a role in the production and dissemination of research data and to the provisions on research data in the ODD.

Table 23 provides an overview of the key provisions and their relevance to research.

**Table 23. Overview of the key provisions and their relevance to research**

| Provision(s) | Relevance to research |
|---|---|
| **Art. 2(9)** | Definition of research data: the definition of research data provided by the ODD determines which types of research data shall be reusable (and thus be made reusable by researchers and research organisations). |
| **Art. 3** | A general principle of reusability: documents to which the ODD applies shall be made reusable by default, which can create opportunities for a wideI range of reuse of public sector information for research purposes. |
| **Art. 5** (Recital 33-35), **6** (Recitals 36, 38-40), **11** (Recital 46 | Favourable conditions for reuse: free of charge in principle, non-discriminatory terms, practical usability (open, machine-readable). This may benefit researchers seeking to reuse such documents for research purposes. |
| **Art. 10,** Recitals 27, 28 | Reuse of research data: member states adopt policies to open up publicly funded research data in accordance with FAIR principles; reuse allowed of research data made available in repositories. |

*Source: Compiled by the study team.*

### *General reuse principles*

The default of the Directive is that public sector bodies **must ensure that** information/data they hold shall be **reusable** for commercial or non-commercial purposes when this information is contained in publicly accessible documents. In a few cases, allowing reuse is not mandatory, e.g. for public undertakings and university libraries. Chapters III and IV of the Directive set out a number of principles and aspirations for how and under what terms and conditions public sector information is to be made reusable.

Any limitations imposed on reuse must be "objective, proportionate, non-discriminatory and justified on grounds of a public interest objective." The requirement of **non-discrimination** means that any conditions for reuse must be the same for comparable categories of reuse and re-users. Different policies are allowed, e.g. commercial and non-commercial reuse[270]. However, there is only very limited scope for exclusivity: only in cases where the provision of a service in the public interest necessitates exclusive agreement is this allowed, and only for a limited period[271].

Importantly, the ODD prohibits public sector bodies from exercising any *sui generis* database rights they might own in contravention of the purposes of the ODD. Member States must ensure the availability of standardised electronic licences whenever reuse is subject to restrictions and encourage public sector bodies to use them[272]. In addition, practical measures must be taken to help ensure the findability of information resources, e.g. through portals and search facilities.

270 Article 11 ODD, recital 46 ODD; European Commission, Directorate-General for Research and Innovation, Eechoud, M., Study on the Open Data Directive, Data Governance and Data Act and their possible impact on research, Publications Office of the European Union, 2022, p. 15, https://data.europa.eu/doi/10.2777/71619.

271 Article 12 ODD; European Commission & Van Eechoud 2022, p. 15,

272 Article 8 ODD.

With respect to costs **generally, reuse should be free of charge**. At most, marginal costs associated with the information supply, including costs for, e.g. anonymisation of personal data, may be charged. For some institutions, there is more room to charge; e.g. libraries, including university libraries, museums and archives, may charge up to the full costs, and the same goes for public sector bodies that have to operate under a scheme that obliges them to generate revenue to cover a substantial part of their costs relating to the performance of their public tasks (in some Member States this concerns, for example, land registries and company registers).

To promote reuse, public sector bodies are encouraged to make information **available as open data, in both a technical and legal sense**. This means wherever possible, data should be made available in open, machine-readable formats, be compliant with formal open standards and be accompanied by metadata. Data are considered legally open when made available under a licence that permits anyone to freely access, reuse and redistribute the data without restrictions based on intellectual property rights (except attribution of the source). A typical example of an open licence is Creative Commons Attribution ("CC-by"), the Creative Commons Zero and the GNU General Public Licence version 3 (GPL-3.)[273]

Although the proactive supply of technically and legally open data are the gold standard in the ODD, in many respects[274], it is not a hard obligation for public sector bodies (let alone an enforceable right for businesses and citizens). However, over the course of the past 20 years, the rules in the Directive have become more elaborate and prescriptive.

The Directive sets out **standards for request procedures** and the publishing (standard) terms and conditions. In short, public sector bodies should be transparent about how requests for reuse can be made, facilitate electronic requests and have appropriate appeals procedures in place. The norms for request procedures do not apply to educational establishments, research performing organisations and research funding organisations, but university libraries are not exempt[275].

*Institutions covered*

The current Directive lays down different regimes, depending on whether documents are held by public sector bodies, by public undertakings, or qualify as research data. The Directive contains an elaborate definition of "**public sector body**", which includes the State, municipalities and general bodies governed by public law. It also includes bodies incorporated under private law but funded by public monies or subject to management supervision by a public authority. Clearly, then, **universities** will often qualify as public sector bodies. Indeed, the ODD recognises this by defining a university as "any public sector body that provides post-secondary-school higher education leading to academic degrees." In principle, then, universities are subject to the obligations of the ODD. However, Article 1 also excludes from the scope of the Directive all documents held by **educational establishments** at the tertiary level, except research data. To add to the complexity, the Directive also contains rules for libraries, including university libraries, museums and archives. These are subject to the Directive but not obliged to allow reuse.

273 See https://opensource.org/licenses/ for a (non-exhaustive) list of license types.

274 van Eechoud, M., 'FAIR, FRAND and open - the institutionalization of research data sharing under the EU data strategy', in: S. Frankel et al (eds), Improving Intellectual Property. A Global Project, Cheltenham: Edward Elgar 2023, p. 328.

275 Article 4 ODD, Chapter II ODD.

Of note, **research performing organisations** and **research funding organisations** have only become a category named in the Directive with the introduction of a special provision on research data (see below). It is implicit in the Directive that it only applies to RFOs and RPOs that meet the requirement of being a public sector body. The distinction between archives, libraries, educational establishments, universities, RPOs and RFOs is not always clear, probably because of the gradual extension of the scope of the Directive since its 2003 enactment.

Certain categories of public sector bodies are excluded from the ODD altogether, such as public service broadcasters and cultural institutions other than libraries, museums and archives. Educational establishments outside of higher education, e.g. at the primary and secondary school level, are also excluded. Since 2019, the ODD contains a new category: it also applies to public undertakings in certain sectors – briefly put: utilities and transport – "over which the public sector bodies may exercise directly or indirectly a dominant influence by virtue of their ownership of it, their financial participation therein, or the rules which govern it" (Art. 2(3)) ODD. For such public undertakings, there is no legal obligation to allow reuse; it is just an obligation to make an effort to enable the reuse of information that is produced within the scope of their (statutory task) to provide services in the general interest.

*Information covered*

The general notion of public sector information as used in the Directive pertains to "**existing documents** held by public sector bodies of the Member States", documents being "**any content** whatever its medium"[276]. The Directive itself explicitly excludes certain types of information from its scope, i.e. documents in which third parties hold intellectual property and documents the supply of which is an activity falling outside the scope of the public task of the public sector bodies concerned. It further refers to the access regimes of Member States because it builds on domestic legislation and practice. In each case, one needs to consider whether the information is publicly accessible under national law. Member States will typically have enacted access to official documents (freedom of information acts), but there may also be laws on public registers, archives, or statistics that contain provisions mandating public access. There are various reasons why government documents can be closed, e.g. freedom of information acts typically protect commercially confidential information, sensitive private information, and information the disclosure of which affects national security, international relations, or court proceedings. In recognition of common grounds as to why documents are not publicly accessible under national laws, the ODD names various grounds and sets out a generic 'disclaimer' of applicability.

276 Articles 1(1), 2(6) ODD.

A new category of information since 2019 is so-called **high-value datasets**. The idea is that particular datasets have significant socio-economic benefits, such as data related to the environment, economic statistics, or mobility, and this warrants actively opening them up across all Member States. The ODD does not classify particular datasets but rather lists the themes and key aspects of openness. The European Commission's implementing regulation sets out in detail which datasets are to be made available and how[277]. The list includes meteorological data, environmental data (e.g. emissions, pollution), statistics on population, employment, public accounts and other national statistics, certain company data, and data on transport networks and tourism. These datasets must be available free of charge, machine-readable, in open formats, and be provided via APIs and typically also as bulk downloads. The implementing regulation prescribes the use of open licences, either a Creative Commons-BY 4.0 licence or an open licence that is at least as permissive as CC-BY 4.0.

### *Reuse obligations for research data*

One of the novelties of the ODD is that it has specific provisions on 'research data'. To understand why research data are now included in the ODD as it is, it helps to take a short look back and identify its links to open science policy.

The 2003 and 2013 predecessors of the Open Data Directive did not directly address research data, but they contained a general exclusion of educational and research establishments in the public sector. In 2013, university libraries, with other types of (public) libraries, museums, and archives, were included in the scope, although there was no hard obligation to allow the reuse of (publicly accessible) holdings. Member States had the competence to determine openness and reusability of research data[278]. Reasons to exclude research data were that the benefits of reuse would not outweigh the administrative burden[279] and, more importantly, that research data could often be subject to intellectual property or other third-party rights[280]. Of note, to date, the ODD does not apply to information in which third parties (outside public sector bodies) hold intellectual property. Whether research data are protected by IPRs may not always be clear, and part of the additional burden of allowing reuse would be that the legal status had to be established[281]. It was also argued that the "specificities and limitations of the research sector" could be taken into account much better as part of the development of open science policies rather than as part of general public sector information policies[282].

277 Commission Implementing Regulation (EU) 2023/138 of 21 December 2022 laying down a list of specific high-value datasets and the arrangements for their publication and re-use, C/2022/9562, OJ 2023 L 19/43.

278 Gobbato, S., 'Open Science and the reuse of publicly funded research data in the new Directive (EU) 2019/1024', *Journal of Ethics and Legal Technologies* 2020, vol. 2(2), pp. 147-148.

279 European Commission & Van Eechoud 2022, pp. 16-17 in reference to European Commission, Explanatory Memorandum on the Proposal for a Directive of the European Parliament and of the Council on the re-use and commercial exploitation of public sector documents, COM(2002) 207 final - COD(2002) 123.

280 Gobbato 2020, p. 151. See also: Arisi M., 'Open Knowledge. Access and Re-Use of Research Data in the European Union Open Data Directive and the Implementation in Italy', The Italian Law Journal 2022(1) https://www.theitalianlawjournal.it/data/uploads/8-italj-1-2022/8-italj-1-2022-full-issue.pdf, p. 38.

281 Arisi 2022, p. 38; Richter, H, Open Science and Public Sector Information – Reconsidering the exemption for educational and research establishments under the Directive on reuse of public sector information, (2018), Journal of Intellectual Property, Information Technology and Electronic Commerce Law 9, p. 51 in reference to SEC(2011) 1152 final.

282 Arisi 2022, p. 38 in reference to SEC(2011) 1152 final, p. 27; Richter 2018, p. 51; Parliamentary Research Service, 'Briefing EU Legislation in Progress: Re-use of public sector information', July 2019, p. 8; see also Science Europe e.a., 'Joint Statement on the Revision of the PSI Directive', 12 November 2018.

As a research funder and given the Union's objective of strengthening its scientific and technological bases to achieve a European Research Area (ERA), the Commission had already set out recommendations on the access to and preservation of scientific information[283]. Member States were already asked to set up and implement clear policies in national action plans on publicly funded research data[284]. This expectation is now legally binding under Article 10 ODD. In short, the expectation is that by this inclusion, more data resulting from publicly funded research will become available for reuse. The normative argument that data should be available for everyone to reuse when they are publicly funded plays a role here[285].

### Scope and definition

Not surprisingly, no universal definition of 'research data' exists. Notions can differ per discipline and cover a variety of materials[286]. Article 2(9) ODD defines research data as: "documents in a digital form, other than scientific publications, which are collected or produced in the course of scientific research activities and are used as evidence in the research process, or are commonly accepted in the research community as necessary to validate research findings and results".

Note that the ODD explicitly makes clear that scientific publications (papers, articles, books, etc.) are not research data and, thus, in principle, excluded from its scope. What is meant more concretely by research data can be gleaned from the recitals. It includes "statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings and images. It also includes metadata, specifications and other digital objects", such as "supporting information"[287]. Educational materials and administrative data on the operational activities of universities and RPOs generally fall outside the scope of the ODD[288].

Article 10 ODD sets out two types of obligations: for Member States to have an open access policy for research data, which they have to address as RPOs and research funders[289], and a more direct obligation to be implemented, which obliges RPOs and research funders to allow reuse of data in repositories[290].

### Obligation to enact open access policy for research data

Figure 29, provided by Arisi, gives a structured overview of the obligation to enact open access for research data[291].

283 Commission Recommendation (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information.

284 Ibid, sub (3) 'management of research data, including open access'.

285 European Commission & Van Eechoud 2022, pp. 17-18.

286 N. Dietrich & A. Wiebe, 'Definition of Research Data', in: L. Guibault & A. Wiebe (eds), *Safe to be open: Study on the protection of research data and recommendations for access and usage* (Göttingen: Universitätsverlag Göttingen, 2013), p. 17; Paseri, L., The European Legal Approach to Open Science and Research Data, Defence held on 17/06/2022 in Bologna, Italy, available at https://orbilu.uni.lu/bitstream/10993/51952/1/PhD_ThesisLUX_PASERI.pdf, pp. 137-138.

287 Recital 27 ODD. Gobbato 2020, p. 152 in reference to Murray-Rust, Open data in science, Serials Review, 2008, 34(1), 52–64, doi:10.1016/j.serrev.2008.01.001.

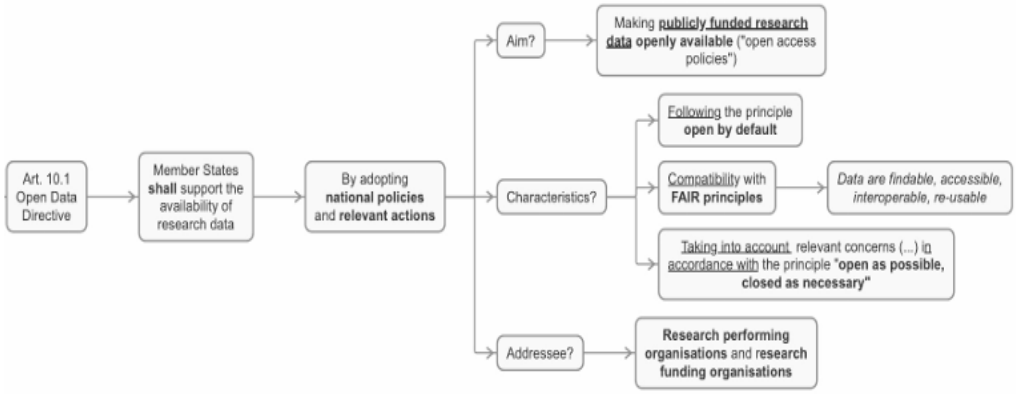
288 European Commission & Van Eechoud 2022, p. 18.

289 Article 10(1) ODD reads: "Member States shall support the availability of research data by adopting national policies and relevant actions aiming at making publicly funded research data openly available ('open access policies'), following the principle of 'open by default' and compatible with the FAIR principles. In that context, concerns relating to intellectual property rights, personal data protection and confidentiality, security and legitimate commercial interests, shall be taken into account in accordance with the principle of 'as open as possible, as closed as necessary'. Those open access policies shall be addressed to research performing organisations and research funding organisations."

290 Article 10(2) ODD reads: "Without prejudice to point (c) of Article 1(2), research data shall be re-usable for commercial or non-commercial purposes in accordance with Chapters III and IV, insofar as they are publicly funded and researchers, research performing organisations or research funding organisations have already made them publicly available through an institutional or subject-based repository. In that context, legitimate commercial interests, knowledge transfer activities and pre-existing intellectual property rights shall be taken into account."

291 Arisi M., 'Open Knowledge. Access and Re-Use of Research Data in the European Union Open Data Directive and the Implementation in Italy', The Italian Law Journal 2022(1) https://www.theitalianlawjournal.it/data/uploads/8-italj-1-2022/8-italj-1-2022-full-issue.pdf.

**Figure 29. Obligation to enact open access for research data**




*Source: Arisi 2022, p. 49.*

It is noteworthy that the addressees of national policies must be the bodies that conduct and fund scientific research, termed 'research performing organisations' and 'research funding organisations'. Individual researchers, research groups, and, for example, public-private consortia are not addressees. Additionally, considering that the ODD's focus is on public sector bodies (and to some extent public undertakings), only RPOs and RFOs that qualify as public sector bodies within the meaning of the Directive are within its scope. With respect to such public sector research organisations, the Directive excludes from its scope documents they hold other than research data. So, it does not create an obligation for, e.g. open access policies to include (journal) publications or for RPOs to allow the reuse of, e.g. administrative data. Member States are, however, free to enact broader policies[292].

The term 'open access' is traditionally used in connection with the publication of research outputs free of charge to the reader. The ODD, however, uses the term open access in relation to research data[293]. Of note, Recital 27 ODD sets out a particular strand of 'open access', namely publication of research outputs online, free and without any restrictions on use and reuse (beyond attribution of the source). This seems to refer to the practice of publishing under Creative Commons Public Domain Dedication (CC0, CC Zero), Creative Commons Attribution (CC-BY) or other "open content licences". It is the most liberal type of open access licensing, by which the author essentially relinquishes all control over intellectual property (but retains the claim to be identified as the author). This form of open access, as encouraged by the ODD, may raise concerns with regard to academic freedom and integrity (see Section 2.2.4 on recognition of scientific integrity, ethics and academic freedom as normative frameworks).

292 Recital 27 ODD.

293 Paseri 2022, p. 163. See further: Paseri 2022, section 3.1.2.

Member States must, under Article 10 ODD, take into account intellectual property rights, the protection of personal data, as well as "confidentiality, security and legitimate commercial interests"[294]. Presumably, this includes the interests of all stakeholders, from individual researchers to private sector partners in publicly funded research. With respect to intellectual property – especially as it is a fundamental right protected under the Charter of Fundamental Rights of the EU (CFREU) – the question is how open access policies accommodate these rights. Especially where policies set out duties to publish and prescribe the use of certain licences (as described above and further discussed in Section 2.2.4), intellectual property of researchers, RPOs, or third parties may be at play. Generally speaking, where scientific publications (articles, papers, books, etc.) will typically be subject to copyright, this is not so for research data. To what extent research data are subject to intellectual property rights must be assessed on a case-by-case basis: copyright protects software and collections of data if they meet the required work standard, while datasets can also attract *sui generis* database protection if certain conditions are met[295]. Trade secrets are protected under Member State laws on the basis of the EU Trade Secrets Directive[296], while the protection of other forms of commercial confidentiality may differ per country.

Under the ODD, the guiding principle in shaping national open access policy must be "as open as possible, as closed as necessary"[297]. Within those bounds, Member States have a fair amount of discretion in setting open access policies for data. Several scholars note that Member States retain considerable power over the actual, practical organisation of open science regarding research data[298].

The provision on research data also introduced the concept of "FAIR" data in the Directive. FAIR is an acronym routinely used in the field of scientific research to signal key attributes of research data management needed to be able to efficiently share data. These attributes or principles are that data must be Findable (discoverable, also by computers), Accessible (known how to access data, including authentication and authorisation), Interoperable (data can be integrated with other data, processes, and workflows) and Reusable (e.g. have good metadata)[299]. FAIR principles play a central role in the European (and global) research landscape and were developed outside of the debates around opening up public sector data for (commercial) reuse[300]. In the context of the ODD, it is important to note that FAIR is most relevant for the technical aspects of sharing (research) data. It does not directly concern the legal aspects (i.e. the use of open licences), nor does FAIR mean that data should be accessible to or reusable by anyone[301]. For instance, data can be FAIR and made accessible to a certain category of recipients with certain use restrictions attached.

294 Article 10(1) ODD.

295 See for a comprehensive analysis of access to and reuse of research data under EU copyright law: Kuschel L and Dolling J, 'Access to Research Data and EU Copyright Law' (2022) 13 JIPITEC https://www.jipitec.eu/issues/jipitec-13-3-2022/5558.

296 Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful *acqui*sition, use and disclosure.

297 Article 10(1) ODD.

298 See on the discretionary freedom: Gobbato 2020, p. 153; Guglielmetti, M., Dalla Corte, L., & van Loenen, B., '43. Open Data and Public Sector Information', in: Elgar Encyclopedia of Law and Data Science (ed. G. Comandé) 2022, p. 250; European Commission & Van Eechoud 2022, p. 19, Paseri 2022, p. 162.

299 Wilkinson et al. 2016.

300 See https://www.go-fair.org/fair-principles/

301 See for more detail on the distinctions Gobbato 2020; Paseri 2022, European Commission & Van Eechoud 2022; Van Eechoud 2023.

### Obligation to allow reuse of research data in repositories

The second part of the research data provision, Article 10(2) ODD[302], more directly affects RPOs and research funding organisations as well as researchers, albeit the Directive needs to be implemented in national law first. In short, Member States must ensure that research data, similar to other public sector information under the ODD, is reusable for both commercial and non-commercial purposes. Two requirements must be met. First, the research data must be publicly funded. Second, the research data must already have been made "publicly available through an institutional or subject-based repository". If the research data meets both of these requirements, it must be made reusable in accordance with the requirements laid down in Chapters III and IV of the ODD. As explained above, these chapters set out the key principles of how and under what terms and conditions data are made reusable. Of note, the provisions that set out norms for request and appeal procedures do not apply to research performing organisations and funders because of the administrative burden it would bring[303].

The question is whether research data are made publicly available in repositories and on what terms and conditions they are influenced by the obligation to take into account "legitimate commercial interests, knowledge transfer activities and pre-existing intellectual property rights". Although unlike Article 10(1) ODD, Article 10(2) does not specifically name security or data protection, any publication in repositories must be in conformity with the General Data Protection Regulation and other privacy laws. Complying with this increase of several rules in various frameworks on different topics, e.g. IP rights, commercial interests, and the protection of personal data, can be very challenging for research data, especially for individual researchers. This is further discussed in Section 2.2.4.

In this regard, it is interesting to note that the RPO survey showed that 89 respondents answered they expected legal uncertainty, e.g. unclarity whether the use of data are allowed and whether provisions apply to their organisation, to be one of the challenges of the ODD (55.3%)[304]. At the same time, 145 respondents (67.4%) expected the ODD to be beneficial for scientific research because of increased legal certainty about their rights and obligations[305]. This outcome signals that the ODD has clarified matters but also brought or perpetuated uncertainties.

302 Article 10(2) ODD reads: Without prejudice to point (c) of Article 1(2), research data shall be re-usable for commercial or non-commercial purposes in accordance with Chapters III and IV, insofar as they are publicly funded and researchers, research performing organisations or research funding organisations have already made them publicly available through an institutional or subject-based repository. In that context, legitimate commercial interests, knowledge transfer activities and pre-existing intellectual property rights shall be taken into account.

303 Article 4(6)(b) ODD.

304 Total n=161, question 70 RPO survey – data legislation part (Annex 5 – Synopsis report) (multiple answers possible). While the question has been posed to the 181 respondents who answered to expect challenges from the ODD to a moderate or larger extent in question 69, only 161 respondents answered the subsequent question on what specific aspects they deemed challenging (question 70). When referring to the corresponding 'total' N, we mean the group of respondents who have answered this question, not the total group of respondents to whom the question is posed, as not all of the questions have a 100% response rate. The same approach is adopted in the following text boxes on survey results. In case a question does not have a 100% response rate, the total number of respondents to whom the question in case is posed is provided in every corresponding footnote, as to ensure a picture as accurate as possible.

305 Total n=215, questions 67 and 68 RPO survey – data legislation part (Annex 5 – Synopsis report). Please note that while question 68 has been posed to 223 respondents, only 215 respondents answered.

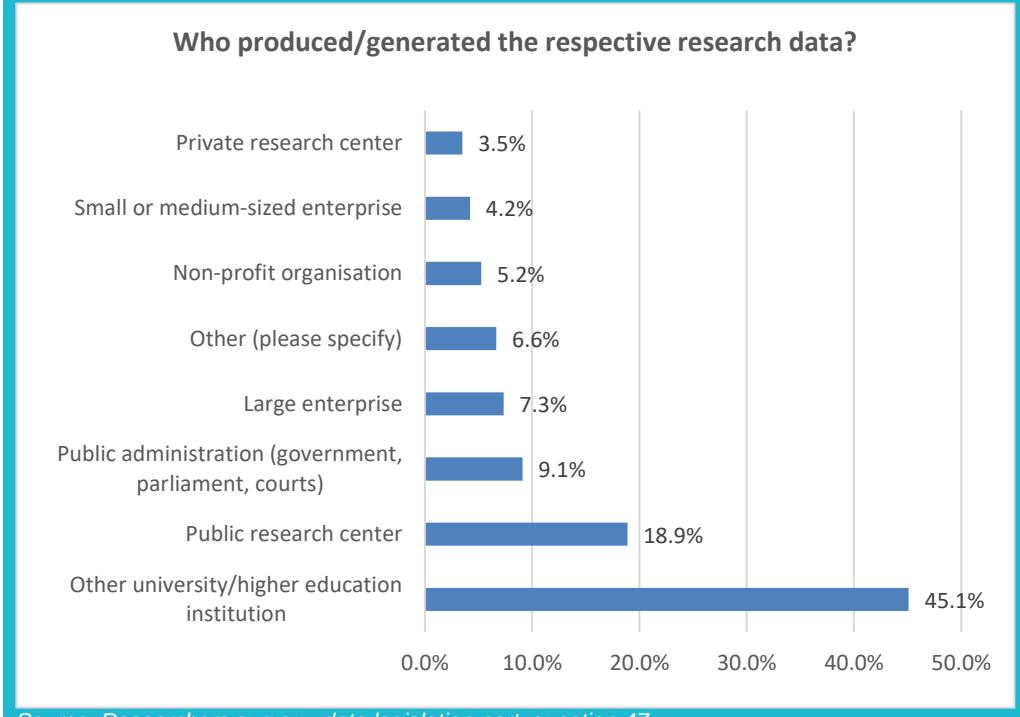
The requirement that **data must be publicly funded** does not specify when research data qualifies as such; it is unclear what level of public funding is 'enough' to include research data within the scope of Article 10(2) ODD[306]. Especially in situations where research is conducted in cooperation with the commercial sector or with civil society, it will have to be established if the research data generated is funded publicly. For example, where university researchers obtain data from an enterprise, as happens regularly, arguably, these data are not publicly funded, although when they are enriched as part of the research, they may become so. Even in that case, there may still be legitimate commercial interests or intellectual property claims that prevent the data from being made publicly available in a repository.

As the Researchers survey showed, 55.1% of the respondents used third-party data in the past year (290 out of 526)[307].

Almost two thirds of that group (64%, n=183) indicated that the third-party data came from other public research institutions[308]. This suggests data are shared predominantly within academia[309]. The data concerned are most likely publicly funded; the same applies to data from, e.g. public administration.

The use of data from the private sector is less frequent. Of the survey respondents who reported having used external data, 15% used data from enterprises or private research centres (n=43)[310]. Note that data from enterprises and private research centres may also be publicly funded.

**Figure 30. Produced/generated the research data**




*Source: Researchers survey - data legislation part, question 47.*

306 European Commission & Van Eechoud 2022, p. 20; Arisi 2022, p. 43; Klünker I, Richter H. Digital Sequence Information between Benefit-Sharing and Open Data. J Law Biosci. 2022 Nov 22;9(2):lsac035. doi: 10.1093/jlb/lsac035. PMID: 36425955; PMCID: PMC9682569, pp. 13-14. See also Recital 28 ODD.

307 Question 46 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

308 Question 47 Researchers' survey – data legislation part (Annex 5 – Synopsis report). Please note that while this question was asked to 290 respondents, only 286 respondents answered the subsequent question on who produced/generated the respective research data, the 64% therefore relates to n=286.

309 It should be noted however that it is not certain whether research data as referred to in Question 47 is fully aligned with the definition of research data as laid down in Article 2(9) Open Data Directive.

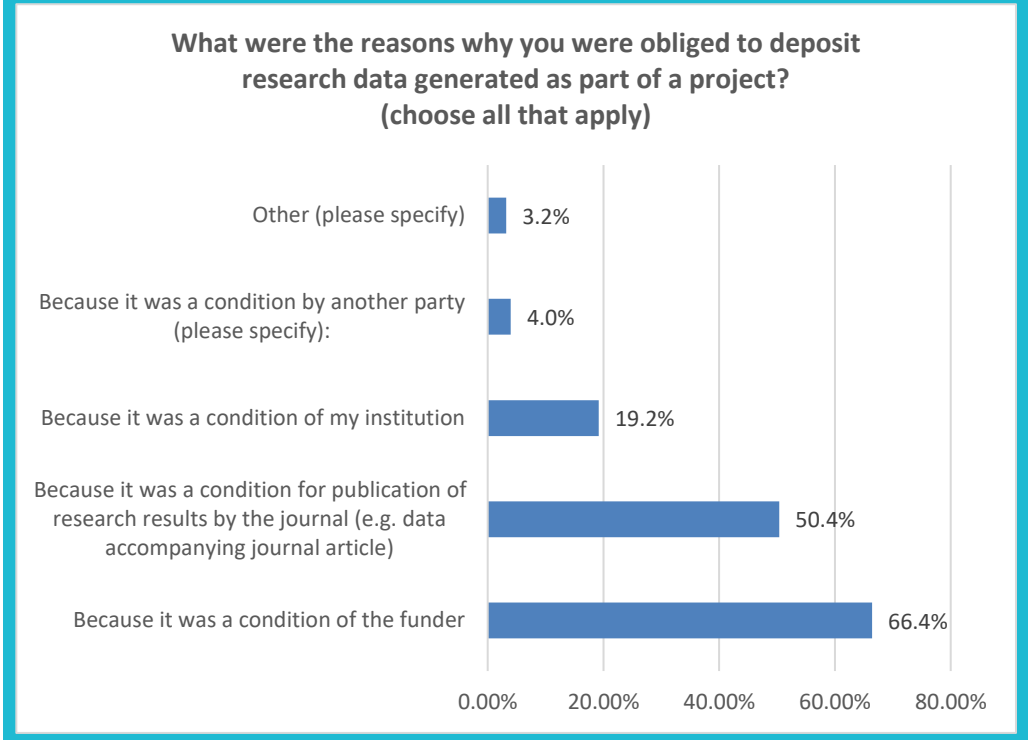
310 Question 47 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

The second requirement is that data be made publicly available in an institutional or subject-based repository, which makes it clear that, in principle, it is up to the researchers (and their institutions and funders) to decide what data become available for reuse. Of course, such decisions will be made in the wider context of the open access research policies that Member States must now develop, and researchers' obligations to publish data can come from their own institutions but also from funders or journals. That Article 10(2) itself does not contain an obligation to make publicly funded research data publicly accessible is in keeping with the overall approach of the Directive, which builds on Member States' access regimes.

252 researchers (47.2%) indicated they were obliged to deposit research data as part of a project in the past year (of the 534 answering the question)[311].

Funders have a major influence: 66.4%[312] of this group indicated that they were obliged by the funder to deposit research data (n=166)[313]. And 50.4% stated that it was a condition of the journal to deposit the research data (n=126)[314]. Only 19.2%[315] of the respondents indicated that the deposition of the research data were a condition of their (research) institution[316]. Note that the question to researchers was whether they were obliged to deposit data, not whether they were obliged to deposit data as publicly accessible.

**Figure 31. Obligation to deposit research data**




*Source: Researchers survey - data legislation part, question 53.*

As said, contrary to other public sector bodies, RPOs and RFOs do not have to have procedures in place that enable persons to make electronic requests for reuse that are not publicly available, nor are they bound by procedural requirements and time limits that Article 4 specifies[317]. This makes sense, as the core route through which the reuse of research data are facilitated is through existing repositories and future ones that may develop as a consequence of the rollout of open access research policies, whether as a result of the Directive's mandate or the broader development towards open science.

311 Question 52 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

312 Question 53 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

313 Please note that 252 respondents answered to have been obliged to deposit research data (question 52), but only 250 respondents answered the subsequent question as to why they were obliged to do so (question 53).

314 Ibid.

315 Ibid.

316 n = 48.

317 Article 4(6)(b) ODD.

Of note, Article 10(2) seems to set out a minimum of sorts as regards the repositories covered. Recital 28 ODD elaborates that Member States may extend the application of the ODD to "research data made publicly available through other data infrastructures than repositories, through open access publications, as an attached file to an article, a data paper or a paper in a data journal"[318].

*Charging for reuse*

As set out above, it is a general principle of the Directive that public sector information is reusable free of charge (e.g. no licensing fees) and that, at most, the actual cost of dissemination is charged. A number of institutions are exempted from the prohibition from charging more than such marginal costs and can charge up to full-cost based fees. This is true for public sector bodies, such as libraries, university libraries, museums, and archives (Article 6(2)-(5) ODD).

However, for research data, no costs may be charged; Article 6(6)(b) ODD explicitly states that the reuse of research data shall be free of charge for the re-user. The assumption probably is that reuse will only be allowed of research data that is made *publicly* available through institutional or thematic (subject-based) repositories under Article 10(2) ODD, i.e. made available to anyone (national or foreign citizens, companies, governments), and not in any way restricted, e.g. to vetted parties or other researchers. In case of such openness, it is likely that there is no compelling reason to charge fees, as the costs of making the data ready to share (ensuring compliance with FAIR, with data protection law, etc.) have already been borne. As will be explained below in the Section on barriers (Section 2.2.4), the provision on charging could have a chilling effect on the willingness of researchers to deposit data as public. There still may be significant costs involved when being required to make research data reusable, costs which will have to come out of research budgets unless specific additional investments are made[319].

### 2.2.2. Implementation in selected Member States

The ODD has been (or is about to be) implemented in all 27 Member States through a variety of regulatory instruments. With respect to research data in particular, Member States have considerable discretion to regulate access and reuse of research data, bearing in mind that the ODD does not regulate *access* itself, only *reuse*. Implementing acts and policies may be elaborated in regional or state-level laws, depending also on the distribution of legislative competencies in a Member State. In terms of domain, the research data provisions might be incorporated in legislation on higher education, legislated as part of generic reuse laws, or included in a stand-alone piece of legislation. Analysis of the implementing laws of the ODD confirms that it is a difficult field to navigate, with many dispersed provisions. More generally, there is only a modest body of accessible (legal) literature that deals with the legal aspects of its provisions, let alone with Article 10 ODD.

To undertake a full analysis of all Member States is beyond the scope of this study, but a selection has been made of three Member States with different models: Germany, Italy and the Netherlands. Based on an analysis of laws and secondary literature, a combination of selection factors was used, i.e. the type of implementation (national or regional), Member States' science governance model (including division of competencies for research policy and open science), geographic spread, and open data maturity as regards policy more generally on open data and on open science specifically.

318 See also: Gobbato 2020, p. 152.

319 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, pp. 60-62.

With respect to the Netherlands, due to its relatively small size and close cooperation at the institutional level of universities and research organisations nationally, it is a good model to show how practice can be ahead of (legislative) policy through a coordinated effort. Implementation of the ODD in the Netherlands is still underway, and an important reason for the delay is that the government's Council of State was very critical of how the initial legislative proposal dealt with research data. This delay does, however, not seem to have affected the commitment to opening up research data in practice, which has been driven to a substantial degree by national research funders[320]. The proposed Dutch implementation now combines new rules in the Act on the reuse of public sector information (*Wet hergebruik overheidsinformatie*) with references to the Higher Education Act.

Germany is of interest because responsibility for research and education policy, as well as for (access to) public sector information, is decentralised at the level of *Länder* (although, at the national level, implementation of the ODD is mainly done through the *Datennutzungsgesetz*). Additionally, the landscape of research organisations is very mixed, with large national research institutions existing side by side with (regional) universities. Despite the fact that there is no comprehensive national OS policy for research data[321], German institutions in the research and education field have had a leading role in promoting open science and the development of EOSC. It is, therefore, a good model to describe (the limits) of regulating open research data through generic EU instruments in a space with distributed responsibility and powers.

Italy is of interest because it scores (very) high on open data maturity in rankings (at the policy level generally) and is among the 'trendsetters' according to the 2022 open data maturity report and the 'fast-trackers' in the 2021 and 2023 open data maturity reports[322]. What is more, it has a national open science policy and (as part of the implementation of the ODD) authority for the Agenzia per l'Italia Digitale to set standards for open research data actively. To get a richer picture of the implementation of Article 10 ODD in Germany, Italy and the Netherlands, desk research was complemented with findings from various interviews with open science experts (see also Section 1.1.1 of Chapter 1).

The analysis per Member State starts with a brief description of the implementation of the ODD. For context, the landscape of open science policy and practice is sketched, with a focus on research data (see also Section 1.1.3 of Annex I for a broader overview of open science policies in Member States).

320 Similarly, the EUA 2022 report notes that "National Open Science strategies are trying to encourage the uptake of research data practices and national funders are increasingly mandating FAIR data management as a boundary condition for funding. National support should therefore be provided in order to ensure universities have the necessary tools and skills to comply with such national-driven ambitions. Yet, Europe is still home to significant national differences in terms of the availability of ad hoc national funding streams to advance research data practices and infrastructure and, even when these do exist, not all universities appear to be aware or benefit from them.", F. Garbuglia and others, A closer look at research data practices in European universities. Follow-up to the 2020-21 EUA Open Science survey, (European University Association 2022), p. 21.

321 'Open Access in Deutschland, Die Strategie des Bundesministeriums für Bildung und Forschung', 2018 sets out the Ministery of Education and Research strategy for open access to publications.

322 Publications Office of the European Union, Hesteren, D., Knippenberg, L., Weyzen, R. et al., Open data maturity report 2021, Publications Office of the European Union, 2021, https://data.europa.eu/doi/10.2830/394148; Publications Office of the European Union, Assen, M., Cecconi, G., Carsaniga, G. et al., Open data maturity report 2022, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2830/70973; Publications Office of the European Union, Page, M., Hajduk, E., Lincklaen Arriëns, E. et al., Open data maturity report 2023, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2830/384422.

*Germany*

In research and education, the legislative landscape of Germany is marked strongly by its federal character with two main levels of governance: the *Länder* (federal states) and the central (federal) government (*Bund*). As was indicated above, competence to regulate access to public sector data rests with the states (for state-level data holders, regulated inter alia in regional freedom of information laws, *Informationsfreiheitsgesetze*), and education and research policy is mainly a matter for states as well[323]. However, the German national government articulated an open data strategy for the public sector more broadly. Various legal instruments are relevant here, notably the *E-Government-Gesetz* (EGovG), which sets out obligations for public sector bodies at the national level to make data publicly available as open data.

**Implementation**

In Germany, the ODD has been transposed into national law by the *Datennutzungsgesetz* (DNG). It builds on but also replaces an earlier federal act that implemented the Public Sector Information Directive (*Informationsweiterverwendungsgesetz* 2006)[324]. The DNG applies not just to federal public sector bodies as data holders but also to data holders at state and communal levels. Broadly speaking, the text of the DNG is true to the ODD text, for example, as regards the definition of research data (§3 (10) DNG). The Act specifies that it applies where data are publicly accessible under freedom of information type laws, where data are made publicly available by public sector bodies as part of their remit, and where data are otherwise made available for reuse.

The DNG uses the general term of the data provider ('*datenbereitsteller*') for public sector bodies within its scope, which includes public universities and other higher education institutions, research institutions, research funding organisations and researchers[325]. Whereas the ODD only speaks of research performing organisations and research funding organisations (without defining those) in Article 10, the DNG seems to have widened the scope of the research actors involved (by including universities). By contrast, under Article 10 ODD, RPOs and RFOs are the (indirect) main addressees national policies (Article 10(1) ODD), and also the parties responsible for making publicly funded and publicly available research data reusable (Article 10(2)).

The DNG provides in §10(3) that the reuse of research data shall be free of charge (as does the Directive). For public sector bodies generally, the implementing act sets out rules saying that the cost of making available data and the cost incurred to make data release compliant with data protection law or safeguard of commercial confidentiality can be recouped (§10(1) DNG). In keeping with the charging principles of the ODD, university libraries are also allowed to charge fees for the use of data itself (§10(2) DNG). It is not entirely clear whether those libraries are then not allowed to charge fees for the reuse of *research* data, as requesting reimbursement for marginal costs under §10(1) for research data are, in turn, not allowed (§10(3) DNG). This is relevant because libraries are increasingly becoming involved in research data management.

323 See also: Chapter 2, section 2.2 of the main report (copyright description of open science landscape).

324 Gesetz für die Nutzung von Daten des öffentlichen Sektors (Datennutzungsgesetz - DNG), 16 July 2021.

325 §2 Anwendungsbereich (3)(a)-(b) Datennutzungsgesetz.

Of note, the DNG is silent on open access policies for research data and on the obligation to allow the reuse of data in repositories. Possibly, this has to do with the ongoing development of a national research act or '*Forschungsdatengesetz'* (FDG). The plan for the FDG has its roots in the German government's coalition agreement for 2021-2025. The improvement and simplification of access to research data for both public and private research is among its stated ambitions[326]. Discussion on the scope of such an act is ongoing, but no official proposal has been published[327]. Possibly, the fact that plans are slow to materialise is due to their ambitious nature and the complexity of harmonising access to data for research purposes, e.g. as regards competency questions in German[328]. Whatever its outcome, the DFG is expected to have a serious impact on research in Germany and alignment with the generic reuse framework resulting from the ODD is needed.

When German RPOs were asked about the extent to which they expect the ODD to affect research in the next few years, 94.1% (32 out of the 34) wrote that they expect an impact to a moderate, large or very large extent[329]. Of that group, the majority (61.8%) noted to expect a 'large' impact (21 out of the 34).

### Practice

The interviews provided a general overview of how responsibilities in the field of research and open science are distributed in Germany. Responsibility for open science policy rests with the federal (central) government (the *Bundesministerium für Bildung und Forschung* (BMBF)) and the states (*Länder*). In the German higher education system, the Länder are responsible for providing education and research (each having ministries for this), and the federal government has a more limited role. In the area of research, it funds programmes and facilities. Universities and research funders also have open access policies. Because of the size of the country and the division of competences, the German landscape is complicated. There is coordination among universities through the German Rectors' Conference, and states cooperate as well. It is through funding conditions that the German national research funders seem to have taken on a central role in promoting the sharing of research data.

More than half (44 out of 75) of the German researchers who responded to the question about data deposits answered they had been obliged to deposit research data in the past year (58.7%)[330]. When asked who obliged them (multiple answers possible), the funder was the most often mentioned (41.9%)[331], followed by the journal of publication (37.1%)[332]. This suggests that in Germany, funders are the most important driver of data deposits; this was confirmed by interviews.

326 Bundesministerium für Bildung und Forschung, Öffentliche Konsultation zum Forschungsdatengesetz, 10 March 2023 (Berlin) https://www.bmbf.de/SharedDocs/Downloads/de/2023/230306-forschungsdatengesetz-Einladungsschreiben.pdf?__blob=publicationFile&v=1.

327 E.g., RatSWD, Positionspapier des RatSWD: Eckpunkte für ein Forschungsdatengesetz, 14 June 2022 (https://www.konsortswd.de/wp-content/uploads/RatSWD-Positionspapier-Eckpunkte-fuer-ein-Forschungsdatengesetz.pdf); DFG, Science and the humanities need legislation on research data! Positioning of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), 11 April 2023 (https://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/forschungsdaten/stellungnahme_forschungsdatengesetz_en.pdf); NFDI, Stellungnahme zur öffentlichen Konsultation zum Forschungsdatengesetz, May 2023 (https://www.nfdi.de/wp-content/uploads/2023/05/NFDI-Stellungnahme-zum-Forschungsdatengesetz.pdf).

328 This has also been suggested in an interview.

329 Question 66 RPO survey. File with answers from only German RPOs on record with team.

330 Question 52 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

331 n = 26. Question 53 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

332 n = 23. Question 53 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

Of special interest is the main federal research funder in Germany, the *Deutsche Forschungsgemeinschaft* (DFG). As part of its research data policy, it has developed 'Guidelines for Safeguarding Good Research Practice' and checklists on the handling of research data (in several disciplines)[333]. The code of conduct entered into force on 1 August 2019 and must be implemented by universities in a legally binding manner. Compliance with the DFG code is a prerequisite for receiving funding[334]. Of particular interest is guideline 13 of the code on the provision of public access to research results. It states that, as a rule, "researchers make all results available as part of scientific/academic discourse". But it also states that "in specific cases, however, there may be reasons not to make results publicly available", but this decision should "not depend on third parties" and that these decisions should be taken by researchers autonomously. This is in keeping with the strong tradition in German universities to uphold the academic freedom of individual researchers, which is guaranteed as a fundamental rights in the German *Grundgesetz*.

If researchers do decide to make results publicly available, the Code prescribes that whenever possible and reasonable, the underlying research data must be published, too. The explanation to this guideline states that the availability of research data in accordance with the FAIR principles is "in the interest of transparency and to enable researchers to be referred to and reused by others". Arguably, the Code of Conduct is an important means to meet the ODD's requirement that Member States develop policies that ensure RFOs and RPOs further open access to research data. It is not a comprehensive policy that by itself meets the requirement of Article 10(1) ODD.

The federal government has expressed its commitment to open science in various documents[335]. For example, the BMBF's general Open Data Strategy of July 2021[336] addresses research data. FAIR principles must be taken into account when setting up research data infrastructures. The strategy seems to favour a discipline-specific approach. It notes that specific infrastructures for the collection, storage, processing and analysis of research data are required and that metadata tailored to the particular research disciplines is needed[337]. Prior to this, the BMBF also issued its Research Data Action Plan[338]. This Plan set out three main goals:

333 https://www.dfg.de/en/research_funding/principles_dfg_funding/research_data/archiv/index.html; https://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/forschungsdaten/forschungsdaten_checkliste_en.pdf. See also: SPARC Europe, An Analysis of Open Science Policies in Europe, v7, (April 2021), p. 36; Deutsche Forschungsgemeinschaft e.V., Guidelines for Safeguarding Good Research Practice. Code of Conduct (April 2022 – revised version).

334 Deutsche Forschungsgemeinschaft e.V., Guidelines for Safeguarding Good Research Practice. Code of Conduct (April 2022 – revised version), pp. 24-25.

335 See also: copyright part, Chapter 3.

336 Bundesministerium des Innern, für Bau und Heimat, Open-Data-Strategie der Bundesregierung (7 July 2021).

337 Ibid, p. 8.

338 Bundesministerium für Bildung und Forschung, BMBF-Aktionsplan Forschungsdaten. Impulse für eine Kultur der Datenbereistellung und Weiterverendung in Bildung, Wissenschaft und Forschung, 5 October 2020.

1. Data sovereignty/data infrastructures;

One of the means to strengthen data sovereignty and data infrastructures was to establish the National Research Data Infrastructure (NFDI), which is a substantial investment in building and connecting research data infrastructures across disciplines (further discussed below). The plan points out the importance of making research and research databases that, up until then, were often decentralised, project-based and temporarily accessible to the entire German science system[339]. It also notes that the BMBF aims to improve data quality by applying the FAIR principles with greater care, e.g. by imposing certain research data management requirements as a condition for funding[340]. Importantly, the BMBF recognises that funding needed for research data management is part of the research, which is why necessary expenses in this regard are eligible to be funded. In this regard, it also mentions how smaller institutions, e.g. universities of applied sciences, particularly face major challenges due to RDM requirements, while the necessary supporting services are often lacking. Therefore, the BMBF indicates setting up a support system for smaller universities for RDM.

2. Data-based innovations;

This Section of the plan mainly sets out different ways in which the BMBF foresees possibilities for collaborations between research and innovation, e.g. through the exchange of data. It also indicates exploring obstacles faced by researchers regarding access to data, including identifying possible options to facilitate such data sharing[341].

3. Data competences.

The BMBF stresses the importance of digital expertise in science and research, which researchers could combine with their disciplinary expertise. One of its plans in this regard is to launch an information campaign on data sharing for students and PhD candidates[342].

339 Ibid, pp. 1-2.

340 Ibid p. 2.

341 Ibid, p. 4.

342 Ibid, p. 4-5.

Another interesting actor in the field of research data in Germany is the *Nationale Forschungsdateninfrastruktur* (National Research Data Infrastructure (NFDI)). In 2016, the *Rat für Informations Infrastrukturen* (RfII) recommended establishing it[343], and, as discussed above, it was set up by the German federal and state governments in 2020[344]. The goal of the NFDI is to roll out research data infrastructures so that data can be stored and curated and become more available for use in research communities and beyond. The NFDI comprises different consortia for various scientific disciplines (e.g. humanities, life sciences, natural sciences), but it also has Sections dealing with cross-cutting issues[345]. One of those Sections (ELSA) focuses on ethical, legal and social aspects[346] that arise in the different consortia gathered. It is also tasked with consulting on legislative proposals of importance for research data infrastructures and with issuing practical solutions and guidelines on topics within the legal, ethical and social spheres[347]. Of special interest to the implementation of the ODD is the work NFDI has been doing on the FAIR principles and FAIR data spaces, which also includes analysis of the European legal framework related to (research) data[348].

Large national (umbrella) organisations for research, such as the Max Planck Gesellschaft (MPG), play a major role in articulating and promoting open science policies. The MPG initiated with others the annual Berlin Open Access Declaration (2003)[349] and the annual global open access conference, which focuses, however, mostly on open access to publications. MPG also runs a research data repository for Max Planck researchers (called Edmond)[350].

Lastly, Germany has started to create a National Data Institute[351], which does not seem to be directly linked to the ODD (or the DGA). The Budget Committee of the *Bundestag* has approved EUR 10 million for the establishment of the Data Institute for 2023. In addition, a further EUR 10 million are available for each of the years 2024 and 2025[352]. The guiding principle of the Data Institute is to make data in Germany more available and usable for society as a whole within the existing legal framework. The Data Institute will bundle know-how and provide targeted assistance – especially in intersectoral exchanges of data. The Data Institute is intended to be a central point of contact for actors from business, science, government/administration, politics and civil society, which bundles interdisciplinary expertise, provides practical methodological competence and develops and provides solutions to challenges in the use of data[353].

The German research sector actively engages in discussions about the National Data Institute. With regard to existing research data centres and data integration centres, the German Council for Scientific Information Infrastructures (in German: RfII) has warned that there should be no institutional duplication of structures that would complicate the process of data sharing[354].

343 Rat für Informations Infrastrukturen, ENHANCING RESEARCH DATA MANAGEMENT: PERFORMANCE THROUGH DIVERSITY Recommendations regarding structures, processes, and financing for research data management in Germany (3 May 2016) https://rfii.de/download/rfii-recommendations-2016-performance-through-diversity/

344 https://rfii.de/en/topics/

345 https://www.nfdi.de/sections/?lang=en

346 https://www.nfdi.de/section-elsa/?lang=en

347 See e.g., NFDI's comments on the FDG (https://www.nfdi.de/wp-content/uploads/2023/05/NFDI-Stellungnahme-zum-Forschungsdatengesetz.pdf), the position paper on the Daten-Governance-Gesetz (implementing the DGA) (https://www.nfdi.de/wp-content/uploads/2023/05/ELSA-Stellungnahme-DGG.pdf).

348 https://www.nfdi.de/fair-data-spaces/?lang=en

349 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) <https://openaccess.mpg.de/67605/berlin_declaration_engl.pdf>/.

350 https://edmond.mpg.de/

351 https://www.bmi.bund.de/SharedDocs/pressemitteilungen/DE/2023/05/dateninstitut.html

352 Ibid.

353 https://www.bmi.bund.de/SharedDocs/downloads/DE/veroeffentlichungen/themen/it-digitalpolitik/dateninstitut/konzeptpapier_dateninstitut.pdf?__blob=publicationFile&v=6

354 https://rfii.de/download/rfii-stellungnahme-zum-daten-governance-rechtsakt-mai-2022/

To sum up, in Germany, open access to research data is also developing at pace, although the legal framework supporting it is not yet fully in place. Also noteworthy is the large role played by research funders in promoting open science. They also engage with legal issues but, at the same time, seem little influenced by the ODD's provisions on research data. A case in point is the recent position paper by DFG on the need for legislation on research data[355]. It highlights the lack of systematic rights to access data held outside RPOs for research purposes, signalling a lack of reciprocity: publicly funded research data are made available for (commercial) reuse, but researchers lack access to important data from other sectors.

*Netherlands*

The wider ambition of open science has been on the national agenda in the Netherlands for over a decade, and there are several initiatives to make research data more accessible and reusable. However, on the legislative side, progress has been slow; the Dutch implementation of the ODD has not been finalised at the moment of writing.

**Implementation**

The Netherlands started the implementation process late. In December 2021, the government launched a public consultation on an amendment to the Dutch act on the reuse of public sector information (*Wet hergebruik overheidsinformatie*, WHO)[356], which is the main piece of legislation to implement the 2013 Public Sector Information Directive (the ODD's predecessor). The original proposal was officially submitted to the Advisory Division of the Council of State (*Afdeling Advisering Raad van State,* hereinafter: the Council*)* on 25 July 2022[357]*.* The Council voiced substantial criticism, especially regarding the impact of the research data provisions on academic researchers[358]. The government reconsidered and ultimately presented an altered bill to parliament in mid-2023[359], which was still pending as of January 2024.

355 DFG, Science and the humanities need legislation on research data! Positioning of the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), 11 April 2023 https://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/forschungsdaten/stellungnahme_forschungsdatengesetz_en.pdf

356 Wet hergebruik overheidsinformatie; https://wetgevingskalender.overheid.nl/Regeling/WGK009986 (in Dutch).

357 Link to original proposal: https://wetgevingskalender.overheid.nl/regeling/WGK009986/documenten/Raad%20van%20State/Adviesaanvraag%20aanhangig%20bij%20Raad%20van%20State/1 (16 August 2022); Parliamentary Papers II 2022/23, 36 382, nr. 4, reference: W04.22.0141/I (Advise by the Advisory Division of the Council of State).

358 Parliamentary Papers II 2022/23, 36 382, nr. 4, reference: W04.22.0141/I (Advise by the Advisory Division of the Council of State).

359 Proposed bill of 15 June 2023, Parliamentary Papers II 2022/23, 36 382, no. 2 (Wijziging van de Wet hergebruik van overheidsinformatie en enkele andere wetten in verband met de implementatie van richtlijn nr. 2019/1024/EU van het Europees Parlement en de Raad van 20 juni 2019 inzake open data en het hergebruik van overheidsinformatie (Wet implementatie Open data richtlijn)); https://wetgevingskalender.overheid.nl/Regeling/WGK009986 (in Dutch).

The original Dutch proposal to implement the ODD of 16 August 2022 contained a provision which stated that, in addition to Article 5c, special rules might be laid down pursuant to a decree (*Algemene Maatregel van Bestuur*) with the aim of increasing availability of publicly funded research data. Such orders would specify when, how, and under what conditions research data must be (a) made publicly available or (b) offered for reuse[360]. When setting out such rules, the principles, rights and interests as listed in Article 10(1) ODD should be taken into account[361]. The accompanying explanatory memorandum explained these delegated acts would serve open access policies; it would be for the Minister of Education, Culture and Science to take the initiative[362].

The Council criticised the proposal for going beyond what the ODD requires: Article 10 does not impose any obligation to make data publicly available. What is more, it should not be for the Minister to mandate which research data must be published; this should, in principle, be the prerogative of researchers and research institutions. The government failed to properly justify why it should be able to impose an obligation to publish[363]. The Council noted that researchers' fundamental rights to intellectual property would be affected. Further, the proposal could deter (private sector) funders, and it was not clear whether the higher education & research sector was adequately consulted in the drafting stages[364]. The Council advised removing the provisions on research data and regulating its reuse in a separate instrument[365]. The government removed the provision on the delegated acts, arguing it was never intended as a vehicle for mandating RPOs and RFOs to make data available anyway but merely as a legal basis for the formulation of an open science policy for research data[366].

The pending proposal contains a specific provision dedicated to research data[367]. It stays very close to the text of Article 10 and the definitions of the ODD. The definition of research data is included in Article 1 WHO (sub "*onderzoeksgegevens*") and is (apart from a few minor changes) copied from Article 2(9) ODD. A new Article 5b is substantially similar to Article 10(2) ODD but also creates more straightforward obligations for RPOs to make research data 'actively' available for reuse in accordance with the FAIR principles[368]. The provision enumerates that this obligation only applies to research data that are produced in the context of research activities that are wholly or partially publicly funded and that are also made publicly available in an institutional or thematic repository as meant in the ODD. The explanatory memorandum accompanying the pending proposal explains that the amount of public funding is determinative for the label 'publicly funded', and can be decided on an institution-by-institution basis, for which the advanced reason is that there are large differences in in the legal nature of the research institutions[369].

360 Article 5a(5)(a)-(b) original proposal Dutch implementation act ODD (16 August 2022).

361 Article 5a(6) original proposal Dutch implementation act ODD (16 August 2022).

362 Explanatory Memorandum of original proposal ('Ontwerp-MvT) (16 August 2022), p. 10.

363 Parliamentary Papers II 2022/23, 36 382, nr. 4, reference: W04.22.0141/I (Advise by the Advisory Division of the Council of State), p. 2.

364 Ibid, pp. 2-3.

364 Ibid, p. 2.

365 Ibid, p. 3.

366 Ibid, p. 10.

367 Proposed bill of 15 June 2023, Parliamentary Papers II 2022/23, 36 382, nr. 2 (Official proposal).

368 Article 5b, first paragraph Dutch implementation proposal. The original (full) text of the provision is: "Onderzoeksgegevens worden door een publiek gefinancierde onderzoeksorganisatie in overeenstemming met de FAIR-beginselen actief beschikbaar gesteld voor hergebruik, voor zover: a. die documenten zijn geproduceerd in het kader van geheel of gedeeltelijk met overheidsmiddelen gefinancierde wetenschappelijke onderzoeksactiviteiten; b. die documenten openbaar zijn gemaakt via een institutionele of thematische databank als bedoeld in artikel 10, tweede lid, van de richtlijn; en Tweede Kamer, vergaderjaar 2022–2023, 36 382, nr. 26c. rechtmatige handelsbelangen, activiteiten inzake kennisoverdracht en reeds bestaande intellectuele eigendomsrechten zich hiertegen niet verzetten."

369 Proposed bill of 15 June 2023, Parliamentary Papers II 2022/23, 36 382, no. 3 – Memorie van Toelichting (Wijziging van de Wet hergebruik van overheidsinformatie en enkele andere wetten in verband met de implementatie van richtlijn nr. 2019/1024/EU van het Europees Parlement en de Raad van 20 juni 2019 inzake open data en het hergebruik van overheidsinformatie (Wet implementatie Open data richtlijn)) (Explanatory Memorandum), p. 13.

The official proposal contains an article stating that the provision ('*beschikbaarstelling*') of publicly funded research data shall be made free of charge[370]. The explanatory memorandum notes that it is possible that public availability of research data can sometimes be part of funding requirements, which means researchers would be required to make those research data also reusable. In those cases, it notes that the funding should cover the costs of making the research data both available and reusable[371].

## Practice

Open science policy has been in development for quite some years. For example, in 2013, the Minister for Education called for robust open science policies to be developed across disciplines and organisations, and in 2016, the Netherlands launched the 'Amsterdam call to open science' as part of its EU presidency. Initially, attention focused on open access to publications. A significant national milestone was the 2017 National Plan Open Science (NPOS), drafted at the request of the Dutch Ministry of Education and Science by stakeholders; one of its key points was the promotion of optimal use and reuse of research data[372]. Better research data management standards and practices aimed at proper storage and descriptions were seen as important preconditions. Discipline-specific approaches were deemed to be most effective to tackle this[373]. The NPOS set some goals as regards the reusability of research data, e.g. the "practical execution and implementation of FAIR criteria", taking into account, e.g. the need to select standards for interoperability, guidelines on protection of personal data and ownership rights, and documentation for verification[374]. The NPOS also underlined that keeping research data permanently available (for access) is costly and perhaps not always necessary or efficient. Rather than storing data permanently by default, the stakeholders favoured a practice of critically assessing at the start of research projects which data should be preserved for how long. This would limit the total volume of data to be curated and keep costs under control[375]. Additional data repositories might be needed to enable the reuse of research data, with tools enabling search and linked data[376].

By 2020, most research institutions had data management policies, and research funders required data management plans[377]. A report analysing the Dutch data landscape concluded it was rich but fragmented and difficult to navigate for researchers[378]. Strengths identified included the Dutch position on open science and FAIR data, the large number of data repositories, and the cooperative culture central among Dutch research and science organisations[379]. Shortcomings included incomplete implementation of policies and continued storage of data locally instead of in repositories, which were FAIR compliant[380]. The lack of resources needed for (costly) research data management practices, both in terms of funding and expertise, was seen as a problem. Project-based funding also hinders necessary long-term investments in data management[381]. With respect to legal aspects, researchers are generally unaware of the applicable legislation or rules and unsure how to handle personal data and commercially sensitive data.

370 Article 9c Proposed bill of 15 June 2023.

371 Explanatory Memorandum Proposed bill of 15 June 2023, p. 33.

372 van Wezenbeek, W., Touwen, H., Versteeg, A., & van Wesenbeeck, A. (2017). Nationaal plan open science. Ministerie van Onderwijs, Cultuur en Wetenschap. https://doi.org/10.4233/uuid:9e9fa82e-06c14d0d-9e20-5620259a6c65

373 Ibid. This has been confirmed in the interviews and is further discussed in sections 2.3 and 2.4.

374 Ibid.

375 Ibid, p. 24.

376 Ibid.

377 Ibid.

378 Melle de Vries, Ruben Kok, Maurice Bouwhuis and Pieter Schipper, 'NPOS (2020) Eindrapport Verkenning en optimalisering nationaal datalandschap', Nationaal Programma Open Science (2020).

379 Ibid, p. 60.

380 Ibid, pp. 59-60.

381 Ibid, p. 60.

The 2020 NPOS report is a case in point of the difficulty faced by research organisations to stay on top of relevant legislation, as it is silent on the 2019 ODD inclusion of research data (no implementing measures had been proposed at the time)[382].The report did note that stringent legislation on, e.g. copyright and privacy, may discourage researchers from sharing and allow for the reuse (of) research data[383].

Meanwhile, universities and other research performing organisations and funders favoured an even more bottom-up coordinated approach[384]. A national governing body on open science (the so-called Regieorgaan Open Science NL) was set up, and was tasked with stimulating and accelerating the transition to open science[385]. It receives around EUR 20 million annually for pilot projects through the National Research Council (NWO); RPOs and RFOs fund an estimated EUR 400 million annually in open science. An 'Ambition document' accompanied by a strategic agenda was drafted[386]. The strategic goal for research data and outputs is that "in 2030, products of and for knowledge creation, like data and software, are findable, accessible, interoperable, and reusable (FAIR), and open in as far regulations allow".

To sum up, there is a broadly supported national effort to make research data accessible and reusable. Of note, these developments are not so much driven by the legal framework but by the open science policies that have been articulated and put into action by actors in the field. The Dutch research landscape is fairly straightforward in that there are only a limited number of university (public) funders and that there is a history of cooperation and institutional arrangements.

Reasons for Dutch researchers to open up their data and make their data reusable differ, although here, too, obligations based on legislation such as the ODD are not the driver. As the survey and an interview suggest, researchers choose to share the data, e.g. to boost the visibility of their work or are obliged or incentivised by funders or their research institution to deposit data. It seems researchers prefer thematic data repositories closely linked to the researchers' own research discipline above generic ones[387]. The fact that these developments take place apart from and ahead of legislative processes and the current obligations under Article 10 ODD is, of course, not problematic. However, the lack of knowledge of the ODD and its impacts in the field does pose the risk that data reuse practices are not always compliant and that institutional arrangements do not sufficiently take into account the legislative framework. Another risk is that legal uncertainties arising under the framework, such as regarding the impacts of making available research data in repositories, will produce a chilling effect.

### *Italy*

Italy has transposed the ODD into national law and has a national open science policy that covers research data. There does seem to be, however, a disconnect between law and policy on the one hand and practice on the other. The practice seems much less mature.

382 The report discusses the General Data Protection Regulation, Dutch copyright and database protection law and also refers to the Dutch Higher Education Act).

383 Ibid, p. 61.

384 Letter from the Minister of Education, Culture and Science to the Speaker of the House of Representatives, 29 March 2023, 31. 288, nr. 1027, p. 6 and as confirmed in one of the interviews.

385 Convenant regieorgaan Open Science, Den Haag, September 2023; (https://www.openscience.nl/sites/open_science/files/media-files/Convenant%20regieorgaan%20Open%20Science.pdf)

386 Open Science 2030 in the Netherlands. NPOS2030 Ambition Document and Rolling Agenda, version 1 (7 December 2022). http://10.5281/zenodo.7433767

387 Such domain-specific data repositories can facilitate easier and tailored search inquiries for instance related to the specific research discipline.

## Implementation

The ODD is implemented primarily in *decreto legislativo* no 200/2021 (8 November 2021), which amended (as far as research data are concerned) *decreto legislativo no. 36/2006*[388]. With respect to public sector data generally, the 2021 *decreto* implements the ODD's provision on mandating reuse, provides guidance on making available data in machine-readable format, etc. The Digital Administration Code also lays down rules for electronic communication by the public sector. As far as research data are concerned, the *decreto* says relatively little.

The definition of research data no. 36/2006, mirrors the ODD's definition of research data (Article 2(1)(c-septies)[389]. The transposition of Article 10 ODD specifically can be found in the newly added Article 9-bis of DL 36/2006, which consists of three paragraphs. In short, the first paragraph states that research data shall be reusable for commercial and non-commercial purposes, taking into account the protection of personal data, commercial interests, IP rights and industrial property rights. The second paragraph states that research data shall be reusable if they are publicly available and, provided that the research data are made publicly available in a public database or through an institutional or thematic database. These requirements go beyond those of the ODD. Whereas the ODD regards research data as 'public' and thus subject to reuse obligations where they have been made available through either an institutional or a subject-based repository, the Italian transposition seems to extend the scope of reuse by adding 'public databases'[390].

The third paragraph of Article 9-bis states that research data shall comply with the FAIR principles. Here, too, it seems as if the Italian legislator went beyond what is required, as Article 10(2) itself does not require that all data in repositories be FAIR; rather, a Member State must promote FAIR in its open access policies on the basis of Article 10(1) ODD[391].

With respect to charging, Article 7(9-bis)(b) of the *decreto legislativo* no. 36/2006 states that reuse of research data shall always be free of charge[392]. This is in line with the provision in the ODD stating that the reuse of research data is free of charge for the user.

Of note, Article 9-bis is silent on the national access policies that the ODD prescribes the Member States to implement. This obligation must, therefore, be met through other instruments or fora[393]. As described earlier in Germany, the main implementing act for the ODD is silent on the open access policy.

As is the case with the German and Dutch transposition, the Italian transposition does not clarify what must be understood as 'publicly funded' research data. Some have proposed using the same standard as that used in an act that promotes open access to scientific publications, i.e. setting the bar at 50% or more public funding[394].

388 Arisi 2022; Caso 2022.

389 Arisi 2022, p. 66.

390 Arisi 2022, p. 68.

391 Ibid.

392 Arisi 2022, p. 66.

393 See Caso 2022, p. 818.

394 Arisi 2022, p. 68.

## Practice

Although Italy scores high on open data indicators[395] and the Open Science Monitor, compared with countries like Germany, actual research data practices lag behind. Reasons advanced for this are that only a few institutions have policies on research data management, the status of open science is not monitored (at the local or national level), and universities and public research centres lack institutional coordination structures, both internally (interdepartmentally) and externally[396]. It is also observed that even where policies and obligations exist, such as with respect to publishing outputs of publicly funded research as open access, these are not adhered to in practice[397].

The perceived need for a national policy on research (data) and open science has been (partly) fulfilled by the introduction of the National Plan on Open Science, which was announced in the National Research Programme 2021-2027[398]. The plan focuses on five 'axes of intervention', of which research data are one. The plans of intervention in this regard relate to the FAIRification of the Italian research system, integration in EOSC, collaborative data production processes, and training of technical staff[399]. It also states that it is the Ministry of Universities and Research's responsibility to implement Article 10 ODD and to support FAIR certification processes and FAIR investments[400]. However, awareness among universities and individual researchers is low, and it has been regarded as merely a declaration of principles and will probably remain a dead letter[401]. This may also have to do with a lack of funding and resources and the fact that it does not provide a monitoring or verification plan, which has been regarded to clearly indicate that "openness in science remains an unimportant issue for both science policymakers and for most researchers"[402].

When Italian RPOs were asked in the survey to what extent they expected the ODD to affect research within their organisation, 22 out of 26 respondents indicated to expect affection to a 'moderate', 'large' or 'very large' extent (84.6%)[403]. 15 out of those 22 respondents deemed this type of affection to be beneficial to a large or very large extent (68.2%)[404].

Another actor in the Italian field is the *Agenzia per l'Italia Digitale* (AgID), which is more generally related to digital public administration and is also the national centre of competence in open data. AgID has published a three-year plan, which also refers to the ODD, the Italian transposition legislation and contains a chapter on data but does not propose any concrete measures on how to comply with the obligations for research data under the ODD[405].

395 Publications Office of the European Union, Hesteren, D., Knippenberg, L., Weyzen, R. et al., Open data maturity report 2021, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2830/394148; Publications Office of the European Union, Assen, M., Cecconi, G., Carsaniga, G. et al., Open data maturity report 2022, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2830/70973; Publications Office of the European Union, Page, M., Hajduk, E., Lincklaen Arriëns, E. et al., Open data maturity report 2023, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2830/384422.

396 Caso 2022, p. 834; see also Galimberti 2020.

397 Ciriminna & Pagliaro 2023, p. 3.

398 National Research Programme 2021-2027. Italian national plan for open science https://www.mur.gov.it/sites/default/files/2023-01/PNSA_2021-27_ENG.pdf

399 Italian National Plan for Open Science, p. 6.

400 Italian National Plan for Open Science, p. 11.

401 Caso 2022, pp. 834-835.

402 Ciriminna & Pagliaro 2023, p. 3.

403 Question 66 RPO survey – data legislation part (Annex 5 – Synopsis report). File with answers from only Italian RPOs on record with team.

404 Question 67 RPO survey – data legislation part (Annex 5 – Synopsis report).

405 The Three-Year Plan for ICT in the Public Administration, Piano Triennale per l'Informatica nella Pubblica Amministrazione https://www.agid.gov.it/sites/default/files/repository_files/piano_triennale_per_linformatica_nella_pa_2022-2024.pdf

Apart from the national policy, there have been some developments in open science, which have mainly been set up by taking a bottom-up approach. For instance, in 2015, an Italian Association for Open Science (AISA) was established, and afterwards, the Italian Open Science Support Group, which included professionals from various Italian universities, was created[406]. There is also the Italian Computing and Data Infrastructure (ICDI), which is one of the four founding members of EOSC. It reportedly developed a national Competence Centre (CC) with the purpose of providing training and support in FAIR RDM[407].

As in other countries, legislative instruments relevant to research data policy do not seem to be well known, as is evident from the lack of references to them in policy documents and the lack of literature. This was confirmed by senior open science experts during the interviews.

### 2.2.3. Opportunities for researchers and research organisations

Taking the above-discussed aspects of the ODD, particularly Article 10 on research data, this Section discusses a number of benefits that can be expected from the perspective of researchers and research performing organisations. It is based on an analysis of the law, literature, interviews and survey outcomes.

*Better availability of data as input for research*

The extension of the ODD to data from some public undertakings, the structures put in place for high-value datasets, and the general tightening of the ODD to make public sector bodies release data as technically and legally open should mean that more data resources become available for researchers and research performing organisations too.

From the RPO survey, it follows that 141 respondents expected more public sector data to become available for research purposes as a result of the ODD, which equals 65.6% of the answers (multiple answers possible)[408]. Of note, the survey did not distinguish which type of PSI (research data, high-value datasets or other public sector information).

In addition, the special rules for research data should help the wider availability of data held by RPOs for use in research. It is already the case that research data of researchers at other public research institutions seem to be the most important external data resource; 64% of researchers have used external data in the past year sourced from other universities or public research institutions, as indicated by the researchers survey respondents[409]. The question is to what extent the ODD will further stimulate this. It must be noted that the country's studies show that the development towards research data sharing does not seem to be driven by the Directive. The surveys indicate that funders and journals do, however, drive deposits.

406 Ciriminna & Pagliaro 2023, p. 2.

407 SPARC Europe, An Analysis of Open Science Policies in Europe, v7, (April 2021), p. 30.

408 Question 68 RPO survey – data legislation part (Annex 5 – Synopsis report), n=215. Please note that while this question was asked to 223 respondents, only 215 respondents answered the subsequent question on what aspects they deemed to be beneficial (question 68).

409 See section 2.1.4.3.

*Push towards (comprehensive) national policies*

The ODD's provisions on research date from 2019, when various Member States had already rolled out open science policy for research data. It is likely that the ODD's impact will be limited in MS with higher levels of open science policy maturity. By encoding the obligation to have open access policy for research data, the ODD will, however, speed up policymaking in Member States that are less active to date. It also gives scientific communities, whether through universities, research centres, or funders, some leverage to push for comprehensive research data policies. The 2025 review of the ODD will likely yield insights that RPOs and RFOs can use to advance best practices for national open access policies[410].

*ODD steers toward FAIR*

By specifying that research data should be made available as FAIR, the ODD recognises the key role that common principles for research data management play in the realisation of good sharing practices[411]. Arguably, encoding FAIR in what is now the primary EU legal instrument addressing research data will help mainstream FAIR principles throughout different disciplines. For the realisation of EOSC, this is of crucial importance[412]. The choice for FAIR as a guiding framework also recognises that research takes place in an international environment, not just in European networks. Because FAIR is a conceptual framework developed for research data globally and accommodates the needs of different types of scientific domains, it also helps to promote data sharing in wider global scientific communities.

*Increased efficiency – reduced costs to access data and verify research outcomes*

From the perspective of RPOs and researchers as *users* of research data, the better availability of data under the terms of the ODD potentially reduces the cost of obtaining data; the same results can be used for other studies, too[413]. This will be particularly true for high-value datasets. However, where wider availability is a driver for more intensive use (i.e. data are used because it is there), this may come with increased costs for RPOs, e.g. for infrastructure, support staff and data management of acquired data. As holders of research data, high costs are associated with making research data FAIR and available through repositories; see below (Section 2.2.4). A benefit of better and more availability is that it makes collaboration between researchers easier (and less costly from that perspective) and that it allows for more verification of results[414].

410 Article 18(1) ODD on the European Commission's review.

411 A 2021 survey report from the European University Association showed that surveyed institutions offer several types of research data support, but only 35-47% of the respondents indicated that "an open research strategy, FAIR principles compliance and FAIR publishing via recommended repositories" was available, see: R. Morais and others, From principles to practices: Open Science at Europe's universities. 2020-2021 EUA Open Science Survey results (European University Association) 2021, p. 37.

412 See Chapter 7 on the European Open Science Cloud for further analysis.

413 Borgerud C, & Borglund E, 'Open research data, an archival challenge?', *Archival Science* (2020)20 https://doi.org/10.1007/s10502-020-09330-3, p. 283, although the authors also note that this has been debated as "the workload to make data understandable to others requires a lot of time and money", in reference to Hammersley 1997.

414 Borgerud & Borglund 2020, p. 283; Van Eechoud 2023, p. 320.

*Recognition of the role of institutional and thematic repositories*

For institutions, the rise of data-intensive research and the need to manage data effectively are major reasons for setting up repositories. Thematic repositories typically cater to the needs of researchers in particular disciplines, allowing cross-institutional access. Perhaps the most prescriptive part of the ODD for research is the mandate to allow the reuse of data published in institutional or thematic repositories. It is an important step for research-sharing practice to recognise the importance of both thematic and institutional repositories, as it can give further direction to how data are disseminated. At the same time, it should be noted that the concepts of 'institutional' and 'thematic' repositories in the ODD can be interpreted in different ways, which may cause uncertainty as to when research data become subject to reuse obligations (see below).

### 2.2.4. Challenges identified

From the opportunities and benefits described above, it can already be gleaned that the ODD's regime for research data also brings challenges. What follows is a short inventory of challenges based on an analysis of the ODD, literature, interviews and survey results.

*Legal uncertainty about scope*

One of the barriers of the ODD, is that it is not always clear how terms relevant to determining its scope of application must be interpreted. This causes legal uncertainty. For instance, the ODD was written from the perspective of public sector bodies (which are in scope), but the special treatment for (university) libraries, archives, research performing organisations and research funders makes it difficult to determine for a particular data resource what regime applies.

As noted above, respondents from the RPO survey indicated that they expected the ODD to bring more (n=145, representing 67.4% of the answers) *and* less legal certainty (n=89, representing 55.3% of the answers)[415]. This may be an indication that RPOs are not sure what to expect in terms of legal obligations and rights or that they are uncertain about their position as data providers (of research data) but less so about being data users (of other public sector data). Of note, the respondents were not asked about their familiarity with the instruments.

415 Questions 68 and 70 RPO survey – data legislation part (Annex 5 – Synopsis report). Please note that the percentages provided correspond to the number of respondents who have answered questions 68 and 70, not the total group of RPOs taking part in the survey.

Similar legal uncertainty is caused by the ODD's vagueness about what is to be understood as 'publicly funded' research data, especially in terms of public-private partnerships[416]. If it is up to Member States to decide the boundaries[417], this will make the picture at the EU level very complex. If publicly funded means wholly publicly funded research data, this narrows the scope of the reuse provision. The one element that could serve as a reference is the definition of public sector body, which includes private sector organisations that are funded "for the most part" by the State or other public authorities[418]. Unfortunately, 'for the most part' is a vague notion itself. Either way, the provision presupposes that each individual dataset can be traced to whether it was created with public, private, or mixed funding.

Another point of uncertainty is when research data are 'publicly available' in 'an institutional or subject-based repository' as referred to in Article 10(2) ODD. It is currently *not* the case that data repositories are open to anyone anywhere in the world or that in data repositories that are universally publicly accessible, the individual datasets are open to all users. Data sets may be deposited with restricted access in place, in terms of who gets access for which purpose, or, for example, with time restrictions. If 'publicly available' means the data must be accessible to anyone globally, this potentially narrows the scope of the reuse provision. If it is a matter for the Member States to decide what constitutes 'publicly available' − it is, after all, the Member States' laws on access to information and duties to make public that the ODD builds upon − it may become very complicated to determine whether a given dataset is publicly available. When data from different sources is merged, the situation becomes even more complex.

With respect to the geographical reach, it is also unclear which repositories are covered. Arguably, institutional repositories are those operated by (cooperating) research performing organisations or research funders. What matters is whether those organisations qualify as public sector bodies under the ODD (and are established in the EU). The institutional repositories they run are then in scope, so data made public there are subject to the reuse regime. It is, however, more difficult to determine which subject-based (that is, thematic) repositories are affected by the ODD. This is because thematic repositories may host data deposited by providers from a multitude of jurisdictions (also outside the EU/EER), be established in a Member State but operate on behalf of international scientific partners, or be established outside the EU but host data from researchers working in the EU[419]. The ODD is unclear on what the relevant 'connecting factor' is that brings a dataset within the scope of the reuse obligations. Must the organisation formally responsible for operating the repository be established in a Member State, and are data, regardless of country of origin, subject to the ODD? Must the depositing researcher of the research organisation be based in the EU? Does it matter if the repository is organised as a private sector body (e.g. a non-profit foundation or association), or must it be a public sector body? How do we regard federated repositories that span different countries? The more data infrastructures develop, the more legal uncertainty may arise.

416 Klünker & Richter 2022, pp. 13-14.

417 Although Recital 28 ODD states that "[…] certain obligations stemming from this Directive should be extended to research data resulting from scientific research activities subsidised by public funding or co-funded by public and private-sector entities". Some argues this means that "[t]he recital could thus be interpreted that Member States should apply open policies when funding is even partly public, suggesting the introduction of flexible rules for the definition of what constitutes publicly funded research", Arisi 2022, p. 43.

418 Article 2(2)(c) ODD.

419 See for example the repositories that have a Core Trust Seal (https://amt.coretrustseal.org/certificates).

Clearly, then, it may be difficult for universities, higher education institutions and other RPOs and RFOs to figure out whether, and if so, how the rules on research data apply to them. This will impact researchers and teams who will rely on their RPOs and funders for insights on what obligations they have to meet. What is important to note here is that although understanding the FAIR data principles is important to help foster data sharing, this is by no means enough. There is a difference between FAIR data and open data. FAIR is more about the technical side but says little to nothing about the legal issues to be tackled, whereas open data has a strong legal dimension.

*Repositories accommodating third-party access to research data*

One of the questions arising from the ODD framework in terms of research data are how suitable repositories, especially subject-based (thematic) ones, actually are for providing responsible access to parties outside of the scientific discipline, not to mention to the broader public. By bringing research data into the regulatory fold of public sector information, its logic of maximised public availability becomes the frame, where before, the focus in scientific communities was more on improving data sharing for research purposes. Even there, the question arises whether 'open by default' is the most effective norm.

It can be very time-consuming to format data in such a way that research data are understandable to others from other disciplines, let alone reusable[420]. And even if data are made accessible and reusable, it can still be called into question whether such research data will actually be reused on a wider scale or only within very specific (research) contexts. Indeed, the interviews confirmed that researchers tend to prefer (narrow) thematic data repositories closely linked to a particular research discipline above institutional or very broad subject-based repositories, as this is where they look for data and expect their data to get the best exposure. The researchers' survey also shows that in the vast majority of cases where researchers use 'external' data, this originates from other (publicly funded) research institutions.

*Compliance requires capacity building and knowledge exchange*

The mandate to allow the reuse of data published in repositories presupposes there is adequate capacity and knowledge in research performing organisations and among researchers to manage research data in a way that is compliant with an ever more complex legal environment (e.g. as regards data protection, confidentiality, safety and security, intellectual property, licensing terms and conditions). From the literature and interviews, it emerges that this is not currently the case[421]. Open access publishing of articles is already a more common practice, but opening up research data thus far is not[422]. In order to foster the reusability of research data, substantial investment in capacity building and knowledge sharing seems required. Without it, obligations to allow reuse for commercial and non-commercial purposes might actually have a chilling effect on the willingness of researchers to deposit data because researchers and institutions fear the consequences, e.g. in terms of risks of infringing rights or having no control over downstream uses of the data (misrepresentation, political uses, unethical commercial uses, etc.).

420 Borgerud & Borglund 2020, pp. 284-285. The EUA 2021 report also shows that data support services are not yet widely available, see: R. Morais and others, From principles to practices: Open Science at Europe's universities. 2020-2021 EUA Open Science Survey results (European University Association) 2021, p. 48.

421 See for instance also: Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam: September 2023, in context of access to data for research purposes.

422 A. Salazar, B. Wentzel, S. Schimmler, R. Gläser, S. Hanf and S.A. Schunk, 'How Research Data Management Plans Can Help in Harmonising Open Science and Approaches in the Digital Economy', *Chemistry – A European Journal* (2023) doi.org/10.1002/chem.202202720, p. 1.

When RPOs were asked in the survey to what extent they expect challenges due to the ODD, almost half of the respondents answered 'to a large' or 'very large' extent (48%)[423], and another 33.9% answered to a 'moderate' extent (n=75)[424]. This group of 181 respondents was asked what aspects of the ODD were deemed challenging in particular (multiple answers possible). Legal uncertainty was mentioned 89 times (55.3%), but the most frequently mentioned was compliance costs arising from the ODD's obligations, which was mentioned 105 times (65.2%). Furthermore, 84 respondents also mentioned the time-consuming nature (52.2%), and the protection of third-party rights was mentioned 87 times (54%)[425].

*Dealing with conflicting rights and obligations*

Various provisions of the ODD, including Article 10 ODD, prescribe that due regard must be had for data protection, intellectual property rights, the preservation of commercially sensitive information, and other rights and interests, including those linked to knowledge transfer activities. The ODD itself does not have much guidance on how to deal with conflicting rights and interests. It also leaves much room for Member States to articulate open access policies, which may not provide clear guidance either. It can be a challenge for RPOs, funders and researchers alike to handle this. What is more, an environment of cross-border cooperation and diverging national laws brings additional complexity. Existing discipline-specific research ethics standards and practices, to a degree, already inform data sharing (e.g. the principle of patient anonymity in medical research vulnerability disclosure processes in computer security research). However, when making data 'open by default' (Article 10(1) ODD) becomes the norm, clearly articulated policies and guidance for handling conflicting interests seem necessary.

Out of the group of RPO survey respondents who indicated to expect the ODD to bring challenges to a moderate, large or very large extent (n=181), 87 respondents answered that they expected the protection of third-party rights (e.g. personal data, commercial confidentiality and intellectual property rights) to pose challenges to their organisation, equalling 54%[426].

The above-mentioned potential chilling effect on the willingness to make research data publicly available may also be fuelled by this lack of understanding of how to deal with conflicting rights and obligations. Here, too, individual researchers and RPOs may be inclined not to make research data available in the first place to escape an obligation to make the data reusable under Article 10(2) ODD and the attendant risk of infringing third-party rights.

423 n = 106.

424 Based on n = 221 for total number of answers to question 69 RPO survey – data legislation part (Annex 5 – Synopsis report), while the question has been asked to 267 respondents.

425 Question 70 RPO survey – data legislation part (Annex 5 – Synopsis report).

426 Question 70 RPO survey – data legislation part (Annex 5 – Synopsis report). Please note that while this question was asked to 181 respondents, only 161 respondents answered the question on what aspects they deemed challenging. 54% corresponds to n=161.

### *Need for additional resources*

It follows from the previous challenges regarding capacity building and knowledge exchange that making research data reusable under Article 10(2) ODD may come with significant costs. At the level of individual datasets, the burden "ultimately lands on the plate of individual academic researchers (and support staff) who have to prepare the research data for publication and reuse"[427]. This means researchers will have less time to actually devote to conducting new research unless perhaps they habitually make use of pre-existing data that are FAIR and open themselves, which can save time on data collection and preparation. On the institutional level, it should also be noted that while the ODD does not mandate the setting up of repositories, its regime for research data are built on the presumption that they exist. Setting up and running research data repositories are continuing processes and, therefore, require long-term investments. The availability of adequate long-term funding for research data management was a recurrent concern in the interviews, and costs were also a main concern in the surveys[428]. The country cases illustrate that so far, it is mainly up to research performing organisations to put up the bulk of the associated costs.

Out of 181 RPO survey respondents who indicatedhat they excpected the ODD to bring challenges to a moderate or (very) large extent, the aspect respondents deemed the most challenging was the compliance costs arising from the ODD's obligations, e.g. in terms of resources and expertise (n=105, equalling 65.2%)[429].

### *Recognition of scientific integrity, ethics and academic freedom as normative frameworks*

Considering the history of the ODD, it is perhaps not surprising that any mention of research ethics or scientific integrity is conspicuously absent. Transparency of research data is important for reasons related to quality; it allows for verification of claims and replication of research. This is part of scientific integrity, and from that perspective, one could say that scientific integrity is already served by the ODD's research data provisions, as well as the inclusion of the FAIR principles, which also help findability and verification. Of course, scientific integrity and research ethics are about much more. The current law recognises third-party interests, such as the interests of data subjects in the lawful use of personal data and commercial interests of parties, including intellectual property. It does not, however, recognise the multifaceted nature of research ethics and scientific integrity as a matter of public interest and a matter of individual interest for researchers and institutional interest in being able to follow (and craft) integrity standards in their dealings with research data. These might be generic (e.g. preventing fraudulent data) or domain-specific (e.g. in security-sensitive domains), relatively stable or dynamic (e.g. as around data authorship and attribution, which are community norms that do not necessarily map onto how copyright and other intellectual property laws define ownership and authorship). It can also be questioned whether data subjects' willingness to participate in, for example medical research (through, e.g. data donation) would decline if their data were not to be used solely for scientific purposes but used also for commercial purposes, as foreseen by the ODD. As the RfII notes: "this effect may seriously distort study results"[430].

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427 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, pp. 60-62.

428 See also the 2022 EUA report, in which it is noted that "[w]hile most universities benefit from multiple funding sources, sustainability remains an issue. This is especially true at institutions which cannot rely on funding streams that are entirely dedicated to research data. While the institutional availability of sustainable funding may be influenced by different organisational, cultural, and legal factors, university case studies have shown the added value of regular sources of funding to support the implementation of research data-related activities and demonstrated how the investment of even limited seed-funding can be scaled up to provide long term benefits.", F. Garbuglia and others, A closer look at research data practices in European universities. Follow-up to the 2020-21 EUA Open Science survey, (European University Association 2022), p. 21.

429 Question 70 RPO survey – data legislation part (Annex 5 – Synopsis report). Please note that while this question was asked to 181 respondents, only 161 respondents answered the question on what aspects they deemed challenging. 54% corresponds to n=161. 65,2% corresponds to n=161.

430 Rat für Informationsinfrastrukturen, Statement of the Council for Scientific Information Infrastructures (RfII) on current developments concerning Open Data and Open Access, March 2019, p. 3.

Perhaps the legislator's presumption was, with regard to the reuse of data in repositories, that any ethical or integrity issue would have been addressed before data were deposited. Or that the national policies that Member States must adopt already integrate academic integrity and research ethics. However, Article 10(2), once implemented, creates a direct obligation for RPOs (and for researchers in some Member States, like Germany) to allow commercial and non-commercial reuse by anyone for any purpose with respect to data made publicly available. The mandate for Member States to design open access policies for data to be directed at research performing organisations and funders, however, makes no mention of the need to square this with research ethics. So, the decision to deposit data publicly becomes pivotal also from a research ethics perspective. A related aspect of scientific research that the ODD does not address is the connection between scientific integrity, academic freedom (at individual and institutional levels), and a legal framework that puts research data made 'as open as possible, as closed as necessary' centre stage.

The researchers survey showed that of the 252 researchers who were obliged to deposit research data as part of a project in the past year (47.2%)[431], 179 respondents answered the following question on whether they had been obliged to grant a licence for the use of that data, of which 85 they were indeed obliged (47.5%)[432]. Of that group, 43 researchers indicated that they had some freedom to choose between a few standard licences (e.g. Creative Commons-By or Creative Commons non-commercial), which accounts for 50.6%[433]. Of note, almost 40% of the group that was obliged to deposit research data and grant a licence had no say at all over the terms and conditions for the reuse (n=33)[434].

The type of open access licensing encouraged by the ODD may impact researchers' academic freedom as guaranteed by Article 13 of the Charter of Fundamental Rights EU (CFREU). This is because licensing is an important tool that researchers have to exercise control over what happens with their work. What is more, national policies developed under Article 10(1) ODD may go beyond Article 10(2), which is a form of minimum harmonisation. In other words, Member States might enact policies that force researchers to make their research data publicly available and to do so under particular licensing schemes.

From the perspective of academic freedom and scientific integrity, it can be viewed as problematic when open access policies force researchers to publish under liberal open content licences, which effectively means a loss of control over how the data are used. What is more, where researchers have no or little choice as regards decisions to publish and the licence applied, this may well interfere with the protection of intellectual property (including copyright and *sui generis* database rights) as a fundamental right under Article 17(2) Charter.

Academic freedom also has an institutional dimension, i.e. the freedom of universities and other research institutions to exercise autonomy in terms of how they organise research and what priorities are set. Here too, a prescriptive framework that veers towards obligations to make research outputs available for reuse can be at odds with institutional autonomy. Of note, institutional autonomy has multiple dimensions: it regards decisions about academic research (and teaching) as such, but also decisions on administrative matters that enable academic research (and teaching). It is not just the ODD but also the wider body of data legislation that can impact institutional autonomy and thus academic freedom[435].

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431 n=534. Question 52 Researchers' survey – data legislation part (Annex 5 – Synopsis report).

432 Question 54 Researchers' survey – data legislation part (Annex 5 – Synopsis report). Please note that while this question was asked to the 252 researchers who answered to had been obliged to deposit research data (question 52), only 179 researchers answered the subsequent question as to whether they were obliged to grant a license for the use of their research data. 47,5% corresponds to n=179.

433 Question 55 Researchers' survey –data legislation part (Annex 5 – Synopsis report).

434 Ibid.

435 For a more elaborate analysis of academic freedom in relation to digital sovereignty of universities, see Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023.

## 2.3. Data Governance Act

*The content of this Section has been authored collaboratively by Doris, Buijs; Kristina, Irion.*

The EU co-legislator adopted the Data Governance Act (DGA) on 30 May 2022 as Regulation (EU) 2022/868. The DGA entered into force on 23 June 2022 and, following a 15-month grace period, has been applicable since 24 September 2023[436]. At the moment of writing, the European Data Innovation Board foreseen in the DGA is in the process of being set up.

### 2.3.1. Key Aspects

The analysis of the DGA focuses on Chapters II, III and IV of the DGA. Chapter II covers the reuse of certain categories of public sector data, Chapter III codifies the data intermediation services, and Chapter IV provides for voluntary data altruism organisations. In the following Section, the DGA will be explained and interpreted in light of its relevance to the research sector.

Table 24 provides an overview of the key provisions and their relevance to research.

436 Article 38 DGA.

**Table 24. An overview of the key provisions and their relevance to research**

| Provision(s) | Relevance to research |
|---|---|
| **Art. 1(2)** | The DGA does not impose an obligation to make data falling within its scope reusable but encourages public sector bodies to do so, also to the benefit of research. |
| **Art. 2(18),** Recital 12 | Definition of 'bodies governed by public law': where RPOs qualify as public sector bodies under the DGA, this implies that as data holders, they are expected to promote reuse. |
| **Art. 3** | Categories of data to which the DGA applies: This determines both the types of reusable data researchers may gain access to for research purposes and whether (research) data held by RPOs fall within the scope of data to be made reusable. |
| **Art. 4-6,** Recitals 7, 15, 16, 25 | (Favourable) conditions for reuse: e.g. prohibition of exclusive arrangements, non-discriminatory, transparent, proportionate reuse, reuse in secure processing environments, and under favourable/reduced fees. These conditions may benefit researchers who wish to reuse PSI under the DGA (e.g. through the discounted or free of charge reuse for scientific research reuse). Where RPOs are the providers of data under the DGA, they should take these conditions into account when making data reusable. |
| **Chapter III,** Recital 27, 29 | Data intermediation services: Chapter III sets out the requirements applicable to DISs, from which researchers and RPOs can benefit through improved access to (protected) data. |
| **Chapter IV,** Recital 45, 50 | Data altruism: Chapter IV sets out the requirements for data altruism organisations. Data altruism has the potential to benefit research through improved access to (personal data). |
| **Art. 25,** Recital 52 | European data altruism consent form: this form shall be developed through implementing acts (to be adopted by the European Commission) and facilitate the collection of consent for data altruism purposes. Researchers who wish to obtain such data (and thus need consent) may benefit from this consent form. |

*Source: Compiled by the study team.*

*Reuse of certain categories of public sector data*

Chapter II of the DGA contains provisions on the reuse of certain categories of protected data held by public sector bodies, which includes certain research performing organisations (RPOs). As is the case with the ODD, 'public sector body' means the State, regional or local authorities, but also refers to bodies governed by public law, i.e. bodies that meet three cumulative criteria Article 2(18) DGA, see Article 2(2) ODD):

> (a) they are established for the specific purpose of meeting needs in the general interest and do not have an industrial or commercial character;
> (b) they have legal personality;
> (c) they are financed, for the most part, by the State, regional or local authorities, or other bodies governed by public law, are subject to management supervision by those authorities or bodies, or have an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law;

RPOs, which are organised as public sector bodies or bodies governed by public law, are addressees of Chapter II of the DGA. Recital 12 DGA affirms that:

> "[r]esearch-performing organisations and research funding organisations could also be organised as public sector bodies or bodies governed by public law."

Designating RPOs as addressees of the DGA is thus a function of being organised as public sector bodies or bodies governed by public law as defined in Articles 2(17) and (18) DGA.

There are exceptions for specific public-private constellations:

> "If a research performing organisation holds data as a part of a specific public-private association with private sector organisations or other public sector bodies, bodies governed by public law or hybrid research performing organisations, i.e. organised as either public sector bodies or public undertakings, with the main purpose of pursuing research, those data should also not be covered by this Regulation."[437]

Put differently, when private sector organisations cooperate with RPOs on specific research initiatives, the DGA would not cover the resulting data.

Moreover, Recital 12 of the DGA gives several interpretations which are relevant to scientific research. Firstly, data held by cultural establishments, such as libraries, archives, and museums, as well as orchestras, operas, ballets and theatres, and by educational establishments are not covered by this Regulation[438]. This would mean that university libraries are excluded from the DGA's reuse provisions. University libraries can, however, play an important role in research data management, e.g. by hosting repositories. Recital 12 further states that research funding organisations that qualify as public sector bodies do not fall under the reuse provisions. Lastly, Recital 12 DGA explicitly states that "the exchange of data between researchers for non-commercial scientific research purposes… should not be subject to the provisions [on reuse]". This signals that the reuse provisions are not meant as an instrument to further the exchange of data among scientific communities, in the same way that the ODD's reuse provisions leave the exchange of data between public sector bodies as part of their public tasks untouched. However, when taken together, the scope of the application becomes unclear. Repositories for data and scientific publications are typically put in place for storage purposes and to facilitate the exchange of research data among researchers, which suggests they are out of scope, especially as institutional repositories, and thematic ones, may be run by university libraries. Repositories and (some of the) datasets they contain are, however, often also accessible to a wider public. The hybrid nature of repositories is not properly recognised by the DGA. It is unclear what the DGS's reuse chapter means when it refers to universities and research performing organisations.

The DGA lays down the conditions for the reuse of certain categories of protected data held by them, which are enumerated in Article 3(1) DGA:

(a) commercial confidentiality, including business, professional and company secrets;

(b) statistical confidentiality;

(c) the protection of intellectual property rights of third parties; or

(d) the protection of personal data insofar as such data fall outside the scope of Directive (EU) 2019/1024.

Conversely, data that are protected on grounds other than the four listed in Article 3(1) DGA are not covered by this act.

437 Recital 12 DGA.

438 Ibid.

It is important to note that the DGA does not impose any legal obligation to make certain categories of protected data reusable. Note that according to Article 1(2) of the DGA, the Regulation does not create any obligation for covered RPOs to allow the reuse of data, nor does it release them from their confidentiality obligations under the EU or national law. It is, however, the objective of the reuse provisions to have more 'protected' data become available for reuse, which implies a certain effort must be made by public sector bodies. The DGA provides for a set of conditions that covered RPOs should comply with and make the above-mentioned categories of data available for reuse. Together, these conditions create a common framework and procedures for handling certain categories of protected data, thereby underpinning the creation and maintenance of data sharing infrastructures.

Article 4 DGA prohibits entering into exclusive arrangements pertaining to data under the purview of the DGA, which have as their objective or effect to grant such exclusive rights or to restrict the availability of data for reuse by entities other than the parties to such agreements or other practices. This means that the reuse of certain categories of protected data must not discriminate between users. There is one derogation from this prohibition under which granting an exclusive right would be possible for a duration of up to 12 months but only to the extent necessary for the provision of a service or the supply of a product in the general interest. Existing agreements or other practices contravening the prohibition of exclusive arrangements or which do not meet the conditions of the derogation shall be terminated at the end of the applicable contract and, in any event, by 24 December 2024[439].

The conditions of reuse are detailed in Article 5 DGA. Covered RPOs must publish the conditions for allowing the reuse and the procedure to request the reuse via a single information point. The conditions for reuse shall conform to the standards of non-discriminatory, transparency, proportionality and objectivity. Covered RPOs have the obligation to preserve the protected nature of data when making it available for reuse. Article 5 (3) DGA offers different measures of how this can be achieved, such as anonymising personal data and treating other categories of protected data to remove confidential information or IPRs.

Where appropriate, data reuse can take place via secure processing environments, either remotely or – if necessary – on-premises. A secure processing environment is defined as:

> "the physical or virtual environment and organisational means to ensure compliance with Union law, such as Regulation (EU) 2016/679, in particular with regard to data subjects' rights, intellectual property rights, and commercial and statistical confidentiality, integrity and accessibility, as well as with applicable national law, and to allow the entity providing the secure processing environment to determine and supervise all data processing actions, including the display, storage, download and export of data and the calculation of derivative data through computational algorithms;"[440]

439 The conditions under which such an exclusive arrangement is permitted are set out in Article 4(2)-(6) DGA.

440 Article 2(20) of the DGA.

Recital 7 of the DGA refers in this regard to "experience at Union level with such secure processing environments that are used for research on statistical microdata on the basis of Commission Regulation (EU) No 557/2013"[441]. Eurostat and the Dutch statistical authority CBS, for example, provide access to statistical microdata for scientific research purposes through their secure processing environments[442]. Beyond statistical microdata access, there are not yet many known instances of secure processing environments maintained by other public sector organisations and covered RPOs.

In the event that none of these measures can assure that the protected nature of the data is preserved, covered RPOs should assist "potential re-users in seeking the consent of the data subjects or permission from the data holders whose rights and interests may be affected by such reuse" (Article 5(5) DGA). Furthermore, the transfer of non-personal data which is confidential or protected by intellectual property rights to a re-user in a third country requires the consent of the rightsholder and contractual safeguards.

Under Article 8 DGA, Member States shall designate one or more competent bodies, also on a sector-specific basis, to assist the public sector bodies when they grant or refuse access for the reuse of the categories of data. Again, the DGA itself does not carry an obligation to make such data available for reuse, which may stem from other legal instruments at EU and Member States levels and open science policy.

Besides being subject to the DGA's obligations as a public sector body, RPOs can also be beneficiaries of the DGA. This is the case when they request to reuse data held by (other) public sector bodies, holding public sector information potentially relevant for research, for instance. Article 5(1) obliges Member States to provide sufficient means for public sector bodies to make data available. This may potentially incentivise scientific research involving certain categories of data which become increasingly available.

Also, reuse does not need to be free, and charges can be levied[443]. The purpose of scientific research should be recognised when calculating fees for data reuse. To that end, a definition can be found in Recital 25 DGA:

> "Scientific research purposes should be understood to include any type of research-related purpose regardless of the organisational or financial structure of the research institution in question, with the exception of research that is being conducted by an undertaking with the aim of developing, enhancing or optimising products or services."

RPOs' demand for the reuse of certain categories of data covered by the DGA is difficult to gauge since the Regulation is very recent and statistical data per Member State are not available. The potential beneficiary position of RPOs under the DGA is further discussed in Section 2.3.4 on extended reuse of protected data.

#### *Data Intermediation Services*

Chapter III of the Data Governance Act lays down the requirements for data intermediation services. Article 2(11) DGA defines data intermediation services as:

441 Commission Regulation (EU) No 557/2013 of 17 June 2013 implementing Regulation (EC) No 223/2009 of the European Parliament and of the Council on European Statistics as regards access to confidential data for scientific purposes and repealing Commission Regulation (EC) No 831/2002 (OJ L 164, 18.6.2013, p. 16).

442 See for more information on Eurostat https://ec.europa.eu/eurostat/web/microdata/overview and on the Dutch CBS https://www.cbs.nl/en-gb/our-services/customised-services-microdata/microdata-conducting-your-own-research.

443 The conditions for the charge of fees are set out in Article 6 DGA.

> "a service which aims to establish commercial relationships for the purposes of data sharing between an undetermined number of data subjects and data holders on the one hand and data users on the other, through technical, legal or other means, including for the purpose of exercising the rights of data subjects in relation to personal data, …"

Article 10 of the DGA recognises three types of data intermediaries:

- intermediation services between data holders and potential data users;
- intermediation services between data subjects and
- services of data cooperatives as defined in defined in Article 2(15) of the DGA.

*Following Article 10 DGA, all three types must conform with Article 12 and shall be subject to a notification procedure.*

As an outlier to the commercial nature of data intermediation services, Article 2(11), DGA also lists "data sharing services offered by public sector bodies that do not aim to establish commercial relationships." Following Recital 27 of the data, intermediation services, which may thus include public sector bodies' not-for-profit data sharing, play a role "in the context of the establishment of common European data spaces," including for scientific research. Article 15 DGA provides that:

> "This Chapter shall not apply to recognised data altruism organisations or other not-for-profit entities insofar as their activities consist of seeking to collect data for objectives of general interest, made available by natural or legal persons on the basis of data altruism unless those organisations and entities aim to establish commercial relationships between an undetermined number of data subjects and data holders on the one hand and data users on the other. The provisions of Chapter III do not apply to recognised data altruism organisations or other not-for-profit entities insofar as their activities consist of seeking to collect data for objectives of general interest made available by natural or legal persons on the basis of data altruism unless those organisations and entities aim to establish commercial relationships between an undetermined number of data subjects and data holders on the one hand and data users on the other."

As data intermediaries are new service providers in the data economy, the commercial purpose of data intermediation services would ***not*** align with the non-commercial remit of RPOs as public sector bodies. As Recital 29 of the DGA puts it:

> "Other services that do not aim to establish commercial relationships, such as repositories that aim to enable the reuse of scientific research data in accordance with open access principles, should not be considered to be data intermediation services within the meaning of this Regulation."

The literature shares the broad assessment that not-for-profit research data repositories are out of the scope of the DGA's data intermediation services. Van Eechoud, for instance, observes that the EOSC Association would not be considered a provider of 'data

intermediation service' within the meaning of the DGA[444]. However, there may be data exchanges run in cooperation with non-profit RPOs which operate (in parts) for-profit. One example would be AMdEX, a joint initiative of Dutch universities, the City of Amsterdam, and others for a hybrid data exchange, which is in part a data market and in part a research data exchange[445].

Looking at the definition in Article 2(15), the DGA data cooperative would require "an organisational structure constituted by data subjects, one-person undertakings or SMEs who are members of that structure … to negotiate terms and conditions for data processing on behalf of its members" before agreeing to the processing of non-personal or personal data. This is typically not the case for public sector bodies and covered RPOs, which are not member-based organisations but are governed by public law.

RPOs and non-commercial scientific research can nevertheless benefit from the emergence of commercial data intermediaries, especially concerning access to data that cannot be obtained from other sources and access with the necessary permission for data reuse. One of the interviewees observed that it is acceptable to budget the costs for dataset acquisition in research proposals which are approved by research funding organisations in justified cases. In other words, data intermediaries can become an additional avenue for researchers to access data for scientific research.

*Data Altruism Organisations*

Chapter IV of the DGA provides rules on data altruism, which is defined in Article 2 of the DGA as:

> "the voluntary sharing of data on the basis of the consent of data subjects or permissions of data holders to allow the use of their non-personal data without seeking or receiving a reward and for objectives of general interest as provided for in national law, where applicable, such as healthcare, combating climate change, improving mobility, facilitating the development, production and dissemination of official statistics, improving the provision of public services, public policymaking or scientific research purposes in the general interest."

Should a data altruism organisation (DAO) want to register as an official EU one in terms of the DGA, it must meet certain criteria as laid down in Article 18(a)-(e) DGA. Those criteria are:

(a) that it carries out data altruism activities (d) through a structure functionally separate from its other activities;
(b) is a legal person who meets the objectives of general interest;
(c) operates on a not-for-profit basis and is legally independent from entities that do operate on a for-profit basis;
(d) *See (a)*; and
(e) complies with a rulebook established by the Commission. This rulebook shall be established through a delegated act, which still needs to be adopted[446].

444 European Commission & Van Eechoud 2022, p. 13, https://data.europa.eu/doi/10.2777/71619.

445 Ibid p. 31; See https://amdex.eu/usecases/

446 Article 22 in connection with Article 32 DGA.

Subject to meeting the requirements of Article 18 of the DGA, RPOs can obtain registration as a recognised data altruism organisation. The application for registration in the public national register of recognised data altruism organisations is voluntary. Therefore, it should not create any obligation for RPOs to comply with the requirements of a recognised data altruism provider.

Below, some aspects of data altruism and the DGA's data altruism organisations are further discussed as far as they can be relevant for research. As data altruism and data altruism organisations are considered to be of high potential for research, the potential benefits are further discussed in Section 2.3.3 on access to personal data for research from DIS and DAOs. There are, however, also potential challenges related to the success of such data altruism organisations, which are discussed in Section 2.3.4 on data altruism.

- Scientific research purpose in the general interest

Some authors note that the concept of 'general interest' (Article 18(b) DGA) seems quite broad and perhaps also vague[447]. Indeed, the DGA does not define the term 'general interest', but rather provides some examples of general interest in Article 2(16), including "scientific research in the general interest". Recital 45 of the DGA provides that "[s]upport to scientific research should also be considered to be an objective of general interest." According to Finck and Mueller, the wording of this Recital would suggest that scientific research is "presumed to always occur in the public interest", no matter the thematic issue (which the authors deem debatable)[448]. They contend that the DGA's mixture of public interest grounds is likely to cause difficulties in the DGA's practical implementation[449]. The lack of a definition for either 'general interest' or 'scientific research' is also pointed out by Kruesz and Zopf[450]. They suggest using the GDPR's notion of scientific research, which is defined "in a broad manner including, for example, technological development and demonstration, fundamental research, applied research and privately funded research"[451]. Kruesz and Zopf argue that the GDPR and the DGA are closely related, and it would be in the interest of legal consistency and fostering of transboundary research to have a uniform understanding of the term[452]. However, caution is necessary because research is only scientific if it adheres to the scientific method and ethical principles. It is conceivable that a purpose is labelled as scientific research but, in fact, does not meet good scientific practices.

447 Finck, M. and Mueller, M., 'Access to Data for Environmental Purposes: Setting the Scene and Evaluating Recent Changes in EU Data Law', *Journal of Environmental Law,* 2023, 35, 109-131 https://doi.org/10.1093/jel/eqad006; Kruesz C., & Zopf F., 'The Concept of Data Altruism of the draft DGA and the GDPR: Inconsistencies and Why a Regulatory Sandbox Model May Facilitate Data Sharing in the EU', EDPL 2021 (4), pp. 569-579. DOI 10.21552/edpl/2021/4/13 https://edpl.lexxion.eu/article/EDPL/2021/4/13; Paseri 2022; W. Veil, *Discussion Paper #1. Data altruism: how the EU is screwing up a good idea,* (Algorithm Watch 2022).

448 Finck & Mueller 2023, p. 127.

449 Ibid, p. 128.

450 Kruesz & Zopf 2021.

451 Recital 159 GDPR.

452 Kruesz & Zopf 2021, p. 570.

- Rulebook

Pursuant to Article 22 DGA, the Commission shall adopt delegated acts to establish a 'rulebook', with which data altruism organisations are required to comply (Article 18(e) DGA). Article 22 DGA already sets out what type of requirements shall be included in this rulebook, e.g. information requirements to properly inform data subjects and holders, security requirements and recommendations on interoperability standards. Article 22(2) DGA urges the Commission to prepare this rulebook in "close cooperation" with DAOs and relevant stakeholders. In January, the Commission published a webpage that contained more information on the developments in the rulebook[453]. Currently, the draft act is being prepared, and feedback can be submitted after its publication[454]. The Commission is planning to adopt the act on the DAO rulebook in the first quarter of 2025. More information about the (technical) requirements with which DAOs will have to comply may (partly) help to better understand the level of compliance complexity.

- Consent form

Article 25 DGA introduces a uniform "European data altruism consent form" for altruistic data reuse. This consent form should facilitate the collection of consent and permission for (personal) data necessary in order to carry out data altruism activities. Recital 52 DGA specifies that this consent form should "promote trust and bring additional legal certainty and user-friendliness to the process for granting and withdrawing consent, in particular in the context of scientific research [….]". It continues by stating that this form "should contribute to additional transparency for data subjects" to assure them that their data will be used in accordance with their consent and in compliance with data protection rules. It also notes that the form should facilitate consent and streamline data altruism. Article 25(1) of the DGA states that the Commission shall adopt implementing acts for this consent form after it has consulted the European Data Protection Board (EDPB) and taken into account the advice of the European Data Innovation Board (EDIB) and after having 'duly involved' stakeholders. The DGA does not specify who those stakeholders may be, but as the focus of data altruism and the consent form seems to lean heavily towards personal data[455], perhaps one could expect that the DGA's foreseen stakeholders would also conduct activities within these fields. Similar to the rulebook, the Commission has opened up a webpage on which it has announced that the implementing act for the consent form is being prepared[456]. The implementing act is planned to be adopted in the third quarter of 2024.

453 See at https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14094-Rulebook-for-recognised-data-altruism-organisations_en

454 Of note, the Commission's website speaks of both a 'delegated act' and 'implementing act' at the same time, while Article 22(1) DGA notes that the Commission will adopt a delegated act.

455 Baloup J. and others, White Paper on the Data Governance Act (2021) CiTiP Working Paper. https://www.law.kuleuven.be/citip/blog/citipwhite-paper-on-the-data-governance-act/ p. 40; Shabani, M., 'The Data Governance Act and the EU's move towards facilitating data sharing', Molecular Systems Biology 2021, vol. 17(3), https://www.embopress.org/doi/pdfdirect/10.15252/msb.202110229, who notes that "While the proposed Act would apply to all types of personal and non-personal data, the increasing demand for sharing health data has most likely been a major rationale for this new legislation of data governance", p. 40.

456 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14095-European-data-altruism-consent-form_en

- Not-for-profit data cooperatives as data altruism organisations

A recent study by the Joint Research Centre, which has mapped the landscape of data intermediaries, presents a few examples of data altruistic organisations and data cooperatives that serve non-profit scientific research purposes[457]. "Since data cooperatives are often established to support data sharing for public interest outcomes," the study notes, "and not for the purpose of establishing commercial relationships, they might also fall under the label of data altruism organisations"[458] within the meaning of the DGA. In the scope of the DGA's not-for-profit data sharing, it is linked to registered data altruism organisations, but in the space of unregistered not-for-profit data sharing efforts, the terminology is more diverse.

### 2.3.2. Selected Member States' implementing acts

As an EU regulation, the Data Governance Act is a binding law directly applicable in all Member States[459]. Nevertheless, Member States have to comply with the DGA, and oftentimes, Member States adopt 'execution' acts that implement EU law. Similar to the discussion of the ODD's implementation in the Netherlands, Germany and Italy (Section 2.2.2), the Section below discusses in more detail the ways in which the DGA is (being) implemented in the selected Member States.

Pursuant to the DGA, Member States have to inform the European Commission about registered data altruism organisations (discussed in Section 2.3.1), as well as national competent bodies designated under the DGA. The Commission has published a webpage with a (preliminary) overview of the recognised data altruism organisations, as well as a webpage on the "national competent bodies and authorities"[460]. The document uploaded by the Commission shows a table with an overview of three types of competent bodies/authorities: those for several tasks (laid down in Article 7), for data intermediation services (Article 13) and for data altruism organisations (Article 23).

Only a handful of the EU Member States have to date notified the European Commission concerning the designation of competent bodies pursuant to Article 7 DGA: 11 Member States have one, while the other 16 have not informed the Commission of their national competent body. A similar conclusion can be drawn for the competent bodies for data intermediation services and data altruism organisations: only 10 Member States have informed the Commission of their authorities, while the rest have not done so[461]. So far, the Member States that have informed the Commission of their authorities for data altruism organisations and data intermediation services have all designated the same authority for both. The majority of Member States have yet to notify their national competent bodies.

As a next step, the relevant developments in Germany, Italy and the Netherlands will be mapped as instances of the stages of national implementations. Variations can already be perceived with respect to the approach to adopting more detailed national rules for data altruistic organisations.

457 Micheli, M., Farrell, E., Carballa-Smichowski, B., Posada-Sánchez, M., Signorelli, S., Vespe, M., Mapping the landscape of data intermediaries — Emerging models for more inclusive data governance, Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/261724, JRC133988.

458 Ibid., p. 50.

459 Article 288 Treaty on the Functioning of the European Union.

460 https://digital-strategy.ec.europa.eu/en/policies/data-altruism-organisations (on data altruism organisations); https://digital-strategy.ec.europa.eu/en/library/national-competent-bodies-and-authorities-under-data-governance-act (on national competent bodies and authorities).

461 This is based on the list of competent bodies and authorities that was published by the Commission on 2 October 2023.

*The Netherlands*

In the Netherlands, the Ministry of Economic Affairs and Climate (Dutch acronym: EZK) has been working on an implementing act for the DGA[462]. The proposal dates from July 2022[463] and has been pending in parliament since October 2023[464]. The Netherlands did not meet the 24 September 2023 for implementation[465], Below, aspects of the proposed act are discussed where relevant for research[466].

- Data altruism organisations

As already discussed in Section 2.3.1 (and which will be further discussed in Section 2.3.4), data altruism is promising for enhancing data access for scientific research purposes. Article 18(b) DGA states that one requirement to qualify for registration as a DAO is to "be a legal person established pursuant to national law to meet objectives of general interest as provided for in national law, where applicable". These objectives of general interest have indeed been further set out in Article 5(a)-(p) of the proposed implementing law (*Voorstel Uitvoeringswet DGA*) and include "education, science and research"[467]. The explanatory memorandum to the proposed implementing law notes that these objects of general interest have been aligned with those mentioned in the DGA[468].

Article 16 DGA provides that Member States may establish national policies for data altruism[469]. According to the explanatory memorandum, the Netherlands does not intend to develop any national policies for data altruism[470]. It is mentioned that there are no examples of DAOs as referred to in the DGA in the Netherlands[471]. It also noted that it cannot be assessed how many organisations would like to make use of the official DGA EU label for DAOs[472].

If a DAO meets all of the DGA's requirements, it will become a recognised DAO, and it will be included in a public national register, as well as an EU register, maintained by the Commission[473]. Both the Dutch NRA and the Commission have a web page for registered DAOs[474]. The ACM states on its webpage that it will become possible (but not obligatory) to file for registration as an official DAO. As the Dutch implementation law for the DGA has not been adopted yet, it is only possible to contact the ACM now so they can inform prospective applicants as soon as they can apply[475].

462 https://wetgevingskalender.overheid.nl/Regeling/WGK014216

463 Gerritsen, J., 'De Data Governance Act (DGA). Eigentijds of irrelevant?', Nederlands Tijdschrift voor Europees Recht 2023, 3-4, pp. 52-61 https://www.bjutijdschriften.nl/tijdschrift/tijdschrifteuropeesrecht/2023/3-4/NtER_1382-4120_2023_029_003_002.

464 Parliamentary Papers II 2023/24, 36 451, nr. 2 ('Uitvoering van verordening (EU) 2022/868 van het Europees Parlement en de Raad van 30 mei 2022 betreffende Europese datagovernance en tot wijziging van Verordening (EU) 2018/1724 (Uitvoeringswet datagovernanceverordening) (proposal Uitvoeringswet DGA).

465 Ibid.

466 This analysis includes the advice by the Dutch Advisory Division of the Council of State (Afdeling Advisering van de Raad van State) which preceded the official proposal to the Dutch House of Representatives (hereinafter: the Council), see: Parliamentary papers II 2023/24, 36 451, nr. 4 (Advies Afdeling Advisering Raad van State en nader rapport) and the Explanatory Memorandum to the proposal, see: Parliamentary Papers II 2023/24, 36 451, nr. 3 (Memorie van Toelichting – Uitvoering van verordening (EU) 2022/868 van het Europees Parlement en de Raad van 30 mei 2022 betreffende Europese datagovernance en tot wijziging van Verordening (EU) 2018/1724 (Uitvoering datagovernanceverordening).

467 Article 5(c) proposal Uitvoeringswet DGA.

468 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), p. 7.

469 Article 16(1) DGA.

470 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), p. 22.

471 Ibid, p. 7.

472 Ibid, p. 23.

473 Article 18(1) and (2) DGA.

474 https://digital-strategy.ec.europa.eu/en/policies/data-altruism-organisations

475 https://www.acm.nl/nl/onderwerpen/telecommunicatie/datadiensten/data-altruistische-organisaties (in Dutch).

- Enforcement and competent authorities

The DGA provides that Member States should appoint competent authorities in three areas: (i) to assist public sector bodies with granting or refusing reuse requests for data referred to in Article 3(1) DGA (Article 7 DGA), (ii) to monitor data intermediation services (Article 13 DGA) and (iii) to monitor data altruism organisations (Article 23 DGA). Lastly, the DGA requires Member States to designate a national body as the 'single information point' (Article 8 DGA).

The authority competent to assist other public sector bodies will be designated by decree (*Algemene Maatregel van Bestuur*) according to the proposal[476]. The explanatory memorandum states that the intention is to appoint Statistics Netherlands (*Centraal Bureau voor Statistiek*) as the competent authority in the field of scientific and statistic reuse, as the CBS already conducts activities within this field and has a lot of expertise in data and how to open up data in ways in which privacy is safeguarded. As such, the CBS already contains a 'secured processing environment', but it will – for this task – set up a separate secure processing environment[477].

Under the proposed DGA implementation law, the Dutch Authority for Consumers and Markets (*Autoriteit Consumenten & Markt*) will become the national regulatory authority for the DGA[478], specifically for data intermediation services and data altruism organisations[479]. Additionally, the Dutch data protection authority (*Autoriteit Persoonsgegevens*) will advise the ACM on whether data intermediation services and data altruism organisations operate in compliance with the GDPR if they (intend to) process personal data[480]. The Advisory Division of the Council of State expressed concerns about the interaction between the powers of the ACM and AP as laid down in the original proposal. One of the reasons for this was that the ACM had the power to continue to register DISs and DAOs despite potential negative advice from the Dutch DPA. According to the Advisory Division of the Council of State, such would undermine the premise that the DGA applies without prejudice to the GDPR[481]. Despite these concerns, it appears that the proposed implementing act still allows the ACM to disregard the AP's advice[482]. The Minister for Economic Affairs responded to the broader critique by stating that the DPA's advice is *ex ante,* and that the DPA retains its supervisory powers in relation to the GDPR. And, under Dutch law it is allowed to deviate from such advise (if motivated). But, to accommodate the Council's critiques, the duty to advice will be made more flexible in the implementing act[483]. Additionally, the ACM and DPA will adopt a 'cooperation protocol' (*samenwerkingsprotocol),* which shall be publicly available and in which details of the advice can be laid down[484].

As for sanctioning, the proposal states that the ACM may impose administrative sanctions on DIS and registered DAOs in case of infringements of Article 5(14) and Chapters III, IV and VII of the DGA. The administrative fine can be 10% of the annual turnover of the DIS/registered DAO[485].

476 Article 2(1)-(4) proposal Uitvoeringswet DGA.

477 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), pp. 11-12.

478 Article 6 proposal Uitvoeringswet DGA.

479 Ibid; Article 2(6)(a)(b) proposal Uitvoeringswet DGA.

480 Article 7 proposal Uitvoeringswet DGA.

481 Parliamentary papers II 2023/24, 36 451, nr. 4 (Council Advise), p. 9; Article 1(3) DGA.

482 Article 7 proposal Uitvoeringswet DGA.

483 Parliamentary papers II 2023/24, 36 451, nr. 4 (Council Advise), p. 10.

484 Ibid; Article 7(3) proposal Uitvoeringswet DGA. See also the Explanatory Memorandum, which states that the AP's advise in this regard does not replace the AP's regular supervision (p. 17).

485 Article 8(a)(b) proposal Uitvoeringswet DGA. See for further details pp. 15-16 of the Explanatory Memorandum.

Lastly, the proposal states that the 'single information point' as foreseen in Article 8 DGA shall be designated by decree of the Minister for the Interior and Kingdom Relations[486]. The explanatory memorandum notes that the intention is to designate the National Data Portal (*Nationaal Dataportaal, data.overheid.nl)* as the central point of information. The portal already offers datasets for reuse under national reuse legislation (*Wet hergebruik overheidsinformatie),* and it is already possible to request data to be reused. The register is governed by the Ministry of the Interior and Kingdom Relations[487].

- Interactions with other legislation

Lastly, the Advisory Division of the Council of State expressed some concerns about interactions with other legislations, as the original proposal and its complementary explanation rarely touched upon the DGA's relationship with other legislation, e.g. how Chapter II of the DGA and the ODD relate to each other. The explanatory memorandum of the proposal does mention that Chapter II of the DGA complements the Open Data Directive, but it does not clarify what data falls under which legislation in concrete cases. As such, the Council expected that citizens (including researchers) would not know when which law would be applicable, and it encouraged the Dutch legislator to clarify this matter[488].

In its explanatory memorandum, the drafters of the proposal for DGA implementation law seem to have tried to respond to the Advisory Division's wishes for more explanation on the interplay between, e.g. Chapter II of the DGA and the Dutch implementation of the ODD by stating that those two can never apply at the same time. The Minister added that it is impossible to exhaustively and in advance list which data fall within the scope of which regulation, as this has to be determined on a case-by-case basis[489]. The explanatory memorandum broadly explains the types of data covered by the legislation and in which cases an applicant can file a request for reuse under either the national implementation of the ODD or the DGA[490]. This can be relevant for researchers wishing to request certain public sector information. For instance, the explanatory memorandum notes inter alia that, as the ODD creates a 'right to reuse' (whereas the DGA merely creates a framework *in case the* Member States allow for reuse) and the national grounds named in the DGA for reuse are more limited, it makes more sense for applicants to first file a request under the ODD, and eventually subsidiarily to file a request under the DGA[491].

### *Germany*

The German legislator has started implementation activities by circulating a draft law (the *Daten-Governance-Gesetz*) to implement the DGA[492]. According to this proposal, the German regulatory authority *Bundesnetzagentur* will become the competent national body pursuant to the DGA, including for DAOs. As this is still a proposal, Germany has not yet notified the European Commission about its competent national bodies and authorities under the DGA (Articles 7, 13 and 23 DGA). As it stands, the German proposal does not foresee complementary rules governing DAOs, although the DGA gives Member States some leeway to adopt their own legislation[493].

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486 Article 2(5) proposal Uitvoeringswet DGA.

487 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), pp. 12, 27.

488 Parliamentary papers II 2023/24, 36 451, nr. 4 (Council Advise), pp. 13-14..

489 Parliamentary papers II 2023/24, 36 451, nr. 4 (Council Advise), p. 14.

490 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), pp. 18-20.

491 Parliamentary papers II 2023/24, 36 451, nr. 3 (Explanatory Memorandum), p. 19.

492 Copy of the draft law on file with the research team.

493 Art. 16 DGA.

- Proposal for a Daten-Governance-Gesetz

The German Council for Scientific Information Infrastructures (in German: RfII), which represents German RPOs, has criticised the draft law's high sanctions[494]. RfII also calls for a clear derogation in the German Implementation Act from fees and payments for data reuse for publicly funded research[495]. The DGA requires public sector bodies to incentivise the reuse of public sector data for non-commercial purposes, e.g. scientific research, by providing access to public sector data "at a discounted fee or free of charge"[496]. The German implementing provision on the charge of fees does not speak of such a discount or exemption of costs[497]. According to RfII, this exemption should be specifically implemented for publicly funded scientific institutions, and researchers should be provided access to these data free of charge or at least at a discounted fee[498].

The NFDI (*Nationale Forschungsdaten Infrastruktur*) criticises the proposal for a German DGA implementation law that lacks groundbreaking opening clauses for science and research[499]. Additionally, it notes that the proposal does not address the relationship with the ODD, including the German implementation of the ODD (the *Datennutzungsgesetz* (DNG)[500]. A similar critique was also voiced in reaction to the Dutch proposal, which initially also did not clarify the relationship of and interaction between Chapter II of the DGA and the ODD (and its implementation)[501]. The NFDI writes how both acts address public research organisations, which is why the German legislator should have addressed the interplay between the two. It stresses that this lack of explanation on scope is confusing and difficult for researchers who are affected by the legislation[502]. Additionally, the NFDI notes that the German proposal for a DGA implementation law does not mention any concrete plans on data altruism. Neither the proposal itself nor the explanatory memorandum makes any references to the planning of any provisions in this regard[503]. The proposal only appoints the *Bundesnetzagentur* as the competent authority for DAOs. According to the NFDI, it would have made sense to develop technical requirements and guidelines for data altruism in the field of science and research, which is also encouraged through Article 16 DGA. Lastly, the NFDI deems legal and, where possible, sector-specific guidelines for data altruism necessary in the context of research ethics. In their opinion, it is not feasible for laypersons to assess how to conduct research in an ethical and responsible manner[504].

### *Italy*

Italy has not notified the Commission yet about its national competent bodies (including those for data intermediation services and data altruism organisations)[505]. Our research did not yield more information about Italy's implementation of the DGA as relevant to scientific research.

494 RfII (2023).

495 Ibid.

496 Article 6(4) and Recital 25 DGA.

497 §3(1) DGG.

498 Rat für Informations Infrastruktur, Stellungnahme zum Entwurf eines Gesetzes zur Durchführung der Verordnung (EU) 2022/868 des Europäischen Parlaments und des Rates vom 30. Mai 2022 über europäische Daten-Governance und zur Änderung der Verordnung (EU) 2018/1724 (Daten-Governance-Rechtsakt), (2023), p. 1.

499 O. Vettermann & Nationale Forschungsdaten Infrastruktur, Stellungnahme zum Daten-Governance-Gesetz der Sektion ELSA (Ethical, Legal & Social Aspects) des Verein Nationale Forschungsdateninfrastruktur (NFDI) e.V., (2023); https://www.nfdi.de/wp-content/uploads/2023/05/ELSA-Stellungnahme-DGG.pdf

500 See section 2.2.1.1.

501 See section 3.2.1.

502 O. Vettermann & Nationale Forschungsdaten Infrastruktur, Stellungnahme zum Daten-Governance-Gesetz der Sektion ELSA (Ethical, Legal & Social Aspects) des Verein Nationale Forschungsdateninfrastruktur (NFDI) e.V., (2023), p. 1-2.

503 Ibid, p. 2.

504 Ibid, p. 3.

505 https://digital-strategy.ec.europa.eu/en/policies/data-altruism-organisations; https://digital-strategy.ec.europa.eu/en/library/national-competent-bodies-and-authorities-under-data-governance-act on 'national competent bodies and authorities'. https://ec.europa.eu/newsroom/dae/redirection/document/98966

### 2.3.3. Opportunities for researchers and research organisations

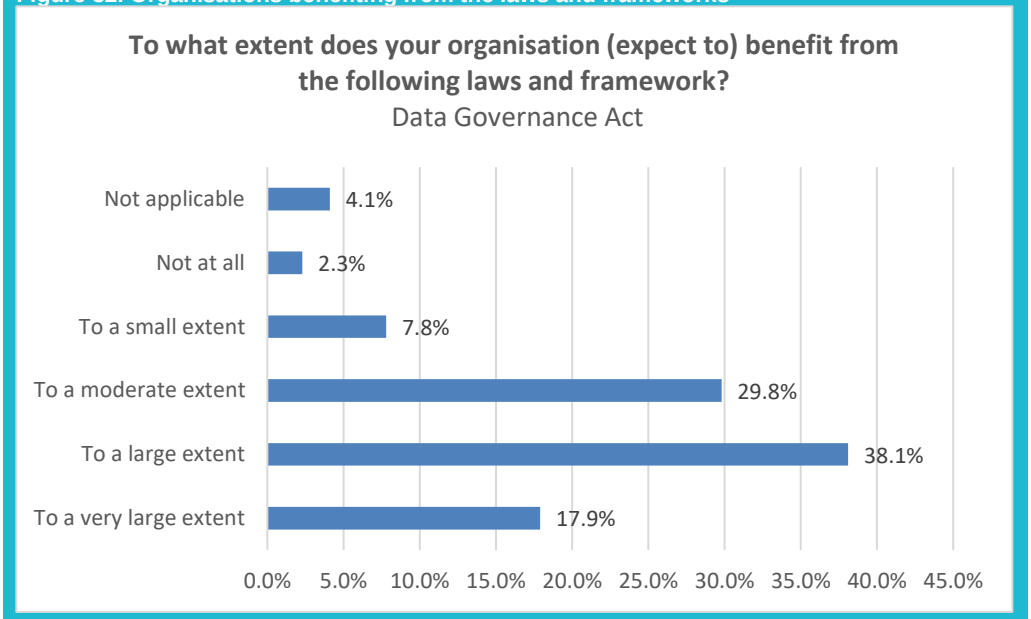
A broad literature review has been conducted to assess the opportunities of the DGA for RPOs and researchers. Frequently, the perspective adopted in the literature is that of RPOs and researchers **as users of data**. There is moderate optimism across different scientific fields that the DGA can improve several issues: (1) improved access to certain categories of protected data held by the public sector, (2) non-profit data altruism has the potential to source personal data for scientific research, and (3) a harmonised EU-wide data altruism consent form can improve EU-wide research collaborations.

*Improved access to PSI*

If more data become available as a result of Article 3 DGA, this will benefit research. The literature highlights the potential benefit of the DGA for improving access and sharing of public sector and research data for various disciplines, such as the language (research) community[506] and public biological databases, to name but a few[507]. The survey underscores the overall positive outlook on the expected benefits of the DGA for the reuse of protected data categories.

In the RPO survey, respondents were asked to what extent they expect to benefit from the DGA. 187 out of the 218 respondents answered they expect to benefit from the DGA to a moderate, large or very large extent (equalling 85.8%)[508].

**Figure 32. Organisations benefiting from the laws and frameworks**




*Source: RPO survey - data legislation part, question 67.*

Altogether 181 RPOs responded to a follow-up question about which aspects of the DGA they deemed beneficial. Little over half indicated expecting a wider availability of public sector data for research purposes as a result of the DGA (51.4%)[509].

506 Kamocki P., et al, 'EU Data Governance Act: Outlining a Potential Role for CLARIN', Selected papers from the CLARIN Annual Conference 2022 https://www.researchgate.net/publication/371457788_EU_Data_Governance_Act_Outlining_a_Potential_Role_for_CLARIN.

507 Bernier A., Busse C. & Bubela T., Public Biological Databases and the *Sui Generis* Database Right. (2023) (54)*IIC*, 1316 https://doi.org/10.1007/s40319-023-01373-0.

508 Question 67 RPO survey – data legislation part (Annex 5 – Synopsis report). Please note that while this question was asked to the 235 respondents who indicated to be affected by the DGA to a 'moderate', 'large' or 'very large' extent in the previous question (question 66), only 218 RPOs responded to the subsequent question 67 as to what extent they expected any benefits from the DGA. 85,8% corresponds to n=218.

509 n = 93, percentage of 51,4% is based on total n = 181, Question 68 RPO survey – data legislation part (Annex 5 – Synopsis report).

*Access to personal data for research from DISs and DAOs*

The literature particularly mentions the opportunity to access personal data for scientific research from data altruism organisations[510]. In particular, the authors note that data altruism organisations "will manage the consent or permission to process personal or impersonal data without seeking a reward, for purposes of general interest, such as scientific research purposes"[511].

Out of the 235 respondents to the RPO survey who expected the DGA to affect their research in the coming years to a moderate or (very) large extent[512], 140 respondents answered a follow-up question on how relevant they deemed the regulation of data altruism organisations for their organisation. 51 respondents deemed the regulation of data altruism organisations relevant to a moderate extent (36.4%), and another 37 to a large (26.4%) and 16 to a very large extent (11.4%)[513].

The expectations voiced in the interviews as regards the benefits of data altruism and the DGA for scientific research have been more tempered. According to one interviewee, data altruism can benefit researchers who lack funding/budget to buy data from stakeholders/industry. However, interviewees noted that the DGA is in many ways ahead of the practice of data sharing in the sense that the DGA presupposes the existence of adequate data sharing infrastructures and the availability of data altruism organisations with varied and large data collections for research. Moreover, the interviewee cautions that the impact of data altruism organisations for scientific research should not be overestimated.

Other (commercial) data intermediation services are relevant insofar as RPOs are re-users of such services[514]. However, this implies being able to pay commercial rates for data intermediation services. For public-private research collaborations, which are exempt from the expanded reuse provisions of the DGA, the launch of a (commercial) data intermediation service could be a possibility. This means that public-private research collaborations that are not governed by the DGA are free to place their research data in a commercial data intermediary service.

*European data altruism consent form for research*

Closely related to (the functioning of) data altruism is the European data altruism consent form as foreseen in Article 25 DGA[515]. Shabani notes that the introduction of a new consent form for sharing data "can be both an opportunity and a challenge for biomedical researchers". She writes how it can both be an extra requirement for data (adding to the already existing requirements), but it may also "ease" data sharing within the EU and the rationale behind the form "seems to align with the goal of empowerment of patients and participants"[516]. The European data altruism consent form has also been lauded by Baloup and others, although the authors also note that "the consent form appears to be simply a(n) obvious means to *comply with* already existing obligations of the GDPR"[517].

510 Jasserand, C., 'Research, the GDPR, and Mega Biometric Training Datasets: Opening the Pandora Box', BIOSIG 2022. Bonn: Gesellschaft für Informatik e.V.. (S. 193-204). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4411452; Lalova-Spinks, Meszaros and Huys, 'The application of data altruism in clinical research through empirical and legal analysis lenses', Front. Med. 10.3389/fmed.2023.1141685; Salazar et al 2023, Shabani 2021; Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023; Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam: September 2023.

511 Salazar et al 2023, p. 3.

512 Question 66 RPO survey – data legislation part (Annex 5 – Synopsis report).

513 Question 72 RPO survey – data legislation part (Annex 5 – Synopsis report).

514 European Commission & Van Eechoud 2022, p. 31, https://data.europa.eu/doi/10.2777/71619

515 See also section 3.1.3.

516 Shabani 2021, p. 2.

517 Baloup and others 2021, p. 40.

Something that also came up during interviews was the severe and various differences within research disciplines and community norms as to what is regarded as ethical or acceptable in terms of openness and reuse of research data. This may differ not only per Member State but also per discipline, university, faculty, or even research group. With that in mind, it can be questioned whether 'one' consent form "in a uniform format" can be realistically expected to be of value and use throughout the whole EU. The DGA seems to recognise this potential concern by stating that the consent form "shall use a modular approach allowing customisation for specific sectors and for different purposes"[518].

Further detailed analysis of the potential of the consent form may be difficult until the adoption of (the) implementing act(s) on the European data altruism consent form. As noted in Section 2.3.1 on data altruism, the Commission plans to adopt the implementing act for the consent form in the third quarter of 2024.

### 2.3.4. Challenges identified

In the literature and interviews, several barriers that the DGA can pose to RPOs and researchers could be identified. Such potential barriers are further discussed below.

*Extended reuse of protected data*

In the literature, there is quite some discussion about the question of whether Chapter II of the DGA covers RPOs and what the limitation in Recital 12 of the DGA implies for the scope of the reuse provisions[519]. The discussion points to a lack of legal certainty if and when the DGA applies to RPOs. The definitions provided in Article 2 (17) and (18) of the DGA, in principle, cover RPOs that are public sector funded or governed by public law. Recital 12 of the DGA formulates exceptions for university libraries and research funding organisations from the DGA Chapter II, which are not binding laws. Of note, recitals merely aid in interpretation; they have "no binding legal force and cannot be relied on as a ground for derogating from the actual provisions of the act in question."[520] Recital 12 of the DGA thus cannot render an authoritative interpretation of Article 2(17) and (18) DGA. Since research data show that RPOs and RFOs are only referred to in recitals and are not dealt with in the actual provisions, it remains unclear when RPOs are covered by Chapter II of the DGA.

The DGA's extended regime for the reuse of PSI has been flagged as incomplete in so far as Recital 12 of the DGA suggests that this Regulation does not cover data held by cultural institutions such as libraries, archives and museums[521]. According to these authors, cultural institutions that are governed by public law should also be covered by the DGA. This critique is also a two-sided sword because, as a result, university libraries would then fall squarely within the scope of application of the DGA. To Klünker and Richter, the DGA is conceptually flawed because it does not cover all types of protected data, only the four special categories of protected data that are listed. Their argument highlights digital sequencing information (DSI), which is subject to a bilateral benefit-sharing mechanism which the DGA does not recognise as a covered category of protected data[522]. They advocate for broadening the DGA's application to all protected data held by PSBs, including where the source of their protection is Member States' domestic regulation or contractual.

At present, the impact of the DGA rules on RPOs seems low, considering that the regulation does not *require* RPOs within its scope to make certain categories of protected data available for reuse. However, the DGA does expect efforts to make 'protected' data suitable for reuse.

518 Article 25(2) DGA.

519 Kamocki et al 2023; Klünker & Richter 2022.

520 CJEU, judgment of 19 November 1998, Case C-162/97 (Nilsson and Others), para. 54, ECLI:EU:C:1998:554.

521 Article 3(2)(c) of the DGA.

522 Klünker & Richter 2022.

By contrast, the ODD only mandates the reuse of data already made public in repositories. From that perspective, the DGA can bring additional burdens for RPOs[523]. Also, Member States' open science policies or RFO grant requirements may go further and require that certain categories of 'protected' data are to be made suitable for reuse (e.g. by making datasets GDRP compliant). It transpired from the interviews that research funding organisations could exert a strong influence on researchers and RPOs, which could potentially turn the DGA into a blueprint for the mandatory release of certain categories of protected data. Some argue that the voluntary approach of the DGA could be hardened into a legal obligation in the next iteration of the legislation[524]; the history of the ODD is a case in point here. As is the case with the ODD, the impact of the DGA on academic freedom at an institutional level (autonomy of the RPO as regards research strategy and administrative management that enables research) has not received particular attention.

The decision to open up certain categories of protected data comes with special compliance obligations not to jeopardise the rights and interests of third parties. Pursuant to Article 5(3) and (4) DGA, covered RPOs deciding to open up their data have to preserve the protected nature of those data and the integrity of the functioning of the technical systems of the secure processing environment used. Non-compliance or data breaches can produce substantial risks of liability under the protective regimes that have been infringed, such as the GDPR and IPR, among others. As a consequence of the legal risks of infringing upon the rights and interests of third parties, RPOs could adopt the most risk-averse strategy and thus refrain from making certain categories of protected data voluntarily available for reuse.

If, however, organisations within the meaning of the DGA decide to allow the reuse of certain categories of protected data, one way to comply with EU and Member States' national law is to set up secure processing environments. One interviewee notes the competence and expertise required to facilitate extended research data sharing and maintain data sharing infrastructures that correspond with the requirements of the DGA. Another commentary stresses significant challenges related to administration and security measures required for adequate DGA compliance[525]. This, moreover, translates into structural funding for maintaining data-sharing infrastructures.

As a means of support, Article 7 DGA provides that EU Member States shall designate competent bodies and empower them to grant access for the reuse of the categories of protected data. The competent body could potentially offer concrete legal, logistical, and technical support to RPOs without however interfering with RPOs' scientific freedoms. The competent bodies could shield RPOs from the risk of liability for infringing the rights and interests of third parties. However, using competent bodies as an intermediary to avoid legal liability may not be facilitating enough to promote voluntary activities by RPOs. This would require an exception from liability for good faith efforts to comply with the DGA requirements.

*Data altruism: need for incentives and data protection compliance*

Although it seems like the European legislator foresees great potential in data altruism for, inter alia, research purposes, two challenges arise when looking at the practical application of data altruism in research. These are (i) concerns related to the lack of incentives for organisations to apply to become an official data altruism organisation under the DGA and (ii) concerns around the protection of personal data while conducting activities within data altruism.

523 European Commission & Van Eechoud 2022, p. 29, https://data.europa.eu/doi/10.2777/71619.

524 Gerritsen 2023.

525 See for a more in-depth description of such challenges: Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, pp. 59-60.

- Need for incentives

First, as mentioned earlier, the registration of data altruism organisations is voluntary. If an organisation decides to officially register in line with Article 19 of the DGA, it must carry out its activities in accordance with this Act. The literature notes that "the DGA does not set any incentives with regard to data altruism organisations"[526]. Gerritsen, for instance, doubts whether organisations already carrying out data altruism activities may actually seek official registration as a data altruism organisation[527]. "[T]he prospect of a label with a logo and subsequent oversight", he notes, may not have enough appeal to set up officially registered data altruism organisations[528]. According to Gerritsen, the DGA even risks being irrelevant in this regard[529]. Similarly, Paseri points out that the benefits of registering as a DAO seem to be quite low, taking into account the several tasks and obligations which she compares to those of the data controller in the GDPR[530]. She adds that DAOs "must also ensure a solid infrastructure system", and she deems "the infrastructure absolutely central" as the DGA's goal is to create 'data pools'. Paseri also notes that the DGA seems to envisage a centralised approach for data management to some extent, which is particularly challenging from a security point of view[531]. Due to this centralisation of data, such DAOs may be highly vulnerable as they can be easily targeted (which is why she notes the EOSC, for instance, is federated and non-centralised)[532].

The incentive structure of the DGA, several interviewees have raised, does not encourage taking the trouble of registering as a data altruism organisation. If anything, the potential fines due to incompliance with the DGA's rules on DAOs may deter organisations from filing an application to become an official DAO under the DGA. Pursuant to Article 34 DGA, Member States shall lay down in their implementing acts of the DGA the rules on penalties for, inter alia, infringements of the conditions for the registration as recognised DAO. Lastly, it could be that the lack of a uniform understanding of what accounts for the purpose of 'general interest', as required by the DGA in order to get approval[533], will have a chilling effect on organisations debating whether or not to act (or use) data altruism organisations[534].

526 Kruesz and Zopf 2021. See also: Gerritsen 2023; RFII 2021; Veil 2022.

527 Gerritsen 2023, pp. 60-61.

528 J. Gerritsen, 'The Data Governance Act (DGA). Modern, Yet Irrelevant?' (English translation of Dutch article: https://legalbeetle.com/wp-content/uploads/Joost-Gerritsen-Legal-Beetle-DGA-modern-yet-irrelevant.pdf) , p. 11. Similarly, Veil notes that "it seems questionable whether such a seal of approval would actually help people already sensitive to data protection overcome their scepticism about donating data", Veil 2022, p. 7.

529 Gerritsen 2023, p. 61.

530 Paseri 2022, p. 211.

531 Paseri 2022, p. 211-212.

532 Paseri 2022, p. 212.

533 This is discussed in section 2.1.3.

534 Finck & Mueller 2023, p. 128. While the authors make this point in the context of data altruism for ecological purposes, the argument could also be relevant for in a broader, general context of organisations considering whether or not to deploy the data altruism mechanisms.

- Data altruism and personal data protection

Frequently, the literature raises the DGA's interface with the GDPR and reflects the ability to improve access to personal data in a GDPR-compliant way. According to Ruohonen and Mickelsson, the DGA further increases the regulatory complexity with regard to personal data processing, particularly in the context of scientific research[535]. On the one hand, it has been noted that the European data altruism consent form would mean an important unification of consent formalities for scientific research purposes across EU Member States and contribute to legal certainty[536]. On the other hand, the literature perceives a challenge "for data altruism consent to fully comply with the GDPR's consent requirements"[537]. The interviews also questioned whether the European data altruism consent form can truly be standardised across disciplines and research purposes. Ruohonen and Mickelsson also note that "it can be challenging for data altruism consent to fully comply with the GDPR's consent requirements as reaching the full potential of data economy requires flexibility in processing activities"[538].

Moreover, it is not clear from the DGA if this consent form can only be used by recognised data altruism organisations or could potentially have a much broader application. Recital 50 of the DGA introduces the uniform European data altruism consent form in connection with recognised data altruism organisations. However, Article 25 of the DGA does not make it a requirement that the uniform consent form can only be used by recognised data altruism organisations. The European Commission's implementing act could open up the European data altruism consent form more broadly for data sharing in the context of scientific research, which adheres to "recognised ethical standards for scientific research"[539].

Apart from the concerns or challenges related to the consent form and the protection of personal data, broader concerns have also been raised by Ruohonen and Mickelsson, who note that there are already efficient algorithms for de-anonymisation and re-identification of data subjects, which they write are only likely to increase in level of advancement, which is why it may be debatable whether the methods the DGA names to protect personal data can prevent breaches of personal data protection[540]. Additionally, they note that national data protection authorities' duties "substantially increase" under the DGA, and it can be questioned whether they will have enough resources and administrative power to conduct their tasks well under the DGA[541].

535 Ruohonen, J., & Mickelsson, S., 'Reflections on the Data Governance Act', Digital Society 2023, vol. 2(1) https://link.springer.com/article/10.1007/s44206-023-00041-7.

536 Shabani 2021.

537 Ruohonen and Mickelsson 2023, p. 10, see also Lalova-Spinks, Meszaros and Huys 2023.

538 Ruohonen and Mickelsson 2023, p. 9.

539 See Recital 50 DGA.

540 Similarily, Druedahl and Kälvemark Sporrong note in the context of patients' perspectives, that "[…] [data] must be sufficiently anonymized so that patients do not risk reidentification (and hence possible discrimination) with both present and future technologies, the latter being, by nature, a challenge as it is unpredictable", Druedahl, L.C., Kälvemark Sporrong, S. (2024). Patient Perspectives on Data Sharing. In: Corrales Compagnucci, M., Minssen, T., Fenwick, M., Aboy, M., Liddell, K. (eds.) The Law and Ethics of Data Sharing in Health Sciences. Perspectives in Law, Business and Innovation. Springer, Singapore. https://doi.org/10.1007/978-981-99-6540-3_4, p. 63.

541 Ruohonen and Mickelsson 2023, p. 6.

Concerns about data protection within the field of healthcare have also been described by Druedahl and Kälvemark Sporrong by focusing on patients' perspectives[542]. They stress how there "seems to be a discrepancy between the currently researched patient perspectives on data sharing and the reality wherein their data are to be shared"[543]. Although there is some knowledge of existing patient concerns around data sharing, most research took place in a "local" context, the authors note, while "the reality of data use is moving towards reuse of data for secondary purposes", such as the forthcoming European Health Data Space and legal privileges for scientific research under the GDPR[544]. The authors tease out the discrepancies between individuals' perceptions and the overall push for secondary reuse of personal data for research purposes.

## 2.4. Digital Services Act

*The content of this Section has been authored collaboratively by Ilaria, Buri.*

The Digital Services Act (DSA), adopted in 2022, aims to harmonise the internal market of intermediary services and to ensure a safe and transparent online environment where people's fundamental rights online are adequately protected[545]. The DSA is currently in the process of being implemented and became fully applicable on 17 February 2024[546].

### 2.4.1. Key aspects

Table 25 provides an overview of the DSA provisions which are most relevant from a research perspective.

542 Druedahl and Kälvemark Sporrong 2024. See also Ruohonen & Mickelsson, noting that "According to some surveys, Europeans have generally positive attitudes toward reuse of their healthcare data, but have still concerns about commercialization, security, and misuse of reused data (Skovgaard et al., 2019). Similar results presumably apply also to voluntary data sharing for not-for-profit purposes.", Ruohonen and Mickelsson 2023, p. 7.

543 Druedahl and Kälvemark Sporrong 2024, p. 64.

544 Ibid.

545 Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act).

546https://www.europarl.europa.eu/RegData/etudes/ATAG/2022/739227/EPRS-AaG-739227-DSA-Application-timeline-FINAL.pdf

**Table 25. An overview of the DSA provisions which are most relevant from a research perspective**

| Provision(s) | Relevance to research |
|---|---|
| **Artt. 3(a), (g)(i)-(iii), (i),** Rec. 5 | Definitions of types of intermediaries: these provisions set out the definitions of 'information society service', 'intermediary service', and 'online platform'. In case (part of) an RPO falls within the definition of one or more of these services, the corresponding obligations also apply to (part of) the respective RPO in their capacity as, e.g. platform. |
| **Art. 40,** Recs. 97, 98 | Data access for researchers: this provision introduces a novel research access mechanism, setting out the procedure and requirements for researchers to obtain access to certain data of Very Large Online Platforms (VLOPs) and Very Large Search Engines (VLOSEs). |
| **Various transparency provisions** | E.g. transparency reporting (Art. 15, 24(1)), terms and conditions (Art. 14), and advertisement repository (Art. 39). This increased transparency can benefit researchers as users of data wishing to obtain information about intermediary services in the scope of application of the DSA. |

*Source: Compiled by the study team.*

The DSA provides a horizontal framework for the regulation of digital intermediary services in the EU. It reaffirms and upgrades the liability regime introduced by its predecessor, the 2000 e-Commerce Directive, for three categories of intermediary services: mere conduit, caching and hosting services[547]. Moreover, the DSA codifies the notice and action mechanisms that hosting service providers must make available to enable users to report the presence of illegal content on their services[548].

However, the crucial innovation of the DSA lies in that it introduces a series of layered due diligence obligations (which apply irrespective of the liability exemptions)[549]. Specifically, the regulation is characterised by a layered "pyramidal" architecture comprised of four horizontal layers of obligations, each applying to different intermediary services[550]. These layers apply cumulatively: while some services are only subject to the bottom layer of obligations, other services will have to comply with all four subsets of obligations.

The first layer of basic obligations (corresponding to the basis of the pyramid) applies to all intermediary services[551]. These obligations include appointing a point of contact for the competent regulators and for the users[552], providing information in their terms and conditions on any content moderation activity they engage in[553], and publishing reports on these same activities at least once per year[554].

547 Articles 4 to 6 DSA.

548 Article 16 DSA.

549 Husovec, Martin and Roche Laguna, Irene, Digital Services Act: A Short Primer (July 5, 2022). Available at SSRN: https://ssrn.com/abstract=4153796 or http://dx.doi.org/10.2139/ssrn.4153796.

550 Wilman, Folkert, The Digital Services Act (DSA) - An Overview (December 16, 2022), p. 3. Available at SSRN: https://ssrn.com/abstract=4304586.

551 Article 3(g) DSA.

552 Articles 11 and 12 DSA.

553 Article 14 DSA.

554 Article 15 DSA.

The second category of due diligence rules applies only to hosting services, which are defined as services involving the storage of information provided by users[555]. These provisions include the obligation to put in place notice and action mechanisms for the notification of illegal content[556], the provision of a statement of the reasons based on which content was restricted[557] and the notification of suspected criminal offences to law enforcement and judicial authorities[558].

The third set of obligations is addressed to 'online platforms', a type of hosting service that not only stores but also disseminates public users' information. Due diligence obligations targeting online platforms include setting up an internal complaint-handling system to enable users' complaints about content restriction decisions[559], informing users about the possibility of out-of-court dispute resolution[560], processing with priority the notifications of illegal content received by "trusted flaggers"[561], transparency reporting on dispute settlement and suspensions for misuse[562], advertising-related transparency and prohibitions[563], recommender system transparency[564], protection of minors[565] as well as additional provisions applicable to e-commerce platforms[566].

The apical layer of obligations exclusively applies to "Very Large Online Platforms" (VLOPs) and "Very Large Online Search Engines" (VLOSEs) with at least 45 million average monthly active users in the EU. These rules include the following key obligations: conducting assessments on the systemic risks associated with the functioning and use of VLOPs/VLOSEs' platform systems; adopting appropriate mitigation measures[567]; submitting to independent audits[568]; making available recommenders not based on profiling[569]; setting up a repository on their interfaces providing information on the advertisements they display[570]; providing researchers with access to data for the identification and understanding of systemic risks (and the impact of the mitigation measures adopted)[571]; publishing additional transparency reports[572] and contributing to the Commission's supervision tasks by paying a fee[573]. While the national authorities (Digital Services Coordinators, "DSCs") are tasked with enforcing the DSA vis-à-vis the companies not qualifying as VLOPs/VLOSEs, the exclusive competence to enforce the rules that are specific to providers of VLOPs and VLOSEs has been centralised in the hands of the Commission[574].

555 Article 3(g)(iii) DSA.

556 Article 16 DSA.

557 Article 17 DSA.

558 Article 18 DSA.

559 Article 20 DSA.

560 Article 21 DSA.

561 Article 22 DSA.

562 Article 24 DSA.

563 Article 26 DSA.

564 Article 27 DSA.

565 Article 28 DSA.

566 Articles 29 to 32 DSA.

567 Articles 34 and 35 DSA.

568 Article 37 DSA.

569 Article 38 DSA.

570 Article 39.

571 Article 40 DSA.

572 Article 42 DSA.

573 Article 43 DSA.

574 On the enforcement structure of the DSA, see I. Buri, J. van Hoboken, The DSA supervision and enforcement architecture, 2022, at https://dsa-observatory.eu/2022/06/24/the-dsa-supervision-and-enforcement-architecture/

In April 2023, the Commission designated 19 platforms as VLOPs and VLOSEs[575]. The designation was followed by the submission, in August, of the platforms' first risk assessments (which will be published in redacted version in the summer of 2024). The designated VLOPs and VLOSEs submitted their first transparency reports (due every 6 months) in October 2023[576], when the Commission also launched the transparency database on statements of reasons established under Article 24(5)[577]. In December 2023, the Commission designated three additional platforms as VLOPs[578].

### 2.4.2. Relevant provisions for researchers and RPOs and the rights and obligations provided therein

In order to explore the impact of the DSA on RPOs and researchers – and to highlight relevant opportunities and/or challenges, including in terms of compliance burdens – a preliminary distinction is needed as to the role of RPOs vis-à-vis the digital services employed in the context of their activities, to the extent these might be characterised as intermediary services (as such, falling within the scope of the DSA). This distinction concerns, on the one hand, the use of third-party intermediary services by RPOs and researchers and, on the other hand, the provision of services — which could be qualified as intermediary services – by the same RPOs[579].

In the course of their activities, RPOs use a multitude of third-party services, such as internet connectivity services, hosting services, educational and collaborative tools, and productivity platforms[580]. However, in some cases, RPOs may also offer themselves services which might be construed as intermediary services. This could be the case, for instance, for repositories, discussion forums, and virtual classroom software[581].

As regards, in particular, the analysis of the opportunities that the DSA offers to RPOs and researchers, it can be observed that most of the DSA transparency provisions present relevance from a data access angle. From a research perspective, Article 40 DSA – which introduces a novel data access regime specifically dedicated to researchers – emerges as the most prominent provision in the DSA transparency toolbox. The research access mechanism under Article 40 DSA, however, does not exhaust the data access potential of the DSA, as a variety of other DSA transparency rules discussed further in the text – e.g. the transparency reports and the public database on the statements of reasons – feature data-generating elements which are of potential interest for researchers and RPOs.

#### *Applicability of the DSA to RPOs as providers of intermediary services*

The DSA does not foresee specific rules (or exemptions) for RPOs and for the intermediary services that they might provide in the course of their activities[582]. RPOs can differ in their legal status and organisation. At the same time, the services they might provide in the context of their research and education remit are also very diverse and can include, for instance, research repositories, video-conferencing, and virtual classroom services. Whether the DSA applies to a certain RPO's activity will thus require a case-by-case assessment.

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575 https://digital-strategy.ec.europa.eu/en/policies/dsa-vlops. Two of these platforms, Zalando and Amazon, challenged their designation as VLOPs.

576 https://digital-strategy.ec.europa.eu/en/news/very-large-online-platforms-and-search-engines-publish-first-transparency-reports-under-dsa

577 https://transparency.dsa.ec.europa.eu/statement. The analytics function of the database shows that in the first 30 days of operation, the database received over 600 million statement of reasons.

578 https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6763

579 An analogous distinction is adopted in the study on digital sovereignty recently carried out at the University of Amsterdam, Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 49-52.

580 LERU, Observations and recommendations, Possible impact of EU data and digital legislation on research, June 2022, https://www.leru.org/files/Possible-impact-of-EU-data-and-digital-legislation-on-research-EC-Workshop-20-June-2022_LERU-statement.pdf

581 Ibidem.

582 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 51-52.

Article 2 DSA defines the scope of application of the regulation, which is limited to intermediary services. Therefore, a specific RPO-provided service will fall in the scope of application of the DSA if it meets the definition of intermediary services, which can only be determined through a case-by-case analysis, having due consideration for the specific features of the service at issue.

Intermediary services are defined by Article 3(f) DSA as information society services which can be qualified either as "mere conduit", "caching", or "hosting" services. According to Article 3(a) DSA, which recalls the definition laid down by Article 1(1)(b) of the Directive (EU) 2015/1535[583], an information society service is to be understood as "any service normally provided for remuneration, at a distance, by electronic means and at the individual request of a recipient of services".

When looking at RPOs' activities, it must be emphasised that substantial differences exist not only among different typologies of services but also within a seemingly homogeneous category of services. This is the case, for example, with the repositories for publications and other research outputs such as datasets. Some research repositories are only accessible to the researchers affiliated with the RPO providing the service, while others are open to researchers from different institutions. Moreover, some of these research repositories are run by not-for-profit organisations, while other services follow a commercial scheme. By focusing on these features – and with no ambition of outlining an exhaustive categorisation of the types of repositories that RPOs might be providing – we can identify different typologies of repository services.

One can distinguish institutional repositories where only researchers who are affiliated with the specific RPO upload their publications and data. In doing so, affiliated researchers also fulfil reporting requirements vis-à-vis their institutions and contribute to open science and open research data goals. Of note, a university might procure existing commercial research management information systems such as Elsevier's 'Pure' system[584] or the 'figshare' repository[585] (thereby acting as a user of third-parties services, as discussed in the next Section 2.4.2).

However, there are also thematic (domain-oriented) repositories that cater to content and data from researchers active in a particular discipline or research network. Contributing researchers are then typically affiliated with a variety of RPOs and from different EU member states and beyond. Some repositories operate as a unit of a non-profit public sector research organisation but are run on a cost-recovery basis. These repositories rely on participating organisations and researchers to guarantee scientific quality standards. Examples are Data Archiving and Network Services (DANS) run by the Royal Netherlands Academy of Arts and Sciences (KNAW) in the Netherlands[586], SSOAR maintained by the Leibniz Institute for the Social Sciences in Germany[587] and NOMAD for materials research, which is part of a joint initiative by research institutions and funders from various countries[588]. Yet another type of repositories is run on a commercial basis, such as the Social Science Research Network (SSRN) for publications, which is owned by Elsevier[589].

583 Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification)

584 https://www.elsevier.com/products/pure

585 https://figshare.com/

586 https://pure.knaw.nl/portal/en/organisations/dans-knaw

587 https://www.ssoar.info/ssoar/

588 https://nomad-lab.eu/nomad-lab/index.html

589 https://www.ssrn.com/index.cfm/en/

In many cases, services run by RPOs will be on a non-profit basis. However, this does not necessarily mean they fall outside of the scope of the DSA. This is because the requirement that the service be "normally provided for remuneration" has been broadly interpreted by the CJEU in its case law as an element reflecting the economic nature of the activity carried out by the service provider[590]. Hence, the relevant question is whether the particular service – independently from the payment of a fee by the user – can be qualified as an "economic activity".

A separate set of questions concerns whether the activities engaged in by public entities can be qualified as "economic activities". As clarified by the CJEU on matters of competition law[591], an activity cannot be construed as an "economic activity" when it is provided by a public entity in the exercise of its public powers[592]. These considerations appear relevant to determine the status of public bodies' RPOs and their activities under the DSA, as they might have an impact on whether such activities can be deemed to fall within the scope of application of the DSA. Arguably, where, e.g. a repository service provided by a public body RPO could be understood to be part of its legally defined public tasks, there would be no "economic activity", and the service would therefore not qualify as an "information society service".

Against this rather complex background – and given the fact that the final text of the DSA does not include any explicit exemption for RPOs – evaluating the nature of the RPOs and their activities is crucial to understanding under which category of obligations they would fall under the DSA. In the cases in which the DSA rules would apply to RPOs as service providers, the latter would be subject to the provisions laid down by the DSA for providers of intermediary services, hosting services or online platforms. In light of the threshold established for VLOPs, it seems safe to exclude that services provided by RPOs could be qualified as such and, therefore, be subject to the most stringent layer of due diligence obligations under the DSA.

Where an RPO-provided service would be qualified as a hosting service, the RPO would have to comply – among other rules – with the DSA obligations relating to the notice and action mechanism and statement of reasons. However, where an RPO-provided service would meet the DSA definition of the online platform, additional rules would apply to the RPO, including – among others – the obligations on internal complaint handling, out-of-court dispute settlement, trusted flaggers and reporting. In most cases, however, RPOs would probably not meet the threshold established under Article 19 DSA (exclusion for micro and small enterprises) to qualify as online platforms[593].

In conclusion, when it comes to the impact of the DSA on RPOs as providers of intermediary services, it must be emphasised that both the RPOs and the (intermediary) services they might offer can display very different natures and characteristics. Case-by-case assessments are therefore needed to determine the status of a particular RPO activity under the DSA.

590 Case C-291/13 Papasavvas; Case C-484/14 McFadden. See also the specification included in Recital 18 of the 2000 e-Commerce directive.

591 Case C-138/11, Compass-Datenbank v. Austria. See also European Commission, Directorate-General for Research and Innovation, Lundqvist, B., Study on the Digital Services Act and Digital Markets Act and their possible impact on research, Publications Office of the European Union, 2022, p. 8-9, https://data.europa.eu/doi/10.2777/751853

592 Case C-138/11 Compass-Datenbank v. Austria, para 36.

593 If firms offer the technical function, but do not have 50 employees or an annual turnover of 10 million euros, they will not be regulated as online platforms. See M. Husovec, The DSA's Scope Briefly Explained, p. 2, available at https://ssrn.com/abstract=4365029.

The status of universities – in most cases, publicly funded public bodies – deserves particular attention from a DSA compliance perspective, as it is not always easy to determine whether their activities are an expression of their tasks as defined under public law, which would exclude the existence of economic activity. Therefore, some elements of uncertainty remain as to the status of some RPOs (particularly universities) as potential providers of information society services under the DSA. Additional research on the nature and features of RPOs' activities and services could greatly benefit these (potentially complex) evaluations and help define the most appropriate DSA compliance strategy.

*RPOs as users of services subject to DSA*

RPOs use a variety of third-party online services to perform their institutional mission. As the service providers are subject to DSA rules (and other legislative frameworks, including DMA, which might in various ways impact their organisation and business), it is possible to imagine that RPOs might face higher costs in their contracts with the service providers, due to the compliance burden incurred into by the companies.

The new DSA rules could also be reflected in the contracts between the RPOs and the providers. In this regard, RPOs might need to adapt their internal guidelines on the safe and appropriate use of the services by their staff, students, and third parties.

*DSA rules relevant from a data access perspective*

Several DSA provisions are relevant for researchers and RPOs as they envisage some form of access to data.

A research project on "Information Law and the Digital Transformation of the University" recently carried out by the Institute for Information Law (IViR) at the University of Amsterdam explored questions relating to the application of the DSA – among other legal frameworks – to universities and researchers[594]. The IViR study finds that several DSA transparency provisions are interesting from a data access perspective, as they target, at different levels, both system-level data (relevant to understanding the functioning of online platforms and search engines) and individual-level data (relevant to gaining insights on the individual's use of the platform).

Examples of potentially relevant DSA transparency rules providing for individual-level data, which could positively impact researchers and RPOs include, e.g. Article 17, which requires hosting services to provide their users with "a clear and specific statement of reasons" when they impose restrictions on content, and Article 20(5), which requires providers to inform users who submitted an internal complaint of their "reasoned decision" on the complaint[595].

594 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam: September 2023, p. 67-68.

595 Ibidem, p. 67. Online platforms must submit these statements of reasons to the publicly accessible machine-readable database managed by the European Commission (laid down in Article 24(5)), which collects anonymised versions of the statements of reasons. As the database allows for insights into the content moderation activities engaged in by the platforms, and related analytics, this provision can be considered as enabling access on system-level data.

Moreover, DSA transparency provisions which could enable researchers to understand system-level data include the following:[596]

- Article 40(4) DSA, which introduced the possibility for vetted researchers to access the data of VLOPs and VLOSEs, is limited to research aimed at identifying and analysing systemic societal risks and the adequacy and effects of the mitigating measures adopted by the platforms. In addition, Article 40(12) requires that VLOPs and VLOSEs allow researchers – i.e. including those affiliated to not-for-profit bodies, organisations and associations – to access data that is "publicly accessible in their online interface", again, for the sole purpose of researching systemic risks. In contrast to non-publicly accessible data, access to publicly accessible data under Article 40(12) is provided directly, without the intervention of a national regulatory authority. Given the particular relevance and innovative character of this provision – the only one in the legal frameworks analysed in this study that provides for a specific access regime for RPO researchers – Article 40 will be analysed in more detail in the following Section.

- Article 14(1) DSA on terms and conditions, requiring intermediary services to include information on any restrictions they impose in respect of content provided by users in their contractual terms.

- Articles 15 and 24(1) DSA on transparency reports, prescribing that intermediary services and online platforms publish reports on the content moderation activities they carry out.

- Article 42(4) DSA on VLOPs' transparency reporting obliges VLOPs to publish reports in which they describe the outcome of their systemic risk assessments, the mitigating measures adopted, as well as the audit report and the related implementation report.

- Article 39 on additional advertising transparency, requiring VLOPs to create a publicly available ad library, i.e. a repository on their interface providing information on the advertisements they display or have displayed in the last year.

Other DSA transparency provisions which can be considered relevant from a data access perspective, as they complement the ones listed above, are, in particular, the following:

Article 21(4) DSA on reports by DSCs on the functioning of out-of-court dispute settlement bodies;

- Article 23(4) DSA on measures and protection against misuse;
- Article 22(3)(4)(5) DSA on trusted flaggers and reports;
- Article 26(1) DSA on advertising on online platforms;
- Article 27(1)(3) DSA on recommender systems transparency;
- Article 28(1) DSA on protection of minors;
- Article 33(6) DSA on reporting obligations relating to providers of VLOPs and VLOSEs;
- Article 35(2) DSA on the publication of comprehensive yearly reports by the Commission, covering the identification and assessment of the most important systemic risks reported by VLOPs and VLOSEs;
- Article 45(3)(4) DSA on codes of conduct;

596 Ibidem.

- Article 48(4)(f) DSA on crisis protocols and the process to publicly report on any measures taken during the situation of crisis;

Article 55 DSA on DSC's activity reports;

- Article 80(1) DSA on publication of enforcement decision by the Commission.

### Access to platform data for researchers

As highlighted earlier in this report, the DSA provision of most immediate and specific relevance for researchers and RPOs is Article 40, which introduces a novel form of access to platform data for researchers[597].

Since the publication of the DSA proposal and given its innovative character, the research access regime introduced by the DSA has attracted a great deal of attention from experts. In particular, scholars and civil society organisations started discussing several aspects of the access regime established by Article 40 DSA, exploring its scope, potential, practical operationalisation, expected results and possible shortcomings[598].

Specifically, Article 40(4) requires VLOPs and VLOSEs, following a request from the DSC of establishment, to grant access to their platforms to "vetted researchers" who satisfy a series of requirements and whose research is aimed at (i) identifying and understanding the systemic societal risks set out in Article 34 DSA, and (ii) assessing the effectiveness and impact of the measures adopted to mitigate them. The categories of systemic risks which are relevant for the purposes of research access under Article 40(4) DSA are the following: (i) dissemination of illegal content; (ii) negative effect on the exercise of fundamental rights; (iii) negative effects on civic discourse, electoral processes or public security; and (iv) negative effects in relation to gender-based violence, physical and mental health and the protection of public health and minors[599].

Following an access request by the competent authority, platforms have 15 days to demand an amendment of the request if they consider that (i) they do not have access to the data, (ii) giving access to the data would lead to significant vulnerabilities in terms of information security or the protection of confidential information (such as trade secrets)[600]. In such cases, the VLOP/VLOSE must propose one or more alternative solutions that would ensure access to data in a way that is sufficient for the research in question[601]. The establishment's DSC issues a final decision on the amendment request.

597 See also: Van Drunen & Noroozian 2024.

598 See Vermeulen, M. (2022). Researcher Access to Platform Data: European Developments. Journal of Online Trust and Safety, 1(4); Edelson, Laura; Graef, Inge & Lancieri, Filippo. "Access to Data and Algorithms: For an Effective DMA and DSA Implementation" (CERRE, March 2023), available at https://cerre.eu/publications/access-to-data-and-algorithms-for-an-effective-dma-and-dsa-implementation; Darius, P., Stockmann, D., Bryson, J., Cingolani, L., Griffin, R., Hammerschmid, G., Kupi, M., Mones, H., Munzert, S., Riordan, R. and Stockreiter, S., 2023. Implementing Data Access of the Digital Services Act: Collaboration of European Digital Service Coordinators and Researchers in Building Strong Oversight over Social Media Platforms, accessible at: https://opus4.kobv.de/opus4-hsog/frontdoor/deliver/index/docId/4947/file/Implementing_Data_Access_Darius_Stockmann_2023.pdf; Tromble, R. (2021). Where Have All the Data Gone? A Critical Reflection on Academic Digital Research in the Post-API Age. Social Media + Society, 7(1); de Vreese, C. and Tromble, R., 2023. The Data Abyss: How lack of data access leaves research and society in the dark. Political Communication, pp.1-5; Leerssen, P., Heldt, A., & Kettemann, M. C. (2023). Scraping by? Europe's law and policy on social media research access. InC. Strippel, S. Paasch-Colberg, M. Emmer, & J. Trebbe (Eds.), Challenges and perspectives of hate speech research (pp. 405–425). Digital Communication Research; Dergacheva, Daria and Katzenbach, Christian and Schwemer, Sebastian Felix and Quintais, João Pedro, Improving Data Access for Researchers in the Digital Services Act (June 1, 2023). Available at SSRN: https://ssrn.com/abstract=4465846 or http://dx.doi.org/10.2139/ssrn.4465846.

599 Recital 79-83; Article 34 DSA.

600 Article 40(5).

601 Article 40(6).

In order to become vetted, researchers must demonstrate that they meet all the conditions listed under Article 40(8). First, as required by Article 40(8)(a) DSA, they must be affiliated with a research organisation within the meaning of Article 2 of the CDSM directive. This definition includes universities, research institutes, or any other entity that has a primary goal of conducting scientific research or carrying out educational activities that also involve scientific research. Moreover, these organisations must also: (i) be not-for-profit entities or reinvest all profits in scientific research; (ii) pursue a public interest mission recognised by a Member State; and (iii) not directly promote the interests of an undertaking that influences such organisation[602].

Applicant researchers must meet all of the following requirements to be vetted by the DSC of establishment:

I. They must be independent of commercial interests, and specific application requests must clearly disclose sources of funding (Article 40(8)(b)(c) DSA) ;

II. They must show that they can maintain data security and meet confidentiality requirements and describe in detail appropriate technical and organisational measures to achieve these goals (Article 40(8)(d) DSA);

III. They must justify the necessity and proportionality of a given request, as well as how the results will contribute to the detection, identification, understanding and mitigation of systemic risks (Article 40(8)(e) DSA); and

IV. They must commit to making the results of the research available free of charge within a reasonable period (Article 40(8)(g) DSA).

Researchers may also file access requests with the DSC of the Member State of the research organisation they are affiliated with. This DSC conducts an initial assessment and, upon approval, sends the application and supporting documents to the establishment's DSC. Only the establishment DSC has the competency to make the final decisions[603].

In addition, Article 40(12) mandates VLOPs and VLOSEs to make accessible to researchers – including those affiliated with not-for-profit bodies, organisations and associations – data which is already “publicly accessible in their online interface” to be used for the purpose of researching systemic risks. Contributions to the Commission’s public consultation on Article 40 DSA (discussed further in this Section) have argued that Article 40(12) DSA should be intended as allowing the practice of web scraping on VLOPs and VLOSEs and that the legal status of web scraping should at least be clarified, given its importance for research.

The Commission is to adopt, later in 2024, a delegated regulation to detail the technical conditions of access to platforms' data. The delegated regulation will specify, in particular, relevant procedures and indicators and the conditions to realise access in compliance with data protection rules and in a way which takes into account the rights and interests of the platforms (notably, their confidentiality and security concerns).

602 Article 40(8)(a) DSA.

603 Article 40(9) DSA.

In the spring of 2023, the Commission launched a public consultation, which ran from 25 April 2023 until 31 May 2023[604]. Specifically, the consultation invited submissions on a variety of questions clustered around four main areas: data access needs, data access application and procedure, data access formats and involvement of researchers, and access to publicly available data[605].

The consultation's responses (a total of 133 submissions) are a valuable resource to understand how the research community, and specifically RPOs and researchers – as well as other stakeholders, such as regulators and industry – approach the potential, scope and operationalisation of the data access regime devised under Article 40 DSA. Moreover, as the contributions to the consultation will inform the drafting of the Commission's delegate regulation, the analysis of the consultation responses is also helpful in assessing which types of suggestions – and from which types of stakeholders – will have been incorporated into the delegated act.

The consultation sought contributions from stakeholders on a variety of questions, ranging from data access needs to data access applications and procedures, data access formats and involvement of researchers, as well as access to publicly available data.

In November 2023, the Commission published a summary report on the call for evidence on the delegated regulation on data access[606]. The report discusses the consultation responses (categorised around the consultation's questions listed above) and presents the main findings of the consultation. The consultation analysis and the underlying submissions and references are important resources for investigating how RPOs and researchers perceive their research needs, priorities, and possible obstacles to making use of Article 40. Understanding these elements is key to realising the full potential of Article 40 – where ideally, researchers can harness this mechanism to fulfil their institutional role, inform the societal debate and contribute to the enforcement of the regulation.

The report provides an overview of the type of stakeholders who responded to the consultation: academic/research institutions – 32.33%, EU citizens – 24.06%, NGOs – 21.8%, non-EU citizens – 6.77%, company/businesses – 5.26%, others – 3.76%, business associations – 3.76%, public authority – 2.26%[607].

With regard to data needs and analysis methodologies, the responses display great diversity in relation to the following thematic categories: content and metadata, recommendations, ad-targeting and profiling, and content moderation and governance aspects[608]. The analysis also shows that the respondents broadly support tools, APIs and infrastructures to carry out research, as well as independent collection methods (e.g. scraping and adversarial sock puppet auditing)[609].

604 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13817-Delegated-Regulation-on-data-access-provided-for-in-the-Digital-Services-Act_en

605 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13817-Delegated-Regulation-on-data-access-provided-for-in-the-Digital-Services-Act/feedback_en?p_id=32045757

606 P. Leerssen, Call for evidence on the Delegated Regulation on data access provided for in the Digital Services Act – Summary and Analysis, 2023, available at: https://digital-strategy.ec.europa.eu/en/library/digital-services-act-summary-report-call-evidence-delegated-regulation-data-access

607 Ibidem, p. 2.

608 Ibidem, p. 4

609 Ibidem, p. 5 and Section 4.

On the question of vetting applications and procedures, the consultation summary shows that researchers have concerns about timeliness in the procedure, funding and the preservation of the autonomy of academic research[610]. To protect academic freedom, researchers emphasised the importance of independent peer review of the access applications by an independent advisory mechanism, which would also ensure expertise on questions of methodology and research ethics[611]. Respondents also suggested measures to standardise vetting application forms, data access agreements, and non-disclosure agreements[612]. With regard to the affiliation requirement under Article 40(8)(a), a considerable number of submissions deal with questions of eligibility of non-university researchers and non-EU organisations and researchers[613].

As to the technical and legal safeguards that could help minimise risks and balance data access with users' and businesses' rights, many respondents engaged in detail with questions about data protection and privacy[614]. Among other measures, they refer to anonymisation/pseudonymisation, privacy-enhancing technologies, clean rooms, data vaults, and data access agreements[615]. Stakeholders are engaged less in questions of confidentiality/trade secrets, where proposed solutions are mostly centred on NDAs and on security as grounds to refuse access[616]. On the question of how to interpret and enforce research purposes, researchers' submissions highlight the importance of exploratory research in studying platform ecosystems[617].

With regard to the involvement of researchers in the process and possible capacity building measures for the research community, the solutions identified in the responses include the following: ensuring adequate staffing at DSCs; remunerating peer review activities; establishing dedicated funding schemes ("DSA research grants"); appointing dedicated points of contact at VLOPs and VLOSEs; and creating knowledge-sharing events, workshop and networks[618].

Finally, on Article 40(12) and public data, several contributions highlight current uncertainties around the definition of "publicly available data" and the procedures to exercise access rights. Many submissions also stress the importance of protecting methods for the independent collection of data (notably through data scraping) and refer to CrowdTangle as the most relevant established practice in the field[619].

In conclusion, it is clear that the actual impact of Article 40 DSA – arguably the most relevant and potentially generative DSA provision from a data access perspective and a unicum throughout the legal frameworks analysed in this study – will depend on its implementation in practice notably on the definition of the possible scope of access and the balancing of access needs and requests with competing interests. The delegated regulation that the Commission is currently drafting to operationalise research access under Article 40 will be crucial in this regard.

610 Ibidem, p. 11-12.

611 Ibidem, p. 12.

612 Ibidem, p. 15-16.

613 Ibidem, p. 15.

614 Ibidem, p. 17. In this regard, the most relevant guidance, also referred to by many other submissions, is EDMO's report for a Code of Conduct on research access; see EDMO, Report of the European digital Media Observatory's Working Group on Platform-to-Researcher Data Access, 2022, available at https://edmo.eu/wp-content/uploads/2022/02/Report-of-the-European-Digital-Media-Observatorys-Working-Group-on-Platform-to-Researcher-Data-Access-2022.pdf

615 Ibidem, p. 17-19.

616 Ibidem, p. 19.

617 Ibidem, p. 21.

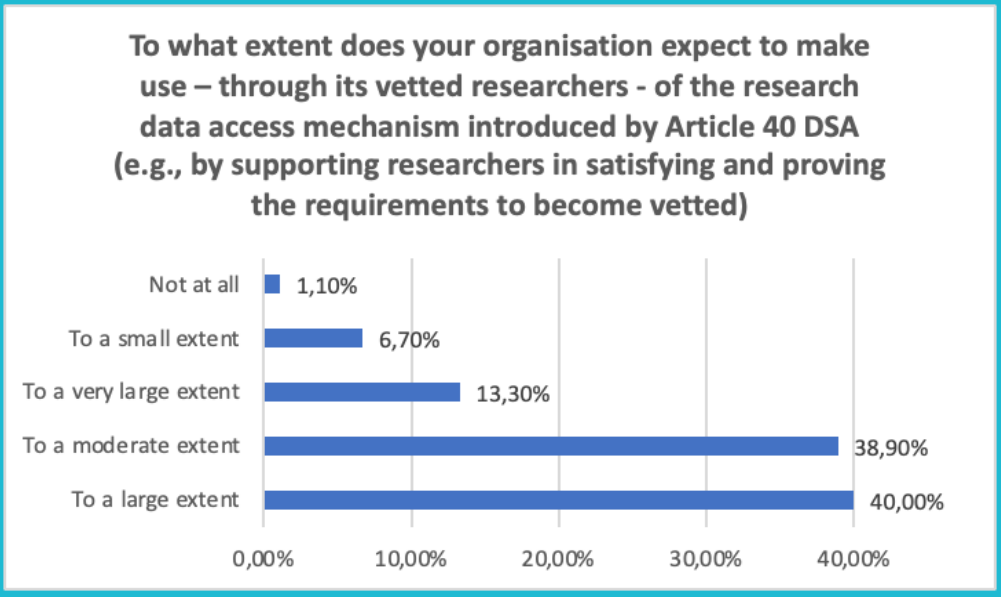
618 Ibidem, p. 26-27.

619 Ibidem, p. 28-32.

In any case, the practical impact of Article 40 on research access will have to be assessed when the mechanism becomes applicable and operative, after the designation of all DSCs and once the Commission has finalised the delegated act on access.

Given the relevance of Article 40 DSA for the set of questions investigated in this study, the RPO survey carried out included a specific question on Article 40 DSA, asking RPOs to what extent they expect to make use of Article 40 through their vetted researchers (e,g, by supporting them in preparing their application and proving the requirements to be vetted)[620]. Out of 90 respondents, an overwhelming majority (92.2%) indicated they expect to make use of Article 40's access regime either "to a large extent" (40%), "to a moderate extent" (38.9%), or "to a very large extent" (13.3%). A minority of the respondents (6.7%) reported they expect to make use of Article 40 DSA "to a small extent" and not at all (1.1%).

**Figure 33. Use of data access mechanism**




*Source: RPO survey - data legislation part, question 73.*

### 2.4.3. Benefiting from the DSA: opportunities for researchers and research organisations

As discussed in the previous Sections, most of the transparency provisions and data-generating mechanisms included in the DSA are of potential interest to researchers and RPOs. Among these, research access under Article 40 DSA stands out as the most impactful and innovative provision from a research and data access perspective. Much of its actual impact will depend on how this access mechanism is implemented in practice and on how the upcoming Commission's delegated act and regulators approach, among other aspects, crucial questions of balancing competing interests when assessing access requests.

620 Question 73 RPOs survey – data legislation part (Annex 5 – Synopsis report).

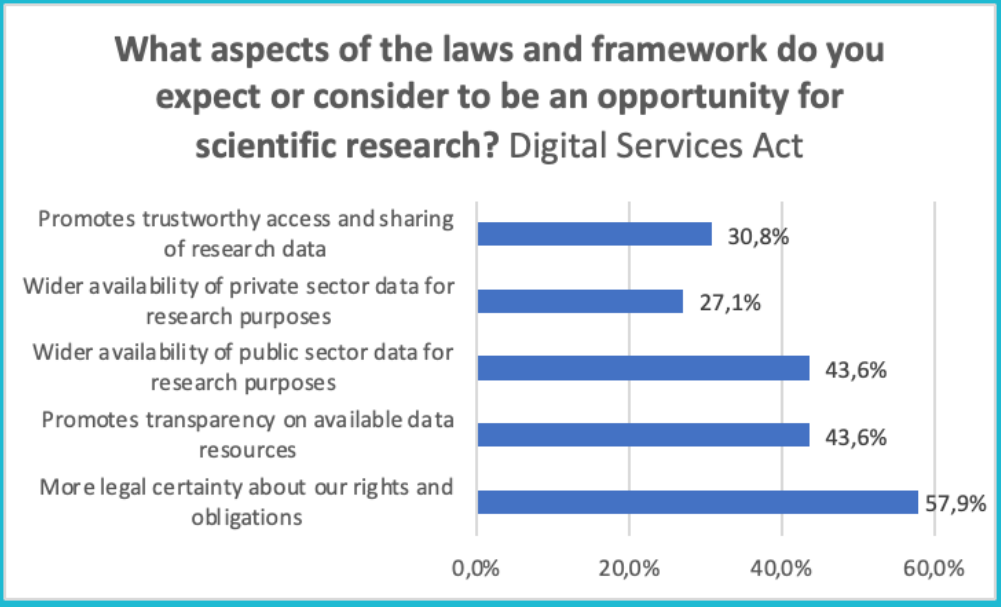
In addition to research access, significant opportunities for researchers could stem from the data-generating schemes envisaged under the DSA transparency rules, e.g. the transparency reports, the transparency database established under Article 24(5) and the advertising repositories under Article 39.

On the question of how the DSA will impact research at their organisation[621], 72.7% of the 220 respondents indicate the expected impact of the DSA as either moderate, large or very large. 14.5% of the respondents anticipate the impact of the DSA on research to be small, while 4.5% expect that the DSA will leave research at their organisation unaffected. Finally, 8.2% consider the question as not applicable to their organisation.

Regarding the extent to which they expect to benefit from the DSA[622], out of the 184 respondents, 75% indicated the expected opportunities as either moderate, large or very large. Benefits are expected to be small by 13% of the respondents and none by 3.8%, while 8.2% of surveyed RPOs consider that the question does not apply to their organisation.

Specifically, on which aspects of the DSA they expect to provide opportunities for scientific research[623], out of 133 respondents, more than half (57.9%) indicate increased certainty about rights and obligations as the main aspect of advantage of the legislation. The wider availability of private sector data for research purposes and the wider availability of public sector data for research purposes are indicated as equally relevant in terms of possible benefits stemming from the DSA (43.6%). Finally, 30.8% of the respondents consider the DSA to be an opportunity for the promotion of trustworthy access and sharing of research data, and 27.1% expect that the DSA will improve the availability of private sector data for research purposes.

**Figure 34. Laws and frameworks as an opportunity for scientific research**




*Source: RPO survey - data legislation part, question 68.*

621 Question 66 RPOs survey – data legislation part (Annex 5 – Synopsis report).

622 Question 67 RPOs survey – data legislation part (Annex 5 – Synopsis report).

623 Question 68 of the RPOs survey – data legislation part (Annex 5 – Synopsis report).

### 2.4.4. Challenges identified

At the same time, the DSA also poses some complex questions for RPOs, as they are confronted with elements of legal uncertainty about how they relate to the scope of application of the DSA and possible direct and indirect financial burdens.

As discussed in Section 2.4.2, the question of how the DSA applies to RPOs as potential service providers remains characterised by some aspects of uncertainty. This complexity, combined with the financial and organisational burdens of compliance, might incentivise the RPOs to further outsource their services. This could entail other costs and potential lock-in risks as RPOs become ever more reliant on powerful technology providers. There may be a broader impact on the institutional autonomy of RPOs that academic freedom seeks to protect (see Section 2.2.4), and especially on so-called "digital sovereignty"[624]. To mitigate the impact of legal uncertainty on RPOs, clarifications and guidance from regulators and policymakers would be helpful.

Moreover, as regards the position of RPOs as users of third-party intermediary services, it could be that higher compliance costs on the providers/vendors' side will present RPOs with increased costs of contracting services.

With regard to Article 40 DSA, arguably the most relevant and potentially generative provision from a data access perspective, possible challenges for researchers and RPOs in accessing data could derive from the practical implementation of this access regime (with particular regard to the scope of access; balancing of the interest in accessing data with competing interests, notably confidentiality and trade secrets, and data security; proving the existence of the requirements to become vetted researchers). Van Drunen and Noroozian argue that due to the general lack of insight into available data from platforms, researchers may first need to submit "relatively broad data access requests that allow them to obtain an overview of the available data" and "progressively formulate more specific research questions"[625]. They note that if multiple researchers formulate such broad requests, this may create "significant redundancy, especially if each request must be vetted by the DSC where the platform is established"[626]. Transparency about the data access regime itself is therefore deemed necessary and to be regarded as a precondition[627].The upcoming Commission delegated act on Article 40 DSA (particularly the way it will detail technical conditions of access and balance different and conflicting interests) will be very important to making a further evaluation of the potential limits of Article 40 DSA's access regime or of any obstacles in making use of this tool.

With regard to the challenges (e.g. compliance costs, restrictions to freedom to manage research data) posed by the DSA to their organisation[628], out of the 179 respondents, 63.1% expect the extent to which DSA-related challenges will affect them as moderate, large and very large, whereas 16.2% of respondents report the expected impact as small. The rate of RPOs that consider DSA-related challenges to be relevant to "a very large extent" or "not at all" is almost the same, 7.8% and 7.3%, respectively. Finally, 13.4% of the surveyed RPOs indicated the question of challenges as "not applicable" to them.

624 For a comprehensive analysis, see Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023.

625 M. Z. van Drunen, A. Noroozian, How to design data access for researchers: a legal and software development perspective, Computer Law and Security Review, Volume 52, April 2024, https://doi.org/10.1016/j.clsr.2024.105946, p. 13.

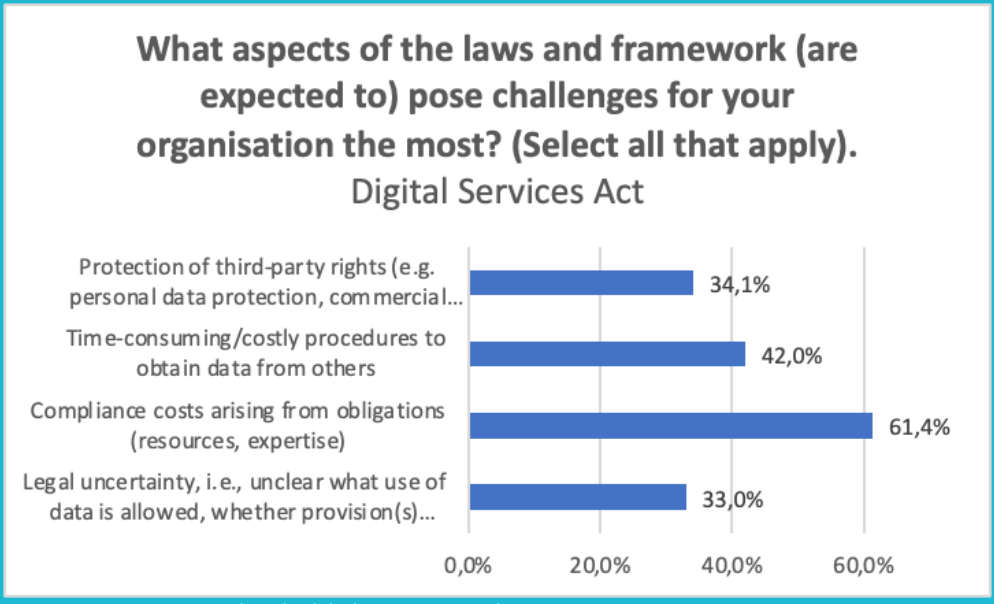
626 Ibidem

627 Ibidem , p. 12.

628 Question 69 RPO survey – data legislation part (Annex 5 – Synopsis report).

On which specific aspect of the regulation they expect to pose most challenges to the organisation[629], out of the 88 respondents, 61.4% indicate compliance costs (resource, expertise) as the most relevant source of challenges (61.4% of respondents), followed by time-consuming or costly procedures to obtain data from others (42% of respondents), while questions of legal uncertainty and protection of third-party rights are perceived as almost equally relevant in terms of DSA-related challenges (respectively, 33% and 34.1% of respondents).

**Figure 35. Laws and framework posing challenges**




*Source: RPO survey - data legislation part, question 69.*

## 2.5. Digital Markets Act

*The content of this Section has been authored by Ilaria, Buri.*

The Digital Markets Act[630] is a 2022 EU regulation that aims to make markets in the digital sector – characterised by the presence of gatekeepers – fairer and more contestable[631]. As set out by Article 1(2) DMA, the regulation applies to "core platform services provided or offered by gatekeepers to business users […] or end users [..]" in the EU. Under the DMA, gatekeepers are subject to a series of obligations which can be characterised as *ex ante* pro-competitive measures.

As illustrated further in this Section, the DMA is mainly relevant to research performing organisations (RPOs) as users of the services offered by the gatekeepers to the extent these services qualify as core platform services.

629 Question 70 RPO survey – data legislation part (Annex 5 – Synopsis report).

630 Regulation 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector.

631 Article 1(1) DMA. See also https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6423

### 2.5.1. Key aspects

Table 26 provides an overview of the DMA provisions which are most relevant from a research perspective.

**Table 26. An overview of the DMA provisions which are most relevant from a research perspective**

| Provision(s) | Relevance to research |
|---|---|
| **Artt. 2(20) and (21)** | Definition of 'business user' and 'end user': RPOs may qualify as business users and researchers as end users, in which cases they would be entitled to have access to certain data through platforms' transparency obligations. |
| **Various transparency obligations** | E.g. Art. 5(9), 5(10), 6(8), 6(9), 6(10), 35: these transparency provisions in the DMA may benefit RPOs and researchers by providing them access to some core platform services-related data, which can be used for research purposes |

*Source: Compiled by the study team.*

The DMA introduces a series of criteria to identify (and formally designate) the gatekeepers who are required to comply with the Regulation's obligations. These are large online platforms that exert a significant influence on the EU internal market, that provide a core platform service which is crucial for business users to reach end users, and that – from a competition perspective – enjoy an "entrenched and durable position" in the market[632].

Article 2(2) DMA defines a core platform service as meaning any of the following services: (a) online intermediation services; (b) online search engines; (c) online social networking services; (d) video-sharing platform services; (e) number-independent interpersonal communication services; (f) operating systems; (g) web browsers; (h) virtual assistants; (i) cloud computing services; (j) online advertising services, including any advertising networks, advertising exchanges and any other advertising intermediation services, provided by an undertaking that provides any of the core platform services listed in points (a) to (i).

Suppose a platform meets the quantitative criteria of Article 3(2) DMA. In that case, the company is presumed to be a gatekeeper and designated as such (unless it can demonstrate the contrary and successfully challenge the designation). The Commission can also examine a company's specific situation and decide to designate it as a gatekeeper on the basis of the criteria identified under Article 3(8).

The DMA identifies and prohibits a series of gatekeeper practices that are deemed to limit contestability or to be unfair[633]. Gatekeepers will have to comply with all these obligations with respect to each of its designated core platform services. They must "ensure and demonstrate compliance" with the obligations set out under Articles 5, 6 and 7[634].

The competence to enforce the DMA has been granted to the European Commission[635]. The Commission also decided to establish a High-Level Group on the DMA, which will provide the Commission with advice on the implementation and enforcement of the regulation[636].

632 Article 3(1) DMA.

633 Chapter III DMA.

634 Article 8 DMA.

635 A joint team in the Directorates-General for Competition (DG COMP) and Communications Networks, Content and Technology (DG CNECT) works on the enforcement of the regulation.

636 https://competition-policy.ec.europa.eu/system/files/2023-03/High_Level_Group_on_the_DMA_0.pdf

On 6 September 2023, the Commission designated six companies as gatekeepers under the DMA: Alphabet, Amazon, Apple, ByteDance, Meta, and Microsoft. Twenty-two services provided by these gatekeepers were designated as core platform services[637].

The obligations laid out under the DMA – with the exception of the interoperability obligation for the 'Number Independent Interpersonal Communications Services' (NIICS) core platform service[638] and the obligation to establish a compliance function and to notify any intended acquisition[639] - become applicable for each of the designated core platform services 6 months after the date of designation (7 March 2024). By that date, gatekeepers will need to submit compliance reports and update them at least once per year[640]. The Commission will then publish a non-confidential summary of each compliance report.

### 2.5.2. Relevant DMA provisions for research organisations and researchers

The DMA does not introduce a specific (and direct) access regime for researchers, such as the one laid out in Article 40 DSA for the study of the systemic risks associated with the functioning and use of the services provided by Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs). However, several provisions of the DMA appear relevant for RPOs and researchers, as they envisage some forms of data access[641]. These are, in particular, the transparency obligations imposed on gatekeepers' core platform services in relation to "business users" and "end users" of the services. Business users are defined in Article 2(21) DMA as "any natural or legal person acting in a commercial or professional capacity using core platform services for the purpose or in the course of providing goods or services to end users", whereas Article 2(20) DMA defines end users as "any natural or legal person using core platform services other than a business user".

Therefore, the DMA transparency rules relate to RPOs in their quality of business users (they use core platforms services in their professional capacity to provide educational services to students and other research and work facilities to their staff), while researchers qualify as end users for the purposes of these provisions[642].

637 https://digital-markets-act.ec.europa.eu/commission-designates-six-gatekeepers-under-digital-markets-act-2023-09-06_en. The services designated as core platform services can be grouped as follows: four social networks (TikTok, Facebook, Instagram, LinkedIn); six intermediation services (Google Maps, Google Play, Google Shopping, Amazon Marketplace, iOS App Store, Meta Marketplace); three ads delivery systems (Google, Amazon and Meta); two browsers (Chrome, Safari); three operating systems (Google Android, iOS, Windows PC OS); two N-IICS, or Number-Independent Interpersonal Communication Services (WhatsApp, Facebook Messenger); one search engine (Google); and one video sharing platform (YouTube).

638 Article 7 DMA. The obligation of the gatekeeper to publish a reference offer applies 6 months after the designation, while the other part of the obligation applies either after 6 months, 2 years or 4 years following the designation.

639 The obligations on a gatekeeper to establish a compliance function and notify any intended *acqui*sition within the meaning of EU Merger Regulation applies as of the day of designation.

640 The Commission published templates for compliance reports, accessible at https://digital-markets-act.ec.europa.eu/template-compliance-report-under-digital-markets-act-published-2023-10-09_en

641 A research project recently carried out by the Institute for information Law (IViR) at the University of Amsterdam on "Information Law and the Digital Transformation of the University" has explored questions relating to the application of the DMA – among other legal frameworks – to universities and researchers. See, Part II: Access to Data for Research, Institute for Information Law, Amsterdam, September 2023, p. 65-66. The factsheet on the DMA-related aspects of the research project can be accessedat: https://www.ivir.nl/publicaties/download/factsheet-dma.pdf. See also European Commission, Directorate-General for Research and Innovation, Lundqvist, B., Study on the Digital Services Act and Digital Markets Act and their possible impact on research, p. 18-22.

The data access-related aspects of the DMA are also discussed in L. Edelson, I. Graef, F. Lancieri, Access to Data and Algorithms: For an Effective DMA and DSA implementation, Report 2023. See annex 1, "A summary of transparency and data access obligations in the DSA/DMA"; spreadsheet accessible at https://docs.google.com/spreadsheets/d/1OnxtVB4tFIHsn3yTGRq16AXkWwNRZ_BV/edit#gid=1296295893 .

642 European Commission, Directorate-General for Research and Innovation, Lundqvist, B., Study on the Digital Services Act and Digital Markets Act and their possible impact on research, p. 19.

Article 5(9) DMA requires gatekeepers to provide advertisers or authorised third parties, for each advertisement, with information on a daily basis and free of charge on (i) the price and fees paid by the advertiser, (ii) remuneration received by the publisher; (iii) metrics which determined prices, fees and remunerations. This provision could be relevant to RPOs, for instance, as possible business users of a gatekeeper's advertising service (universities, for instance, often advertise their educational programmes online through advertising services). However, the possibility for RPOs and researchers to gain access to ad data as third parties authorised by advertisers could be, in practice, more relevant from a research perspective. It can be imagined that, especially where researchers would be able to get multiple authorisations from advertisers, these transparency rules would open up the possibility of researching the dynamics affecting ad spending and the implications these have for advertisers.

Article 5(10) DMA introduces analogous rules for publishers (or third parties which they might have authorised) to access data with regard to each ad placed on the publisher's inventory about (i) remuneration received and fees paid by the publisher, (ii) price paid by the advertiser; and (iii) metrics which determined prices and remunerations.

Also related to ads market data, Article 6(8) DMA introduces the possibility for advertisers and publishers – and again for authorised third parties – to request access to the gatekeeper's performance measuring tools and the data necessary to verify and measure the performance of the core platform services independently.

As regards business users (or authorised third parties), Article 6(10) DMA requires gatekeepers to provide them – upon request and free of charge – with effective, high-quality and real-time access to aggregated and non-aggregated data that is provided for or generated in the context of the use of the relevant core platform services, or the services provided by the business users together with the core platform services. Again, a business user could authorise individual researchers or RPOs to access the data generated on the platform by such business users.

In relation to end users or third parties authorised by an end user, Article 6(9) DMA requires gatekeepers to ensure – upon request and free of charge – the "effective portability" of data provided by the end user or generated through the activity of the end user in the context of the use of the core platform service. Individual researchers could, therefore, request data portability and real-time access to data or obtain authorisation from other end users to access and port the data.

Additional information could be accessed through the annual reports published by the Commission (Article 35 DMA), which include a summary of the Commission's activities in relation to the implementation and enforcement of the regulation. In particular, these reports include information on market investigations, monitoring of the gatekeepers' implementation of DMA obligations, assessments of audited descriptions of profiling techniques, cooperation with the national competition authorities and the activities carried out by the High-Level Group of Digital Regulators.

### 2.5.3. Opportunities for researchers and research organisations

In general, by introducing a set of *ex ante* pro-competitive measures, the DMA may benefit RPOs and researchers by bringing about a higher level of competitiveness and fairness in the digital services market. This would be relevant in particular for RPOs, in their capacity as business users of core platform services and of other (non-core platform services) digital services provided by gatekeepers. At the same time, this would also present opportunities for the researchers as end users of these gatekeepers' services.

More specifically, as discussed in Section 2.5.2, the DMA includes a number of transparency provisions that are relevant to RPOs and researchers as they enable different forms of data access. In particular, the opportunities for data access envisaged under Articles 5(9)(10) and 6(10) are relevant for RPOs as business users and potentially as third parties authorised by other business users (researchers could also qualify as authorised third parties). Article 6(9), on the other hand, is addressed to end users and is therefore directly relevant for researchers (which could then authorise other researchers and RPOs to access the data).

Asked about the extent to which the DMA is expected to impact their research organisations[643], 66% of the 215 respondent RPOs indicate the expected impact as either moderate, large or very large. One fifth (20.5%) of the respondents anticipate the impact of the DMA on their research organisation to be small, while 4.2% expect that the DMA will leave research at their organisation unaffected, and 9.3% consider the question as not applicable to their organisation.

Regarding the extent to which they expect to benefit from the DMA[644], out of the 178 respondents, 66.9% indicated they expect the benefit to be either moderate, large or very large. Benefits are expected to be small by 17.4% of the respondents and non-existent by 5.6%, while 10.1% of the respondent RPOs consider the question as not applicable to their organisation.

Specifically, on which aspects of the DMA will provide opportunities for scientific research[645], 53.8% of the 119 respondents (those who answered to expect a beneficial impact to a moderate or larger extent) indicate more certainty about rights and obligations as the main aspects of advantage, followed by more transparency on available data resources (46.2%), wider availability of private sector data for research purposes (38.7%), wider availability of public sector data for research purposes (36.1%) and the promotion of trustworthy access and sharing of research data (26.9%).

### 2.5.4. Challenges identified

Unlike the DSA, the DMA does not envisage an access regime specifically dedicated to researchers. Access to data under the DMA appears more limited in scope than under the DSA (and it operates more on the individual level of information than on the systems level)[646].

Moreover, the extent to which researchers can benefit from data access under the DMA largely depends on their capability to obtain the necessary authorisations from the relevant business users (or from other end users). In this regard, it can be imagined that possible procedural hurdles, a low level of familiarity with the DMA framework, and, in general, the costs which might be incurred in the process could impact the successful request and acquisition of access authorisations.

Other aspects that might impact the capability of RPOs and researchers to take advantage of the DMA relate to the effectiveness of its enforcement, particularly to the extent this influences the scope of application of the regulation. The number of core platform services to which RPOs and researchers can direct their access requests will vary over time. It depends on the outcome of the market investigations carried out by the Commission, its continuous monitoring of the relevant market, and the capacity of the gatekeepers to successfully challenge the designation of their services as core platform services.

More generally, the level of enforcement also has a direct impact on whether the DMA will deliver on its promise of creating the conditions for a more competitive digital services market – and on whether RPOS and researchers can reap the benefits of this renewed landscape.

643 Question 66 RPOs survey – data legislation part (Annex 5 – Synopsis report).

644 Question 67 RPOs survey – data legislation part (Annex 5 – Synopsis report).

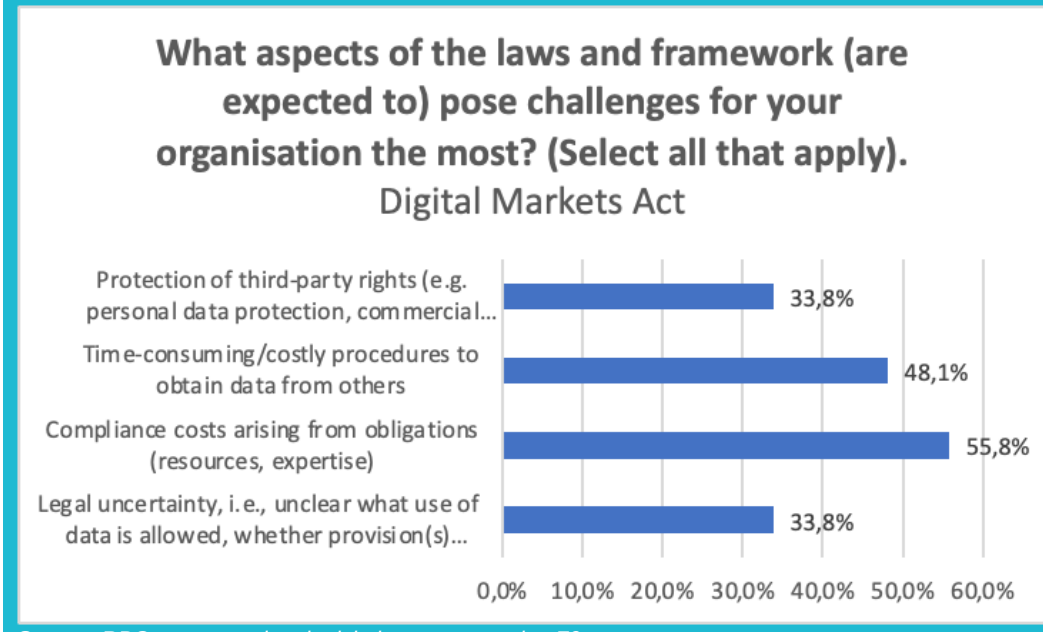
645 Question 68 RPOs survey – data legislation part (Annex 5 – Synopsis report).

646 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam, p. 66.

With regard to the challenges (e.g. compliance costs, restrictions to freedom to manage research data) posed by the DMA to their organisation[647], out of the 168 RPO respondents, over half (54.7%) expect DMA-related challenges to affect their organisation either to a moderate, large or very large extent. 18.5% of the respondents anticipate that challenges brought about by the DMA will be small, while 7.7% expect that the DMA will not pose challenges to their organisation at all. Finally, 19% of the respondent RPOs indicated the question of challenges as "not applicable" to them.

On which specific aspect of the regulation they expect to pose the most challenges to the organisation[648], 55.8% of the 77 respondents indicate compliance costs (resource, expertise) as the most relevant source of challenges, followed by time-consuming or costly procedures to obtain data from others (48.1%), while questions of legal uncertainty and protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) are perceived as equally likely to pose challenges (33.8%).

**Figure 36. Laws and frameworks posing challenges**




*Source: RPOs survey - data legislation part, question 70.*

647 Question 69 RPO survey – data legislation part (Annex 5 – Synopsis report).

648 Question 70 RPO survey – data legislation part (Annex 5 – Synopsis report).

## 2.6. Data Act

*The content of this Section has been authored by Leander, Stähler; Thomas, Margoni; Luca, Schirru; Emircan, Karabuga.*

The Data Act (DA) has garnered substantial attention in recent scholarship, particularly in its implications for data access, data sharing arrangements, interoperability, and the positions of manufacturers of Internet of Things (IoT) devices, as well as that of "data holders" in the context of non-personal data. The DA represents a key piece in EU data policy, contributing to the 2020 Data Strategy[649], thereby providing incentives for horizontal (including cross-sectoral) data sharing[650]. While the reach of the DA is vast, the study concentrates on key elements understood to (directly or indirectly) relate to research activities. These include the DA's stipulations on business-to-consumer (B2C), business-to-business (B2B), and business-to-government (B2G) data sharing (Articles 3 to 22), rules on switching data processing service providers (Articles 23 to 30), rules for interoperability (Articles 33 to 36), and Article 43 addressing the *sui generis* database right (SGDR) established in Article 7 of Directive 96/9/EC. By examining these aspects, we seek to shed light on the potential implications of the DA for research within the EU, underscoring the opportunities and challenges that may arise.

### 2.6.1. Overview of the Key Aspects Regarding Research

The Data Act has been the object of careful analysis in the legal and policy literature. In relation to the original (2021) Commission proposal, there have been a number of studies critically assessing its impact. These studies and the observations developed remain generally applicable to the final adopted text of the Data Act. However, there is a significant lack of discussion in the literature on the many modifications introduced by the successive interventions of the Council and EP, as well as on the finally adopted text of the Data Act. Illustratively, the regime for data sharing between data holders, users and third parties, including data recipients, has been the subject of debate concerning the role of trade secrets in data. The final adopted text of the Data Act developed in greater detail how trade secrets are to be handled within the context of user data sharing rights and data portability. The issue of trade secrecy has also been the subject of debate in the context of B2G data sharing and the notion of "exceptional need", which implicates the availability of such data for researchers and research organisations. Important horizontal rules regarding contractual relations between "enterprises" have been implemented. With generally supportive comments for the proposed legislation, the final text of the Data Act has specified and clarified certain aspects of interoperability.

649 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European strategy for data (the European Data Strategy), COM/2020/66 final [2020]. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0066, 10 et seq.

650 European Data Strategy, 13.

*Relevant provisions for researchers and research organisations*

**Table 27. Relevant provisions for researchers and Research organisations**

| Provision(s) | Relevance to research |
|---|---|
| **Art. 1**, Recital 15 | Data addressed by the Data Act: IoT Sensor data may be an important source of research data. |
| **Art. 4**, Recitals 20-25 | User data sharing rights and obligations: Where researchers and Research organisations make use of IoT products and services (as users under the DA), the availability of that data may be crucial. |
| **Artt. 5, 6 and 9**, Recitals 25, 26, 30, 31, 32, 33, 34, 35, 38, 40, 46, 49 | Data portability: Researchers and Research organisations may (as users under DA) wish to make data available to others or (as receivers) have data made available to them. Researchers and Research organisations may also be identified as the designated third party to which data are made available. |
| **Art. 13**, Recitals 58-62 | Regulation of unfair contractual terms: Where researchers and Research organisations qualify as enterprises, they must respect and will benefit from mandatory contractual rules regarding data-specific practices. |
| **Artt. 14-22** (especially **Art. 21**), Recitals 63-65, 73-76 | B2G data sharing and exceptional need: Certain research organisations may qualify as relevant government entities, whereas government entities may be able to share requested data with researchers and research organisations. |
| **Artt. 23, 24, 30**, Recitals 78, 80-87, 100 | Switching: Researchers and Research organisations as customers of data processing services may be able to benefit from the ability to switch between providers. |
| **Artt. 33-36**, Recitals 100, 103-106 | Interoperability: Researcher and Research organisations may make use of different tools such as data spaces or smart contracts in sharing data, meaning that they will take into account and benefit from interoperability requirements. |
| **Art 43**, Recital 112 | *Sui Generis* database rights and IoT data: Researchers and Research organisations should be aware that the *sui generis* database right is not a valid basis for hindering the exercise of certain rights under the DA. |

*Source: Compiled by the study team.*

*Data addressed by the Data Act*

The DA in Art. 1 (1) lays down rules on:

- making data generated by the use of a product or related service available to the user of that product or service;
- making data available by data holders to data recipients;
- making data available by data holders to public sector bodies where there is an exceptional need;
- facilitating switching between data processing services;
- introducing safeguards against unlawful third-party access to non-personal data and;
- providing for the development of interoperability standards for data to be accessed, transferred and used.

### IoT and sensor data

In the context of Chapter II of the DA, the scope of data addressed by IoT data rules and whether they include sensor data are central. The DA clarifies that, in the context of the "rules for access and use of data from connected products and related services", i.e. Chapter II, data generated by the use of a product or related services "should include data on the use of a product generated by a user interface or via a related service, and not be limited to the information that such action happened, but *also include all data that the product generates*

*as a result of such action, such as data generated automatically by sensors and data recorded by embedded applications*, including applications indicating hardware status and malfunctions" (Recital 15, emphasis added)[651]. The same Recital excludes "information derived by means of sensor fusion, which infers or derives data from multiple sensors" as "information derived from this data". The intention of the DA legislator to encourage aftermarket benefits from sensor-equipped connected products and related services is further outlined in the remainder of the Preamble[652].

*User data sharing and data portability*

The DA introduces provisions that impact data accessibility and utilisation for both consumers (B2C) and businesses (B2B)[653]. Below, these provisions are analysed with a specific focus on their possible effects on researchers' and research organisations' access to IoT data.

**Researchers and research organisations as IoT users:** Researchers and research organisations may qualify as users under the DA[654], where they utilise or otherwise engage with IoT products or related services in their research, triggering the applicability of Article 4 DA. Article 4 of the DA enshrines the obligation of data holders[655] to make "accessible to the user without undue delay, easily, securely and in a comprehensive, structured, commonly used and machine-readable format, free of charge and, where relevant and technically feasible, of the same quality as is available to the data holder, continuously and in real-time" to users "readily available data, as well as the metadata that is necessary to interpret and use that data", where data cannot be directly accessed by the user from the connected product or related service[656]. Under the DA, IoT products are defined as "an item, that obtains, generates or collects, data concerning its use or environment, and that is able to communicate product data via an electronic communications service, a physical, connection or on-device access and whose primary function is not the storing, processing or transmission of data on behalf of third parties, other than the user"[657].

651 Recital 15 Data Act; elsewhere in the same recital clarifying that this covers both data "collected from a single sensor or a connected group of sensors".

652 Recital 16 Data Act.

653 Chapter II Data Act.

654 A user is a "a natural or legal person that owns a connected product or to whom temporary rights to use that connected product have been contractually transferred, or that receives related services" (Art. 2(12) Data Act).

655 That is, "a legal or natural person who has the right or obligation, in accordance with this Regulation, applicable Union law or national legislation implementing Union law, to use and make available data, including, where contractually agreed, product data or related service data which it has retrieved or generated during the provision of a related service" (Art. 2(13) Data Act).

656 Art. 4(1) Data Act.

657 Art. 2(5) Data Act.

There are several categories of data that are involved in this obligation of the data holder to make data accessible to the user. Firstly, all data that can be directly accessible from the connected product or related service can already be made accessible to the user. Secondly, "readily available data" shall also be made accessible, which covers "product data and related service data that a data holder lawfully obtains or can lawfully obtain from the connected product or related service, without disproportionate effort, going beyond a simple operation"[658]. Readily available data thereby covers both "product data"[659], as well as "related service data"[660]. Thirdly, this obligation covers "metadata that is necessary to interpret and use that data", where metadata is defined as "a structured description of the contents or the use of data facilitating the discovery or use of that data"[661], whereas "necessary to interpret and use that data" includes research performing organisations of "retrieving, using or sharing the data"[662].

Under the DA, researchers and research organisations may benefit greatly from access to data, whether it encompasses directly accessible data, readily available data, and/or relevant metadata. In this regard, the scope of data addressed by this provision could be a positive response to critical remarks to previous versions of the DA[663]. Copyright protection may also be involved if the relevant IoT dataset includes metadata[664], although this is far less likely given the fact that metadata are often, albeit not always, rather factual[665].

It should be noted that the final adopted provisions of the DA include aspects that remain unaddressed in the literature. This includes the possibility for users and data holders to agree contractually on restricting or prohibiting access, use or further sharing where the processing could undermine the security requirements of the product[666]. Further, the data holder may withhold or suspend the sharing of data identified as trade secrets where there is no agreement on measures necessary to preserve trade secrecy or there is a failure to implement the agreed measures[667]. In exceptional circumstances, the data holder may refuse a request for access to specific data on a case-by-case basis[668]. Where the data holder makes use of the foregoing provisions, they must notify the competent authority as further detailed in Art. 37 DA. The affected users may lodge a complaint with a competent authority or agree to refer the matter to a dispute settlement body[669]. The adopted text of the Data Act also includes requirements for the data holder to "not make the exercise of the choices or rights under this Article of the user unduly difficult"[670], and for the user to not "deploy coercive means or abuse evident gaps in the technical infrastructure of a data holder designed to protect the data in order to obtain access to data"[671]. These additions to the text of the DA could have significant impacts on the ability of researchers and research organisations to access data as users of IoT products and services.

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658 Art. 2(17) Data Act.

659 Defined as "data, generated by the use of a connected product, that the manufacturer designed to be retrievable, via an electronic communications service, a physical connection or on-device access, by a user, data holder or a third party, including, where relevant, the manufacturer" (Art. 2(15) Data Act).

660 Defined as "data representing the digitisation of user actions or events related to the connected product, recorded intentionally by the user or as a by-product of the user's action, which is generated during the provision of a related service by the provider" (Art. 2(16) Data Act).

661 Art. 2(2) Data Act.

662 Recital 20 Data Act.

663 Contributors from the Max Planck Institute for Innovation and Competition noted in regard to the Commission proposal that to pre-process data for, e.g. machine learning training, additional metadata is usually needed (Drexl and others, 121); potentially also including machine learning research applications.

664 Drexl and others, 98.

665 Kretschmer, Martin, Margoni, Thomas; Oruc, Pinar; 'Copyright law, and the life cycle of machine learning models' (2024) International Review of Intellectual Property and Competition Law (IIC), Vol. 1/2024

666 Art. 4(2) Data Act.

667 Art. 4(7) Data Act.

668 Art. 4(8) Data Act.

669 Art. 4(3) and (9); Cf. Art. 37(3)(b) and 10(1b) Data Act respectively.

670 Art. 4(4) Data Act.

671 Art. 4(11) Data Act; mirroring Art. 11(2) Data Act.

**Researchers and research organisations as receivers of data portability obligations**: Beyond the above, users are also able to transfer data to a third party under Article 5 of the DA[672]. When users (natural or legal persons, including consumers or businesses) exercise their data portability rights, they may request the transfer of IoT data generated by-products and services, including, for instance by, smart appliances, wearables, and environmental sensors. It should be borne in mind, however, that the scope of data here is limited to "readily available data, as well as the metadata that is necessary to interpret and use that data"[673].

Researchers, including those affiliated with research organisations, can serve as the third parties receiving the transferred data[674]. This can be useful when the connected product or related service monitors research-relevant data sources and when the voluntary provision of data, e.g. through citizen science initiatives[675], is essential. Importantly, the DA also regulates the level of compensation that data holders can request from data recipients to make data available in Article 9. Therein, it expressly provides that "*where the data recipient is a […] non-profit research [organisation]*, provided those enterprises do not have partner enterprises or linked enterprises as defined in Article 3 of the Annex to Recommendation 2003/361/EC, which do not qualify as a micro, small or medium enterprise, any compensation agreed shall not exceed the costs set out in [Art. 9(2)(a)]"(emphasis added)[676]. This means that the compensation cannot exceed "the costs incurred for making the data available, including, in particular, the costs necessary for the formatting of data, dissemination via electronic means and storage"[677]. Beyond this, where it is "adopted in accordance with Union law" further EU or national legislation may "[exclude] compensation for making data available or [provide] for lower compensation"[678] – an open door for potential future legislative interventions that could reduce, including at the national level, the amount of due compensation. It needs to be noted that Article 9 addresses "compensation agreed upon between a data holder and a data recipient for making data available in business-to-business relations"[679] – whether a researcher or research organisation is a "data recipient"[680], or whether it engages in "business-to-business relations"[681] in the course of data transactions is not not explicitly addressed in the letter of the DA, but it seems a logical conclusion from a functional reading of the provisions.

672 Art. 5(1) Data Act.

673 Art. 5(1) Data Act; unlike Art. 4, this right does not address data that can be directly accessed by the user.

674 Subject to the requirements of Art. 6 Data Act.

675 Aisling Irwin, 'No PhDs needed: how citizen science is transforming research' (2018) Nature <https://www.nature.com/articles/d41586-018-07106-5> (last accessed 16 October 2023). On a similar note, we refer to Eechoud (2022, 38), who provided the example "of users of certain smart home devices that allow researchers as 'third' parties to obtain IoT data directly from data holders, to be used for say behavioural research". European Commission, Directorate-General for Research and Innovation, Eechoud, M., Study on the Open Data Directive, Data Governance and Data Act and their possible impact on research, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/71619.

676 Art. 9(4) Data Act.

677 Art. 9(3)(a) Data Act.

678 Art. 9(6) Data Act.

679 Art. 9(1) Data Act.

680 Defined as "a legal or natural person, acting for purpose which are related to that person's trade, business, craft or profession, other than the user of a product or a related service, to whom the data holder makes data available, including a third party following a request by the user to the data holder or in accordance with a legal obligation under Union law or national legislation implementing Union law" (Art. 2(14) Data Act).

681 The Data Act does not define business-to-business relations, nor business-to-business relationships, though both terms are used throughout the text of the Regulation.

The extent to which such data portability would be enabled is subject to discussion in the literature. This is the case, particularly regarding the idea that data holders could refuse or suspend requests to share data that they identify as trade secrets[682]. Specifically regarding the inclusion of research organisations under the reduced compensation scheme under Article 9(4)[683], the League of European Research Universities (LERU) welcomes the reduction in compensation that can be asked of qualifying research organisations but maintains that research organisations "should not be asked to sustain any cost for the sharing of data, as they perform a fundamental public function and are already structurally underfunded"[684].

The adopted text of DA includes new provisions that remain unaddressed in the literature, including those that allow for steps to be taken in regard to trade secrets concerning the withholding of the sharing of data[685], refusal to share data[686], the filing of complaints with competent authorities[687], and agreed dispute settlement[688]. A potentially crucial element here is that the right to share data with third parties "shall not apply to readily available data in the context of testing of other new products, substances or processes that are not yet placed on the market unless use by a third party is contractually permitted"[689]. Especially where relevant research activities pertain to or involve such products, substances or processes, such as in technology-intensive research fields, this provision could impede the ability of researchers and research organisations to either share data with others as users or to receive such data as third parties. The provision does not state which party is to contractually permit the sharing of this data, though it could be understood to either rest with the data holder or the manufacturer of the connected product or related service. The overall extent to which such limitations on data portability will impede research uses is, therefore, likely to depend on a case-by-case basis, subject also to trade secrecy considerations and developing industry practices in the context of IoT.

### *Regulation of unfair contractual terms*

The single article Chapter IV of the DA on unfair contractual terms unilaterally imposed by an enterprise may have important implications for researchers and Research organisations. As an intervention in contracts, Article 13 regulates the contractual relationship between two separate enterprises[690].

682 European Parliament, Amendments adopted on 14 March 2023 on the proposal for a regulation of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act), T Margoni, C Ducuing and L Schirru, 'Data Property, Data Governance and Common European Data Spaces' (April 25, 2023). Computerrecht: Tijdschrift voor Informatica, Telecommunicatie en Recht, 2023, Available at SSRN: https://ssrn.com/abstract=4428364 or http://dx.doi.org/10.2139/ssrn.4428364, 8 et seq.

683 Which is traced to the EP proposed compromise text of the Data Act (Data Act proposal – Compromise version of the European Parliament, Art. 9(2)).

684 LERU, 'LERU's Final Remarks on the Draft European Data Act' (2023) LERU <https://www.leru.org/news/lerus-final-remarks-on-the-draft-european-data-act> (last accessed 16 October 2023).

685 Art. 5(10) Data Act.

686 Art. 5(11) Data Act.

687 Art. 5(12)(a) Data Act.

688 Art. 5(12)(b) Data Act; These provisions are not dissimilar to Art. 4(7), (8) and (9) Data Act.

689 Art. 5(2) Data Act.

690 Margoni, Thomas; Strowel, Alain; 2024, 'Contractual freedom and fairness in EU data sharing agreements, in de Werra&Calboli (Eds), Research Handbook on Intellectual Property Licensing; 2024 Publisher: Edward Elgar (forthcoming).

Whether researchers and research organisations may qualify as enterprises under the DA is an open question[691]. Enterprises are defined as “a natural or legal person which in relation to contracts and practices covered by this Regulation is acting for purposes which are related to that person’s trade, business, craft or profession”[692]. The DA does not address whether research activities should be excluded from the concept of ”trade, business, craft or profession”, but it would seem logical that research, often in a weaker position in negotiations with business, should enjoy the favourable provisions on contractual fairness in the same way as they enjoy the reduced compensation calculation in cases of data sharing obligations seen above.

It should be noted that Chapter IV on unfair terms to data access provisions aims to address all situations where “one party is in a stronger bargaining position”, especially where this affects enterprises that “have no other choice than to accept ‘take-it-or-leave-it’ contractual terms”[693]. Looking at the scope of the provisions, it seems that the inclusion of researchers and research organisations in the concept of ”enterprise”, and thus inclusion under the contractual fairness benefits, is in line with the objectives pursued by the Data Act. Certainly, more clarity on this matter could be offered[694].

*Business-to-government (B2G) data sharing and exceptional need*

The provisions of Chapter V (Articles 14 to 22) of the DA represent a significant facet of the legislation, with potentially crucial implications for researchers and Research organisations within the EU. These articles regulate data sharing with public sector bodies (PSBs)[695], the Commission, the European Central Bank (ECB), or Union bodies based on exceptional need.

Generally, Article 14 clarifies that upon request, data holders that are legal persons and not PSBs shall make data available to such a body where it “demonstrates an exceptional need”[696]. Recital 63 clarifies that “Research performing organisations and research funding organisations could also be organised as [PSBs]” and, therefore, may benefit directly from Chapter V B2G provisions in such cases of exceptional need. The notion of "exceptional need” is defined in Article 15 as essentially existing when data are necessary to respond to a public emergency[697] or where the lack of specific non-personal data prevents the body (including qualifying ROs) from fulfilling a specific task in the public interest, and the body “has exhausted all other means at its disposal to obtain such data”[698]. In all cases, the exceptional need is “limited in time and scope”[699]. Articles 15-20 list the obligations and requirements that B2G data sharing needs to follow.

691 See also regarding the notions of “data recipient” and “business-to-business relations” above section 6.1.3.

692 Art. 2(24) Data Act; this definition is the same as proposed by the Commission, with neither the EP nor the Council proposing to amend it; This is not identical to the definition of enterprise as used, for instance, in the SME Recommendation, which defines it as “any entity engaged in an economic activity, irrespective of its legal form. This includes, in particular, self-employed persons and family businesses engaged in craft or other activities, and partnerships or associations regularly engaged in an economic activity” (Recommendation C(2003) 1422, Art. 1).

693 Art. 13(1) and Recital 58 Data Act.

694 Although this may be addressed in the formulation of model contractual terms and standard contractual clauses by the Commission (Art. 41 Data Act).

695 Public sector bodies are defined as “national, regional or local authorities of the Member States and bodies governed by public law of the Member States, or associations formed by one or more such authorities or one or more such bodies” (Art. 2(28) Data Act).

696 Art. 14 Data Act.

697 “[Where] the data requested is necessary to respond to a public emergency and the public sector body, the Commission, the European Central Bank or Union body is unable to obtain such data by alternative means in a timely and effective manner under equivalent conditions” Art. 15(1)(a) Data Act.

698 “[In circumstances not covered by point (a) and only in so far as non-personal data is concerned, where a public sector body, the Commission, the European Central Bank or a Union body is acting on the basis of Union or national law and have identified specific data, the lack of which prevents it from fulfilling a specific task in the public interest, that has been explicitly provided by law, such as official statistics or the mitigation or recovery from a public emergency; and the public sector body, the Commission, the European Central Bank or Union body has exhausted all other means at its disposal to obtain such data, including, but not limited to, purchase of the data on the market by offering market rates or relying on existing obligations to make data available, or the adoption of new legislative measures which could guarantee the timely availability of the data ”Art. 15(1)(b) Data Act.

699 Art. 15(1) Data Act.

More specifically, beyond the general B2G rules, Article 21 DA directly addresses the role of research organisations and researchers in the context of Chapter V[700]. It provides that a PSB, the Commission, the European Central Bank or a Union body shall be entitled to share data received under this Chapter with individuals or organisations in view of carrying out scientific research or analytics compatible with the purpose for which the data were requested, or to national statistical institutes and Eurostat for the compilation of official statistics[701]. This is an important clarification, as the general rule for bodies under Article 17 stipulates that data obtained shall not be made available for reuse within the meaning of the Open Data Directive or the Data Governance Act[702] and that it can only be shared with other bodies, "in view of completing the tasks in Article 15, as specified in the request in accordance with [Art. 17(1)(f)] or to make the data available to a third party in cases where it has outsourced, by means of a publicly available agreement, technical inspections or other functions to this third party"[703].

Researchers and research organisations must comply with the further stipulations of Article 21, including the institutional structure or nature of the activity: Individuals or organisations receiving data must "act on a not-for-profit basis or in the context of a public interest mission recognised in Union or Member State law. They shall not include organisations upon which commercial undertakings have a significant influence which is likely to result in preferential access to the results of the research"[704]. Researchers (individuals and organisations) must further comply with Article 17(3)[705] and with Article 19[706]. Unlike Article 19(1)(c)[707], however, Article 21(4) provides that "individuals or organisations receiving the data pursuant to paragraph 1 may keep the data received for the purposes for which the data were requested for up to 6 months following erasure of the data by the public sector bodies, the Commission, the European Central bank and Union bodies"[708]. Whereas apparently a preferential rule for research organisations, the obligation to erase the data after 6 months does not seem compatible with scientific standards, and in particular, it will be difficult to imagine a scientific journal publishing an article based on a dataset that was (or will be) deleted after 6 months. The relevant body that intends to make the data available (to an individual researcher or a research organisation) also needs to notify the data holder[709].

700 This Article also addresses statistical bodies – national statistical institutes and Eurostat (Art. 21(1)(b) Data Act.

701 Art. 21(1) Data Act.

702 Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information [2019], OJ L 172/56 and Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act) [2022], OJ L 152/1; Art. 17(3) Data Act.

703 Art. 17(4) Data Act; Cf. Petel, A, 'Chapter V of the Data Act - What is the European concept of "B2G data sharing" in the Data Act proposal?' in C Ducuing, T Margoni, L Schirru, D Spajic, T Lalova-Spinks, L Stähler, E Bayamlıoğlu, A Pétel, J Chu, B Peeters, A Christofi, J Baloup, M Avramidou, A Benmayor, T Gils, E Kun, E De Noyette, and E Biasin (2022) White Paper on the Data Act Proposal. CiTiP Working Paper Series, 48-49; It should be noted that the final version of the DA also clarifies that Article 19 applies to third parties (Art. 17(4)), and provides that the data holder may lodge a complaint with the competent authority (Art. 17(5)).

704 Art. 21(2) Data Act.

705 Prohibiting them from further making the data available for reuse under the Open Data Directive and the Data Governance Act, see above.

706 Applying mutatis mutandis, they shall: "(a) not use the data in a manner incompatible with the purpose for which they were requested; (b) have implemented technical and organisational measures that preserve the

confidentiality and integrity of the requested data and the security of the data transfers, in particular personal data, as well as safeguard the rights and freedoms of data subjects; (c) erase the data as soon as they are no longer necessary for the stated purpose and inform the data holder and individuals or organisations that received the data pursuant to paragraph 1 of Article 21 without undue delay that the data have been erased unless archiving of the data is required in accordance with Union and national law on public access to documents in the context of transparency obligations." (Art. 19(1) Data Act); they shall also not: '(a) use the data or insights about the economic situation, assets and production or operation methods of the data holder to develop or enhance a product or service that compete with the product or service of the data holder; (c) share the data with another third party for any of those purposes." (Art. 19(2) Data Act); Article 19(3) addresses the disclosure of (alleged) trade secrets; Art. 19(d4) requires that they "shall be responsible for the security of the data that they receive".

707 Requiring the requesting body to "erase the data as soon as they are no longer necessary for the stated purposes and inform the data holder and individuals or organisations that received the data pursuant to paragraph 1 of Article 21 without undue delay that the data have been erased unless archiving of the data is required in accordance with Union and national law on public access to documents in the context of transparency obligations"(Art. 19(1)(c) Data Act).

708 This generally reflects the position of the Council (Data Act proposal – Compromise version of the Council, Art. 21(4)).

709 Art. 21(5) Data Act.

The literature has addressed aspects of these general rules for B2G data sharing, again mainly in relation to the initial, broader EC proposal. As argued by Margoni et al., the B2G sharing obligations can be understood as quite specific in scope, setting "proportionate – yet narrow – conditions" under which the public (sector) interest is deemed to take precedence over private interests[710]. Leistner and Antoine proposed that the B2G should be expanded such that small and micro-sized enterprises are also covered[711], which is reflected in the adopted text of the DA[712]. Scholars of the Max Planck Institute for Innovation and Competition argued that these provisions can be understood to lack clarity of scope, may not integrate well with the Data Governance Act and Open Data Directive, fall short of accounting for private rights and interests, and ultimately, provide a procedure of questionable effectiveness[713].

Specifically regarding Article 21, scholars of the Max Planck Institute argued, again in relation to the initial EC proposal, that there remain grey zones in regard to the data, for instance, "whether the research has to relate to addressing the concrete emergency or whether the data can be used for general research on emergency prevention"[714]. They find the provision too narrow and inflexible, especially in view of the open-ended nature of scientific research, arguing that a better alignment with the Data Governance Act was needed[715]. Concerning the relationship with other elements of DDL, van Eechoud argued that "IoT and 'exceptional need' data will typically not be research data, but can become so when put to research purposes. This means that such data may then be subject to both the ODD regime and to the DA. It requires a case-by-case evaluation of datasets to work out what the legal ramifications are". [716] From a stakeholder perspective, CESAER and others argue that the rules regarding compensation in Article 20 DA need to be further aligned with the principles outlined in Article 9 DA, discussed above, such that "the compensation does not exceed the technical and organisational costs of making the data requested available"[717].

The concept and amplitude of "exceptional need" have shrunk considerably during the legislative process. For instance, while data necessary to respond to a public emergency is retained by the EP's compromise text, it removes the Commission's proposed provision that exceptional need exists where "the data request is limited in time and scope and necessary to prevent a public emergency or to assist the recovery from a public emergency"[718]. This is not the case for the Council's text. Instead, including the "respond to a public emergency" provision, it would require that the relevant body also be "unable to obtain such data by alternative means in a timely and effective manner under equivalent conditions"[719]. The adopted DA, as outlined above, does not follow the Commission proposal and may be most closely aligned with the Council version in this regard.

710 Margoni et al, 10.

711 Matthias Leistner and Lucie Antoine, 'Attention, Here Comes the EU Data Act! A Critical in-Depth Analysis of the Commission's 2022 Proposal' (2022) JIPITEC 13(3), 19; also addressed in Drexl and others, 50; this is also reflected in the Council's proposed compromise text (Data Act proposal – Compromise version of the Council, Art. 14).

712 Though only regarding cases of public emergency (Art. 15(2) Data Act).

713 Drexl and others, 49-50.

714 Drexl and others, 57.

715 Drexl and others, 57-58.

716 van Eechoud (2022, 38).

717 CESAER and others, 'Joint calls to the EU co-legislators to promote fair access to data for research purpose through the Data Act' (2023) CESAER <https://www.cesaer.org/content/5-operations/2023/20230508-data-act/20230508-joint-calls-to-the-eu-co-legislators-to-promote-fair-access-to-data-for-research-purposes-through-the-data-act.pdf > (last accessed 16 October 2023).

718 Data Act proposal – Compromise version of the European Parliament, Art. 15.

719 Data Act proposal – Compromise version of the Council, Art. 15(a) and (b).

*Switching between data processing services*

Chapter VI (Articles 23-30) of the DA introduces a number of stipulations intended to remove obstacles to the switching between providers of "data processing services"[720]. A data processing service is defined as "a digital service enabling ubiquitous, and on-demand network access to a shared pool of configurable, scalable and elastic computing resources of a centralised, distributed or highly distributed nature, provided to a customer, that can be rapidly provisioned and released with minimal management effort or service provider interaction"[721].

Some contributors dubbed the proposed version of this Chapter a "non-explicit 'right to switch'"[722]. The Max Planck Institute, for instance, welcomed the provisions as "key for quickly unlocking the value of readily available high-quality data across sectors and data-driven technologies"[723]. Some have further argued that this materialises a broader "data portability principle" in the proposed DA[724]. Leistner and Antoine noted that the provisions as proposed do not adequately address SMEs[725]. In effect, these provisions aim to reduce vendor lock-in regarding cloud and edge markets more broadly, of which researchers and Research organisations are also important customers[726].

Key parts of the final version of Chapter VI that have remained unaddressed by the literature are Articles addressing the information obligation of providers of data processing services[727], the good faith obligation[728], and the contractual transparency obligations on international access and transfer[729]. Crucially, Article 24 delimits the scope of the technical obligations to address the "source provider" of data processing services[730], whereas Article 31 clarifies certain regimes where certain Chapter VI provisions shall not apply[731]. From the perspective of research, Art. 31 provides space for researchers and Research organisations to potentially study data processing services as such, clarifying that the obligations of Chapter VI shall not apply to "data processing services provided as a non-production version for testing and evaluation purposes, and for a limited period of time"[732].

720 Switching itself is defined in the final text of the DA as "the process involving a source provider of data processing services, a customer of a data processing service and a destination provider of data processing services, whereby the customer of a data processing service changes from using one data processing service to using another data processing service of the same service type, or other service, offered by a different provider of data processing services, including through extracting, transforming and uploading the data" (Art. 2(34) Data Act).

721 Art. 2(8) Data Act.

722 Ducuing, C, 'Chapter VI of the Data Act – The 'right to switching'' in Ducuing et al, 59.

723 Drexl and others, 60.

724 Margoni et al, 7.

725 Leister and Antoine, 113.

726 Drexl and others, 61; Leistner and Antoine, 112.

727 Covering information on available procedures for switching and porting to the data processing service as well as reference to an up-to-date online register hosted by the provider of data processing services (Art. 26 Data Act).

728 In order to make the switching process effective, enable the timely transfer of data and maintain the continuity of the data processing service (Art. 27 Data Act).

729 Thereby being required to make information on which jurisdiction the ICT infrastructure is subject, as well as a general description of technical, organisational and contractual measures adopted, available on their website (Art. 28 Data Act).

730 Specifically, the "responsibilities of data processing service providers as defined in Articles 23, 25, 29, 30 and 34" (Art. 24 Data Act).

731 For instance: "The obligations set out in Article 23(1), point (d), and Articles 25 and 26(1) and (3) shall not apply to data processing services of which the majority of main features has been custom-built to accommodate the specific needs of an individual customer or where all components have been developed for the purposes of an individual customer, and where these data processing services are not offered at broad commercial scale via the service catalogue of the data processing service provider" (Art. 31(1) Data Act).

732 Art. 31(2) Data Act.

*Interoperability*

Chapter VIII of the DA introduces requirements for the interoperability of data spaces[733], of data processing services[734], and of smart contracts for executing data-sharing agreements[735]. Regarding the proposed version of these provisions, some argued that the scope of these interoperability requirements does not go far enough and should also notably cover the data exchanged in the context of IoT products and related services[736].

The interoperability of data spaces is addressed to "[participants] of data spaces that offer data or data services to other participants"[737]. The purpose of these interoperability requirements for data spaces is also linked to research, with "common European data spaces" being described as "interoperable frameworks of common standards and practices to share or jointly process data for, inter alia, (…) scientific research or civil society initiatives"[738]. The requirements for such data space participants are elaborated in Article 33(1), with further provisions being included regarding Commission delegated acts[739], harmonised standards[740], Commission implementing acts regarding common specifications[741], and Commission guidelines[742], each of which may serve an authoritative function for participants of data spaces in complying with the core requirements[743]. Beyond Article 33, the interoperability of data processing services is closely linked with the provisions of Chapter VI addressed above[744]. Further, the requirements for the interoperability of smart contracts for data sharing reflect their "key role in achieving its envisaged data governance architecture", namely, boosting data transfers[745]. The DA clarifies the relationship between Articles 33 and 36, highlighting that it is "important to encourage those participants within data spaces that offer data or data-based services to other participants within and across common European data spaces to support interoperability of tools for data sharing including smart contracts"[746].

An important aspect of the interoperability requirements relates to the recipients of the obligation, i.e. the parties that must comply with the requirements, which has shifted considerably. All parties offering data or data services within a data space are now addressed by the DA, arguably including, for instance, researchers or research organisations. Beyond this, where researchers or research organisations are receiving data or a data service through a data space, the participant that is providing this to them will need to comply with the essential requirements. Overarchingly, Recital 103 DA clarifies that the participants that offer data or data-based services "should comply with these requirements in as far as elements under their control are concerned"[747].

733 Art. 33 Data Act.

734 Art. 35 Data Act; also "for the purposes of in-parallel use of data processing services" (Art. 34 Data Act).

735 Art. 36 Data Act.

736 The provisions "fall short of establishing conditions for effective data portability, access and sharing as the technical standards still have to be developed"(Leistner and Antoine, 116-117); Drexl and others, 27.

737 Art. 33(1) Data Act.

738 Art. 33(1) Data Act.

739 Art. 33(2) Data Act.

740 Art. 33(4) Data Act.

741 Art. 33(5) Data Act.

742 Art. 33(6) Data Act.

743 Cf. Art. 33(3) and (5c) Data Act.

744 Drexl and others, 60.

745 Casolari F and others, 'Correction to: How to Improve Smart Contracts in the European Union Data Act' (2023) 2 Digital Society: Ethics, Socio-Legal and Governance of Digital Technology, 9.

746 Recital 106 Data Act.

747 Further, it is stated that this also covers "data holders"; Cf. "Participants of data spaces that offer data or data-based services to other participants, which are entities facilitating or engaging in data sharing within the common European data spaces, including data holders" (Recital 103 Data Act).

These requirements have important implications for researchers and research organisations, especially where they are active within the scope of EOSC as a data space[748]. Leistner and Antoine assessed that these requirements "reflect the core prerequisites identified for establishing effective data portability and data transfers"[749]. In an abstract sense, these requirements may contribute to greater data interoperability as a component of "FAIR" data practices[750]. Overall, Chapter VIII entails that researchers or research organisations engaged in data sharing via a data space, depending on the way in which they seek to participate in that data space, may need to comply with these requirements but also potentially benefit from the gains envisioned by a greater level of interoperability.

#### *Sui Generis database rights and Internet of Things (IoT) data*

The single article Chapter X of the DA states that the *sui generis* database right established in Article 7 of Directive 96/9 "shall not apply when data are obtained from or generated by a product or related service falling within the scope of this Regulation, in particular in relation to Articles 4 and 5"[751]. Directive 96/9 states that "Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilisation of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database"[752].

Recital 112 of the Data Act highlights that the provision should "eliminate the risk" that the *sui generis* database right be used to "hinder in particular the effective exercise of the right of users to access and use data and the right to share data with third parties under this Regulation, it should be clarified that the *sui generis* right does not apply to such databases"[753]. Relatedly, Recital 71 DA clarifies that where the *sui generis* database right should apply to a dataset requested by a body pursuant to Article 14 (i.e. public sector body, the Commission, the European Central Bank or a Union body), "data holders should exercise their rights in such a way that does not prevent the [requesting body] from obtaining the data, or from sharing it, in accordance with this Regulation."

748 See Chapter 8 below.

749 Leistner and Antoine, 116.

750 Cf. Linda Kuschel and Jasmin Dolling, 'Access to Research Data and EU Copyright Law' (2022) 13 JIPITEC <https://www.jipitec.eu/issues/jipitec-13-3-2022/5558/kuschel_13_3_2022.pdf/> (last accessed 16 October 2023).

751 Art. 43 Data Act.

752 Art. 7 Directive 96/9.

753 Recital 112 Data Act.

This provision has stirred significant debate[754]. This provision is intended as a clarification of the law in this specific area, given the underlying uncertainty surrounding the distinction between data creation and the obtaining of data in relation to machine-generated data, especially when these data are collected from the surrounding environment, a typical situation in IoT[755]. In this regard, the provision has been interpreted to focus on the "need to clarify the law in this area and not to change it, given the political, technical, and legal hurdles connected to the amendment or repeal of (intellectual) property rights."[756] Further, Article 43 can be functionally understood as addressing a potential defence of data holders against fulfilling obligations under Articles 4 and 5 regarding the rights of users to access and use data generated by the use of products or related services and to share data with third parties[757]. The DA clarifies that Article 43 would also address relevant databases beyond the contexts of Articles 4 and 5, but nevertheless highlights these Articles with the modifier "in particular". It should be pointed out that Art. 43 only addresses the SGDR, not other related rights (e.g. sound recordings or first fixation of films), which, given the fact that IoT devices are defined as being able to record also audiovisual data, could play a role in this settings.

From the additional data collection, it emerged that many researchers had hoped for a more sweeping intervention in relation to this right. There is probably still an expectation among the scientific research community that, following the latest revision study of the Database Directive[758], the SGDR would have been simply repealed.

### *Discussion*

The literature review reveals a significant body of scholarly works concerning the proposed Data Act (DA), yet with limited consideration for research. Prevailing literature predominantly centres on pertinent aspects of the DA, including the conceptual framework of users' rights, the efficacy of data sharing mechanisms, concerns related to interoperability, and the altering dynamics of data holders' positions concerning non-personal data. Notable exceptions are the systematic review of the Max Planck Institute for Competition and Innovation, which addresses the research-specific Article 21 DA[759], as well as the study of Leistner and Antoine[760], though they refer to the initial proposals and thus do not account for the changes adopted in the final text. Further, the contributions of LERU and CESAER and others directly addressed the role of universities and research organisations, advocating for greater access rights and lower access costs for research organisations[761]. However, a notable scarcity exists when it comes to scholarly studies that specifically delve into the ramifications of the DA on potential uses for research purposes by researchers and research organisations. The DA in itself, despite some important provisions, shows only an incidental and fragmentary approach to research.

754 Bearing in mind that the original proposed wording would have stated that the *sui generis* database right "does not apply to databases containing data obtained from or generated by the use of a product or a related service" (Data Act proposal, Commission Text, Art. 35).

755 European Commission, Commission Staff Working Document 'Evaluation of Directive 96/9/EC on the legal protection of databases' [2018] SWD(2018) 146 final <https://digitalstrategy.ec.europa.eu/en/policies/protection-databases> (last accessed 16 October 2023).

756 T Margoni, C Ducuing and L Schirru, 'Data Property, Data Governance and Common European Data Spaces' (April 25, 2023). Computerrecht: Tijdschrift voor Informatica, Telecommunicatie en Recht, 2023, Available at SSRN: https://ssrn.com/abstract=4428364 or http://dx.doi.org/10.2139/ssrn.4428364, 6.

757 Drexl and others, 91; this is consistent with Recital 112 Data Act (see above); The Council's proposed compromise text explicitly sought to limit the ambit of Article 43, stipulating that the lack of applicability of the *sui generis* database right is relevant "[for] the purposes of the exercise of the rights provided for in Articles 4 and 5 of this Regulation" (Data Act proposal – Compromise version of the Council, Art. 35).

758 Robbert Fisher and others, 'Study in support of the evaluation of Directive 96/9/EC on the legal protection of databases' (European Commission, 2018).

759 Drexl and others, 57-58.

760 Leistner and Antoine.

761 LERU; CESAER and others.

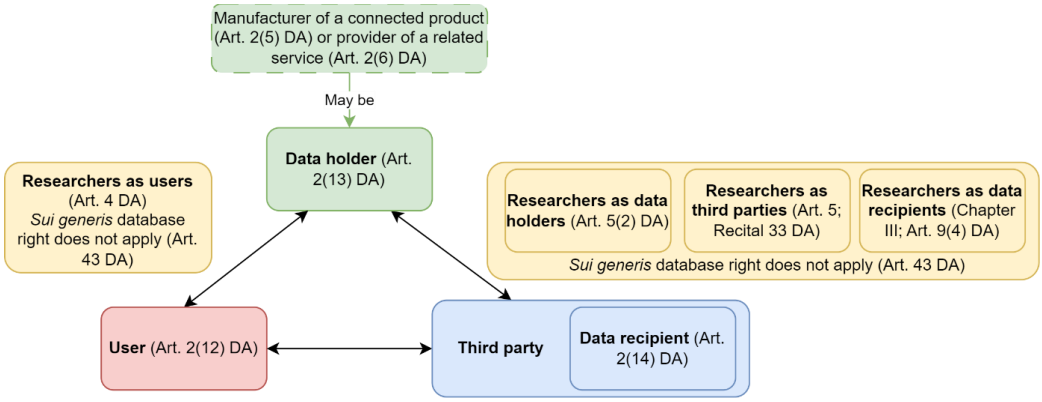
Based on additional data collected by the Study, the role of the DA is likely to be more significant for researchers as users of connected devices and related services. At the same time, the data collected revealed doubts about the potential usefulness of data received from users of connected devices or related services where researchers act as third parties.
Additional data collection methods reveal that the interface between IoT data and copyright and related rights in the DA is deemed unsatisfactory. Furthermore, based on additional data collection, there seems to be a lack of awareness of B2G obligations, which are not perceived as a right of access for researchers. Finally, data collected by the study indicates that the interoperability requirements of the DA are perceived as potentially relevant provisions that may facilitate collaborations.

### Internet of Things (IoT) Rules of the Data Act

The IoT rules of the DA are a cornerstone of the legislation. This is exemplified by the rights and obligations between the user, data holder and the third party. The DA clarifies that this new regime for IoT data cannot be impeded by the *sui generis* database right, but limitations emerge regarding the type of data (readily available) that may be the object of the obligations[762]. This regime may be of paramount importance for researchers, whether they are users of IoT products and services, whether they are data holders in some fashion, or whether they may be a third party receiving data generated by the IoT products and services of others.

762 Art. 43 Data Act.

**Figure 37. Data Act IoT Rules and Research**

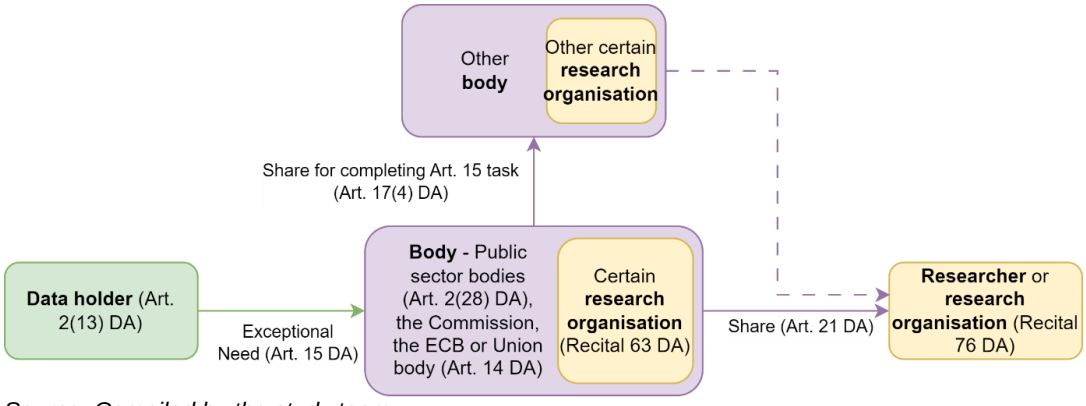



*Source: Compiled by the study team.*

## Business-to-Government (B2G) aspects of the Data Act

The DA introduces a novel regime for data sharing by data holders with various types of public entities, also referred to as business-to-government (B2G) data sharing. The DA notes in Recital 63 that the body that requests data from a data holder may also be a research organisation[763]. Further, researchers or research organisations may play a role where a relevant governmental body shares this data with another such body (including a research organisation) or where they make the data available for research purposes. This can be an important source of data, especially for research within the scope of "exceptional need", providing a new data source, for instance, for a better understanding of public emergency situations, including health emergencies, natural disasters and cybersecurity incidents[764].

**Figure 38. Data Act B2G Rules and Research**



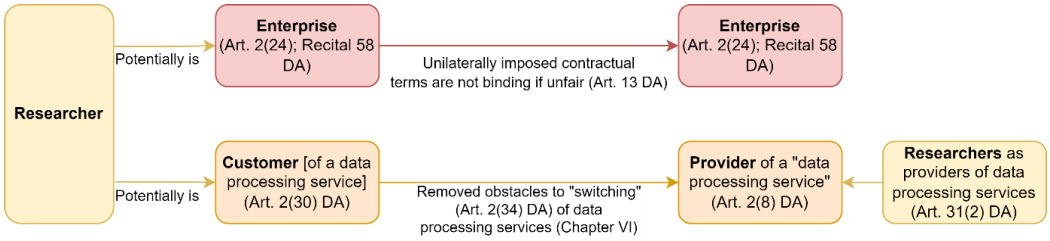

*Source: Compiled by the study team.*

763 Recital 63 Data Act.

764 Recital 64 Data Act.

The DA further introduces a set of legislative interventions of general applicability in regard to the legal arrangements that researchers and Research organisations may fall under, particularly regarding contracts and switching. Article 13 regulates unfair contractual terms unilaterally imposed by an enterprise on another enterprise. Whether researchers and research organisations qualify as enterprises under the DA is an open question[765]. The DA's definition does not clarify whether researchers qualify as enterprises[766]. Nevertheless, given the fact that researchers or research organisations may have various forms of legal personality, it would seem logical that research, where it is in a weaker position in negotiations with business, should enjoy favourable provisions on contractual fairness. Moreover, Articles 23-30 of the DA introduce a number of stipulations intended to remove obstacles to the switching between providers of "data processing services"[767], which benefit researchers where they qualify as customers of data processing services[768]. Further, Art. 31 provides space for researchers and Research organisations to potentially study data processing services as such, clarifying that the obligations of Chapter VI shall not apply to "data processing services provided as a non-production version for testing and evaluation purposes, and for a limited period of time"[769].

**Figure 39. Data Act Contractual and Switching Rules and Research**




*Source: Compiled by the study team.*

765 See also regarding the notions of "data recipient" and "business-to-business relations" above section 6.1.3.

766 Defined as "a natural or legal person which in relation to contracts and practices covered by this Regulation is acting for purposes which are related to that person's trade, business, craft or profession" (Art. 2(24) Data Act).

767 Switching itself is defined in the final text of the DA as "the process involving a source provider of data processing services, a customer of a data processing service and a destination provider of data processing services, whereby the customer of a data processing service changes from using one data processing service to using another data processing service of the same service type, or other service, offered by a different provider of data processing services, including through extracting, transforming and uploading the data" (Art. 2(34) Data Act).

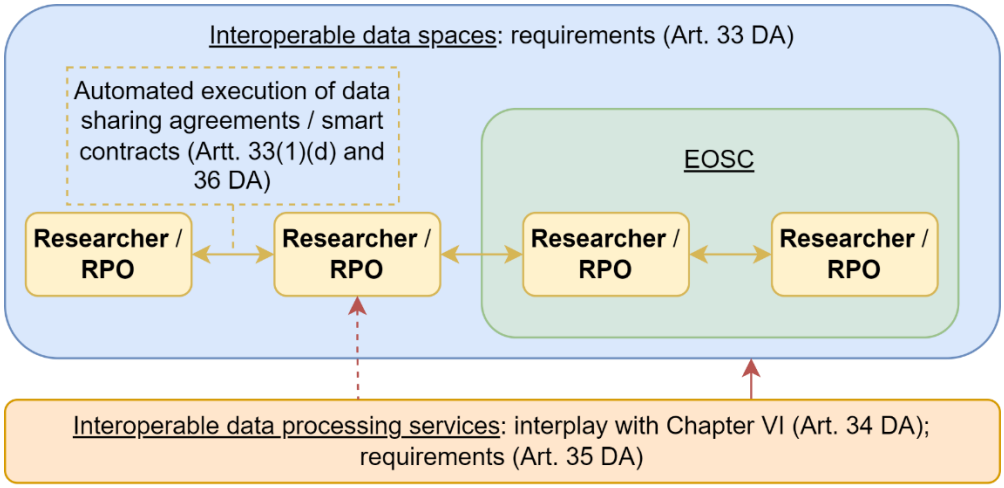
768 Ar. 2(12a) Data Act.

769 Art. 31(2) Data Act.

### Interoperability aspects of the Data Act

Chapter VIII of the DA introduces requirements for the interoperability of data spaces[770], of data processing services[771], and of smart contracts for executing data-sharing agreements[772]. The interoperability of data spaces is addressed to "[participants] of data spaces that offer data or data services to other participants"[773]. The purpose of these interoperability requirements for data spaces is also linked to research, with "common European data spaces" being described as "interoperable frameworks of common standards and practices to share or jointly process data for, inter alia, (…) scientific research or civil society initiatives"[774]. The requirements for such data space participants are elaborated in Article 33(1), with further provisions being included regarding Commission delegated acts[775], harmonised standards[776], Commission implementing acts regarding common specifications[777], and Commission guidelines[778], each of which may serve an authoritative function for participants of data spaces in complying with the core requirements[779]. These requirements have important implications for researchers and research organisations, for instance, where they are active within the scope of EOSC as a data space[780], where they make use of or contribute to the development of data processing services[781], or where they are party to data sharing agreements that are automatically executed, such as via smart contracts[782].

**Figure 40. Data Act Interoperability Rules and Research**




*Source: Compiled by the study team.*

### 2.6.2. Opportunities for researchers and research organisations

**Internet of Things (IoT) rules of the DA**: researchers can encourage the sharing of IoT data, for instance, by non-researcher users with researchers as third parties or by research users with other researchers as third parties.

770 Art. 33 Data Act.
771 Art. 35 Data Act; also "for the purposes of in-parallel use of data processing services" (Art. 34 Data Act).
772 Art. 36 Data Act.
773 Art. 33(1) Data Act.
774 Art. 33(1) Data Act.
775 Art. 33(2) Data Act.
776 Art. 33(4) Data Act.
777 Art. 33(5) Data Act.

**Business-to-Government (B2G) aspects of the Data Act**: Researchers, especially in specialised fields relevant to the contexts of "exceptional needs" such as those related to public health, natural disasters or cybersecurity, may benefit from access facilitated by the DA's B2G data sharing rules permitting the sharing of relevant data by certain public bodies.

**Cross-cutting legal aspects of the Data Act**: The DA's enactment of provisions in the interest of fairness will directly benefit researchers where they are enterprises engaged in contractual relations, and/or customers of data processing services. This will ensure that researchers, where they are subject to contractual or technological power asymmetries, have access to legal recourse under the DA. Further, Article 9(4) benefits not-for-profit research organisations where they are a data recipient within the context of the DA – the compensation of a data holder for making data available to them may not exceed costs incurred for doing so.

**Interoperability aspects of the Data Act**: In the future, it is likely that the DA interoperability requirements will provide an important technical benchmark for data sharing in the EU, especially within the context of data spaces and the EOSC, and thereby facilitate access and sharing of data long-term.

### 2.6.3. Challenges identified

**Internet of Things (IoT) rules of the Data Act**: Where researchers qualify as IoT data holders, they need to be cognisant of the obligations enacted by the DA.

**Business-to-Government (B2G) aspects of the Data Act**: Researcher access is subject to extensive conditions that need to be fulfilled as outlined in Article 21.

**Cross-cutting legal aspects of the Data Act:** At the same time, researchers should comply with the rules on contractual fairness and data processing services, especially where they may be understood to have imposed unfair contractual terms or where they provide data processing services. Further, there remains some uncertainty about whether all types of researchers will qualify as beneficiary “enterprises” under Article 13.

**Interoperability aspects of the Data Act**: The rules on interoperability in the DA may pose an immediate challenge for some researchers when implementing the necessary technical requirements. The requirements are currently unspecified and unimplemented, whereas further standardisation specification and implementation challenges may yet emerge, meaning that benefits accruing from broader interoperability may have limited real-world effects in the short- or medium-term.

778 Art. 33(6) Data Act.

779 Cf. Art. 33(3) and (5c) Data Act.

780 See Chapter 8 below.

781 Artt. 34 and 35 Data Act; Cf. Art. 31(2) Data Act.

782 Art. 36 Data Act.

## 2.7. Artificial Intelligence Act (Proposal)

*The content of this Section has been authored by Matteo, Frigeri; Thomas, Margoni; Luca, Schirru.*

### Introduction

At the time of writing, the AI Act is being negotiated in the "trilogue" stage[783]. This means that the Section below has been written with three texts in mind: (the initial proposal by the European Commission, hereinafter "AI Act Proposal"[784]; the ensuing text produced by the Council –"AI Act Council text"[785]; and the amendments proposed by the European Parliament – the "AI Act EP text")[786]. In the meantime, negotiations in the trilogue have progressed towards an intra-institutional compromise, with a final agreement being reached in December 2023 in relation to the first draft of the study[787].

Given the implicit difficulty of commenting on a legislative text before formal adoption, the remainder of the literature review and the following analysis will focus predominantly on the three texts currently available. The texts of the Council and the EP share some common elements that were absent in the initial EC Proposal, for example, by introducing an exemption for addressing research activities. These aspects will be reflected in the review. In order to ensure that the analysis remains as relevant as possible, when possible, relevant changes to the text are accounted for in a dedicated Section at the end of each analysis, establishing a relationship between the previous texts and the version. The latter will henceforth always be referenced as "AI Act final text"[788]. For ease of clarity, reference will be made to the article in the text; however, these are likely to change as the text is reviewed and finalised[789]. Finally, the analysis within what is possible will consider the legislative developments up to the 8 February 2024.

The AI Act Proposal was announced in April 2021 and is an ambitious attempt to develop horizontal rules and obligations relating to the development and marketing of AI systems according to the level of risk that they pose[790].

783 The trilogue consists of interinstitutional negotiations during the ordinary legislative procedure aimed at facilitating a compromise with other institutions. They complement the ordinary legislative procedure and are regulated by the Rules of Procedure of the European Parliament (9th Parliamentary Term, July 2019), rules 70-74. See P Craig and G de Burca, EU Law: text, cases and materials (7th ed, OUP) p 169. See also EUR-Lex, 'Trilogue'' https://eur-lex.europa.eu/EN/legal-content/glossary/trilogue.html.

784 Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain union legislative acts (AI Act Proposal) [2021] COM(2021) 206 final.

785 EU Council, (Compromise text) 'Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts' ('AI Act Council text') (2023) 14954/22.

786 EU Parliament, 'Amendments adopted by the European Parliament on 14 June 2023 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised
rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union
legislative acts (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD))' ('AI Act EP text') (2023) P9_TA(2023)0236.

787 EU Parliament, 'Artificial Intelligence Act: deal on comprehensive rules for trustworthy AI' (EU Parliament news, 9 December 2023) Artificial Intelligence Act: deal on comprehensive rules for trustworthy AI | News | European Parliament (europa.eu); the compromise text received also the crucial approval by Member States in February 2024 – Luca Bertuzzi, 'EU countries give crucial nod to first-of-a-kind Artificial Intelligence law' (EURACTIV, 2nd February 2024) EU countries give crucial nod to first-of-a-kind Artificial Intelligence law – Euractiv.

788 The main reference document is an interinstitutional file shared with Committee of Permanent Representatives (COREPER). See Council of EU, 'AI Act - analysis of the final compromise tect with a view to agreement' (2024) Interinstitutional File 2021/0106(COD). The document is also cross-referenced with the Commission Q&A: EU Commission, 'Artificial Intelligence – Questions and Answers' (Commission website, 12nd December 2023) Artificial Intelligence – Q&As (europa.eu).

789 Numbering in particular will change, so reference is made only to the AI Act final text. For example, Art 2 currently includes two different provisions under Art 2(5a) - respectively including an exemption for research and a provision on the applicability of EU law; renumbering will therefore affect all other provisions under Art 2.

790 European Commission, White Paper on Artificial Intelligence – A European approach to excellence and trust, COM(2020) 65 final, 3, <https://commission.europa.eu/system/files/2020-02/commission-white-paper-artificial-intelligence-feb2020_en.pdf> (last accessed 16 October 2023).

The legislation is part of a broader vision. It was announced as going “hand in hand” with the Coordinated Plan on AI, which, in turn, has within its main objectives to set the conditions “for AI development and uptake in the EU”[791]. Some of the main actions that led to the AI Act Proposal started in 2018 with the creation of an “AI Expert Group”[792]. Additional initiatives related to the approach of the EU concerning AI encompass the Communication from the Commission “Artificial Intelligence for Europe” – aiming to make the EU a “champion of an approach to AI that benefits people and society as a whole”[793] - and the White Paper “on Artificial Intelligence – A European approach to excellence and trust”, proposing “policy options to enable a trustworthy and secure development of AI in Europe”[794]. While other relevant regulatory initiatives may impact the AI industry in the EU (e.g. the AI Liability Directive)[795], this study will solely focus on the provisions of the AI Act and its potential impact on research.

Differently from other pieces of the data and digital legal framework, such as the Open Data Directive[796] and the Digital Services Act[797], the AI Act EC text did not address in-depth uses for research, yet this is not to say that research was not an important dimension. The recitals of the AI Act underlie the Commission’s commitment to ‘’enabling scientific breakthrough’’ and ‘’preserving the EU’s technological leadership’’[798]. Supporting EU research is thus a salient policy objective as it reduces the EU's dependence on AI technologies developed by companies based in other countries and ensures that the EU maintains a strong position in shaping the future of AI[799].

791 European Commission, 'Coordinated Plan on Artificial Intelligence 2021 Review (2021) COM(2021) 205 final.

792 A comprehensive timeline of the different actions on AI can be found at: European Commission, "A European approach to artificial intelligence'' <https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence> (last accessed 16 October 2023).

793 Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: Artificial Intelligence for Europe.
COM/2018/237 final.

794 European Commission, White Paper on Artificial Intelligence – A European approach to excellence and trust, COM(2020) 65 final, 2.

795 Proposal for a Directive of the European Parliament and of the Council on adapting non-contractual civil liability rules to artificial intelligence (AI Liability Directive) COM/2022/496 final.

796 Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information [2019] OJ L 172/56.

797 Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) [2022] - OJ L 277.

798 White Paper on Artificial Intelligence p. 1.

799 CLAIRE, '''AI made in Europe''- boost it or lose it'' (2023) 1.

The literature on the AI Act surveys a wide variety of issues crucial to the adoption and deployment of such a critical technology. Nevertheless, the perspective of researchers and research organisations remains relatively underrepresented, and is mostly discussed in the context of position papers and policy briefs. The issues that have been at the centre of scholarly attention include: **algorithmic discrimination** and the role of "**transparency**"[800] in fighting discrimination and bias[801]; Large Language Models and "hallucinations"[802]; medical devices **cybersecurity** and alignment of the AI Act Proposal the requirements of the MDR [Medical Devices Regulation]"[803]; **liability** rules and the connection with other AI-related regulation (e.g. the AI Liability Directive)[804]; the AI-related **terminology** adopted in different fields[805]; the interplay with **data privacy** and the impact on **AI regulation** in other jurisdictions[806]; **human oversight**[807]**; trustworthiness**[808]**;** potential **copyright issues**[809]**;** the adoption of **regulatory sandboxes**[810]**;** among others.

When it comes to the interplay with research, the literature seems mainly focused on analysing the impact of the provisions of the AI Act on **certain fields of research**, like journalism[811], media[812], and Natural Language Processing[813]. While important lessons can be drawn from this literature, the impact of the Regulation on the activities of researchers and research organisations seems to be a topic in need of further exploration.

In the remainder of this chapter/Section, the focus will be on aspects of the AI Act selected for their relevance to research and research organisations.

800 Busuioc et al., Reclaiming transparency: contesting the logics of secrecy within the AI Act (2023) 2/1 European Law Open 79.

801 Bettina Berendt, 'The AI Act: Towards the next transparency fallacy? Why AI regulation should be based on principles based on how algorithmic discrimination works' (2022) in BMJV & F Rostalski (Eds.), Künstliche Intelligenz - Wie gelingt eine vertrauenswürdige Verwendung in Deutschland und Europa? (Mohr Slebeck, Tübingen).

802 L Zihao, 'Why the European AI Act Transparency Obligation Is Insufficient' (2023) 5/6 Nature Machine Intelligence 559.

803 Biasin et al., 'Cybersecurity of Medical Devices: New Challenges Arising from the AI Act and NIS 2 Directive Proposals' (2022) 3 International Cybersecurity Law Review 163.

804 Orian et al., ''The European Commission's Approach To Extra-Contractual Liability and AI – A First Analysis and Evaluation of the Two Proposals'' (2022) SSRN.

805 Graziani et al., 'A Global Taxonomy of Interpretable AI: Unifying the Terminology for the Technical and Social Sciences' (2023) 56 Artificial Intelligence Review 3473.

806 Graham Greenleaf, 'The 'Brussels Effect' of the EU's 'AI Act' on Data Privacy Outside Europe' (2021) 171 Privacy Laws & Business International Report 3.

807 Johann Laux, 'Institutionalised Distrust and Human Oversight of Artificial Intelligence: Toward a Democratic Design of AI Governance under the European Union AI Act' (2023) SSRN; Lena Enqvist, "Human oversight' in the EU artificial intelligence act: what, when and by whom?' (2023) 15/2 Law, Innovation and Technology 508.

808 Laux et al., 'Trustworthy Artificial Intelligence and the European Union AI Act: On the Conflation of Trustworthiness and Acceptability of Risk' (2023) Regulation & Governance; Smuha et al., 'How the EU can achieve legally trustworthy AI: a response to the European Commission's Proposal for an Artificial Intelligence Act' (2021) SSRN.

809 Kretschmer, Martin, Margoni, Thomas; Oruc, Pinar; 'Copyright law, and the life cycle of machine learning models' (2024) International Review of Intellectual Property and Competition Law (IIC), Vol. 1/2024; iss. 1; João Pedro Quintais, 'Generative AI, Copyright and the AI Act' (2023) Kluwer Copyright Blog https://copyrightblog.kluweriplaw.com/2023/05/09/generative-ai-copyright-and-the-ai-act/.

810 K Yordanova, 'The EU AI Act–Balancing Human Rights and Innovation through Regulatory Sandboxes and Standardization' (2022) Competition Policy International; Buocz et al., 'Regulatory sandboxes in the AI Act: reconciling innovation and safety?' (2022) 15/2 Law and Innovation Technology 357.

811 N Helberger and N Diakopoulos 'The European AI Act and How It Matters for Research into AI in Media and Journalism, Digital Journalism' (2022) Digital Journalism.

812 Ibid.

813 Srishti et al., 'AI Regulations in the Context of Natural Language Processing Research' (2023) SSRN.

### 2.7.1. Key aspects

*Relevant provisions*

**Table 28. Identifies relevant provisions for research in the three versions of the AI Acts**

| Provision(s) | Relevance to research |
|---|---|
| **AI Act Proposal -** **Art 3(1)**; Recital 6, Annex I **AI Act Council text -** **Art 3(1)**; Recitals 6, 6a, 6b **AI Act EP text –** **Art 3(1)**; Recitals 6, 6a, 6b | **Definition of ''AI system'':** Both algorithms or software used as input or produced as output of research activities may fall under the scope of AI Act depending on how "AI system" is defined, potentially also extending to mere "AI components" |
| **AI Act Proposal -** **Artt 5, 28-29**; Recital 16 **AI Act Council text -** **Artt 5, 28-29**; Recital 12b **AI Act EP text -** **Artt 5, 28-29**; Recital 16 | **AI in Research:** Save when explicitly exempted, the obligations contained in the AI Act apply to the use of AI systems in research activities. Some uses of AI systems – ''AI practices'' – are automatically prohibited (Art 5); special obligations are imposed on users of high-risk AI systems, including in the context of research activities. |
| **AI Act Proposal -** **Artt 53**; Recital 16 **AI Act Council text -** **Artt 2(6), 53**; Recital 12b **AI Act EP text -** **Artt 2(5)(d), 53**; Recitals 2f, 16 | **Research in AI**: Research in AI generally refers to research, testing, and developing activities in relation to AI systems. Given the legal uncertainty on whether these activities may incur obligations under the AI Act, specific exemptions are introduced in both the Council and EP text (Art 2(6) and Art 2(5)(d) respectively). The aim is to ensure that the Regulation does not hinder research in AI systems. |
| **AI Act Proposal -** Recital 16 **AI Act Council text -** **Art 2(6)**; Recital 12b **AI Act EP text -** Recitals 2f, 16 | **Research in AI in Research:** This construct refers to the development of AI systems specifically for research purposes. Given the risk of research being hindered by legal uncertainty and the concrete possibility that research organisations may be considered ''providers'' of such AI systems, a specific exemption was introduced in the Council text to ensure that there a lighter regulatory framework applies. |
| **AI Act Proposal -** - **AI Act Council text -** - **AI Act EP text -** **Art 2(5)(e)**; Recitals 12a, 12b, 12c | **Open Source AI:** A considerable amount of research and experimentation in AI systems takes place under the ethos of Open Science, with AI components made available to the public under Open Source licences. The EP text addresses the complexity of the AI value chain in the recitals and introduces an exemption for ''Open Source AI components'' aimed at reducing legal uncertainty. |
| **AI Act Proposal -** - **AI Act Council text -** **Art 3(1)**; Recital 6 **AI Act EP text -** **Art 28b(4)**; Recitals 60g, 60h | Generative AI – The relevance of the provisions on Generative AI for RPOs stems from the interrelation of these new obligations – especially on transparency of training datasets and copyright infringement – with the existing copyright legislative framework, especially the provisions in the CDSM aimed at facilitating the use of text and data mining techniques (including AI training) by RPOs. |

*Source: Compiled by the study team.*

*The AI Act: overview of the approach to a risk-based regulation of AI and its potential impact on research*

The AI Act is likely to affect a variety of actors in the AI value chain – impacting researchers in various roles.

The first step in assessing the application of the AI Act to research activities is to determine whether researchers could be considered either providers or users of an AI system. The AI Act Proposal defines a ''provider'' as – inter alia - a legal or natural person that ''develops an AI system *or* that has an AI system developed with a view to placing it on the market or putting it into service under its own name or trademark'' (emphasis added)[814]. A ''user'' is considered ''a natural or legal person … using an AI system under its authority, unless it is used in the course of a personal, non-professional activity''[815]. While the concept of ''user'' seems to be sufficiently clear, much uncertainty still exists over which actors in the AI value chain will be considered providers of an AI system[816]. For example, it has been pointed out that researchers collaborating with industry partners may be considered as providers when making available an AI system developed for academic purposes[817].

The second step looks at how the AI Act may generally impact research activities. Article 5 of the AI Act prohibits a series of practices involving the use of AI systems (''Prohibited Artificial Intelligence Practices'' under Title II). The application of this strict regulatory regime is premised on the condition that these practices are at least ''likely to cause … physical or psychological harm''[818] or involve ''detrimental or unfavourable treatment of natural persons''[819]. It seems plausible that research activities will only be covered by this provision in the most extreme cases.

A considerable number of AI systems used in the context of research are, however, likely to be classified as ''high-risk''[820]. These AI systems are not, per se, prohibited; rather, the provider of these AI systems must comply with a list of obligations under Title III of the AI Act[821]. The criteria necessary to identify ''high-risk'' AI systems are provided in Article 6 of the AI Act[822].

**Providers of ''high-risk'' AI systems** – Research institutions may act as developers of high-risk AI systems, making them responsible for compliance with a set of requirements[823]. For example, a research university may partner with a public institution to build an AI system to be used for the management of traffic[824]. To the extent that the university will be considered a provider – whether jointly with the public institution or not – it will have to comply with a series of obligations, including to:

a) set up a risk management system, considering both ''known and foreseeable risks associated with high-risk AI systems''[825];

814 AI Act Proposal art 3(2).

815 Ibid art 3(4). Note that in the AI Act EP text, the term "users" is replaced with "deployers". See art 3(1)(4).

816 Yordanova p 3; Ebers et al., ''The European Commission's Proposal for an Artificial Intelligence Act - A Critical Assessment by Members of the Robotics and AI Law Society (RAILS)'' 4 J p 291.

817 Ebers et al. (n x) p 291.

818 AI Act Proposal Art 5(1(a)(b).

819 Ibid Art 5(1(c).

820 Although this finding cannot be generalised, a recent (non-peer-reviewed) study indicates that out of 514 AI systems analysed, a total of around 30% could be classified as high-risk AI systems. See Hauer et al., 'Quantitative study about the estimated impact of the AI Act' (2023) arXiv <2304.06503.pdf (arxiv.org)> (last accessed 16 October 2023).

821 For a detailed analysis of these obligations, see M Veale and FZ Borgesius, 'Demystifying the Draft EU Artificial Intelligence Act' (2021) 4 Computer Law Review International 112.

822 Defining the criteria for the identification of high-risk systems remains a contentious issue and is being further addressed in the trilogue; however, the iterations in the Council and EP text indicate that the Proposal is moving towards a further narrowing of the definition of high-risk AI system – e.g., that it poses ''a significant risk of harm to the health, safety or fundamental rights of natural persons''. See AI Act EP text art 6(2) and AI Act Council text art 6.3.

823 AI Act Proposal art 16.

824 Such as system would be considered high-risk pursuant to AI Act Proposal Annex III (2)(a) – ''AI systems intended to be used as safety components in the management and operation of road traffic and the supply of water, gas, heating and electricity''.

825 AI Act Proposal art 9.

b) implement an appropriate data governance framework ensuring that the ''training, validation and testing data sets'' meet specific quality criteria[826];

c) ensure that the AI systems comply with several design specifications[827] – e.g. enabling the automatic recording of events for record-keeping purposes[828] or by providing for the possibility that natural persons can be ''effectively overseen'' the AI system during its use[829];

**Users of ''high-risk'' AI systems** – Research institutions may also be considered users of a ''high-risk'' AI system. An example could be a university that uses AI systems ''for the purpose of assessing students'' in the context of educational activities[830]. The AI Act introduces a specific regime of obligations for users in Article 29[831]. These obligations could be seen as an extension of the obligations of providers, playing an ancillary and supporting function. In fact, they mostly consist of monitoring the operations of high-risk AI systems ''on the basis of the instructions of use''[832], record-keeping[833], and the duty to integrate data protection impact assessment with information provided by providers[834].

**Certain AI systems** - Finally, other obligations in the AI Act apply to ''certain AI systems'' irrespective of their ''high-risk'' classification. For example, transparency obligations are imposed on AI systems intended to interact with natural persons, requiring providers to ensure that any interaction with an AI system is made explicit[835] or that AI systems generating images or other audiovisual content falsely representing persons, places or other entities or events[836] ''shall disclose that the content has been artificially generated or manipulated''[837].

In the next Section, we will look at the key legislative provisions that are likely to have an instrumental role in creating a supportive environment for AI-related research activities in Europe.

*Defining AI*

The definition of what may be considered an AI system is a crucial step in determining the scope of application of the AI Act. In the AI Act Proposal, an AI system is defined as "a software that is developed with one or more of the techniques and approaches listed in Annex I and can, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with"[838]. Annex I goes on to incorporate a list of ''approaches'' and AI techniques (machine learning, logic and knowledge-based, and statistical), thus covering a wide variety of AI models without binding the definition to any specific technology[839].

826 AI Act Proposal art 10.

827 AI Act Proposal artt 12-15. While some obligations could be horizontally applied to all AI systems – e.g., compliance with an appropriate level of accuracy, robustness, and cybersecurity (Article 15 AI Act Proposal) – other obligations seem to imply a direct human interaction with the system. An example is Art 13(1) (AI Act Proposal), requiring AI systems to be designed in a way that allows natural persons to ''interpret the system's output and use it appropriately''.

828 AI Act Proposal art 12.

829 AI Act Proposal art 9.

830 Annexes to the AI Act Proposal annex III 3(b).

831 AI Act Proposal art 29.

832 AI Act Proposal art 29(4).

833 AI Act Proposal art 29(5).

834 AI Act Proposal art 29(6).

835 AI Act Proposal art 52(1).

836 Art 52(3) of the AI Act Proposal refers to ''AI system that generates or manipulates image, audio or video content that appreciably resembles existing persons, objects, places or other entities or events and would falsely appear to a person to be authentic or truthful ('deep fake')''.

837 AI Act Proposal art 52(3).

838 AI Act Proposal art 3(1).

839 Annexes to the AI Act, Annex I.

This approach is consistent with the work of the High-Level Expert Group on Artificial Intelligence (AI HLEG)[840], UNESCO's Recommendation on the Ethics of Artificial Intelligence[841] and the OECD's AI Principles[842]. Concerns have been expressed by researchers that such a broad definition may overreach beyond what we normally consider AI systems – e.g. all statistical-based models[843]. These concerns may have been largely eased by the AI Act Council text narrowed definition of ''AI systems'', which adds that they must ''operate with elements of autonomy''[844] and influence the ''environments with which the AI system interacts'', also removing any reference to statistics-based approaches[845]. The AI Act EP text goes even further by completely omitting any reference to the ''techniques or approaches'' used to develop AI systems[846]. The AI Act final text represents a further refined and specific definition, maintaining many of the elements of the previous versions - "a machine-based system designed to be operated with varying levels of autonomy ... influenc[ing] the ... environment" but adding a reference to further qualities – "adaptiveness" and the ability to generate "predictions, content, recommendation, or decision" based on explicit and implicit objectives[847]. Recital 6 further addresses outstanding points of uncertainty, for example, specifying that the "capacity of an AI system to infer goes beyond basic data processing, enabling learning, reasoning or modelling"[848].

### *AI in Research and Research in AI*

As previously mentioned, the AI Act EC text did not originally contain any specific exemption for research purposes[849]. As a result, research organisations may face difficulties in complying with the proposed Regulation and may end up being negatively affected[850]. These concerns led to calls to amend the legislation in order to ensure that the future Regulation will not undermine a) research around AI systems (''Research in AI'') and b) the use of AI systems for the purpose of scientific research (''AI in Research'')[851]. This taxonomy may be further expanded to include a third category: c) the development of AI systems solely for the purpose of scientific research ("Research in AI in Research"). The introduction of exemptions for research has received support in the literature, at least for fundamental research in AI[852]. This should, however, not come at the expense of affording avenues for circumvention of the newly introduced obligations by opportunistic actors[853].

840 High-Level Expert Group on Artificial Intelligence. A definition of AI: Main capabilities and scientific disciplines (2019), p 8.

841 UNESCO (2021). Recommendation on the ethics of artificial intelligence, 10.

842 OECD, 'Recommendation of the Council on Artificial Intelligence'(2023, OECD) OECD/LEGAL/0449.

843 The Guild of European Research-Intensive Universities, Proposals for the Artificial Intelligence Act (2021).

844 In contrast with the Commission text, the Council refers to ''AI systems'' rather than software (see Art 3(1) Commission text). The addition of the concept of operative autonomy is problematic since it is unclear what it means and how it is to be assessed.

845 AI Act Council text art 3(1).

846 See AI Act EP text art 3(1). More specifically, the EP text both increases – by removing any reference to techniques and approaches – and narrows down – by defining AI systems as ''machined-based''. In the definition of AI systems they also remove ''content'' from the list of outputs, a remarkable step given, contrary to the definition of AI systems, that generative AI is not generally held to produce ''predictions, recommendations or decisions''; Almeida et al., 'Proposed EU AI Act – Presidency compromised text: select overview and comment on the changes to the proposed regulation' (2022) 3 AI and Ethics 383. For further criticism of the AI Act Council text, see Yordanova p 4.

847 AI Act final text Art 3(1).

848 AI Act final text recital 6.

849 The only exception is recital 16 AI Act Proposal. This omission was noticed in the literature. See Ruschemeier, 'AI as a challenge for legal regulation – the scope of application of the Artificial Intelligence act Proposal' (2021) 23/3 ERA-Forum 361, 373; Ebers et al. p 591.

850 CLAIRE, 'Response to the European Commission's Proposal for AI Regulation and 2021 Coordinated Plan on AI' (2021) 16. See also VL Raposo, 'Ex machina: preliminary critical assessment of the European Draft Act on artificial intelligence' (2022) 30 International Journal of Law and Information Technology 88, 105.

851 Bogucki et al., 'The AI Act and Emerging EU Digital *Acquis*' (2022) CEPS 28.

852 Kazim et al., 'EU Proposed AI Legal Framework' (2021) 3/2 AI and Ethics 381.

853 Almeida et al., 'Proposed EU AI Act – Presidency compromised text: select overview and comment on the changes to the proposed regulation' (2022) 3 AI and Ethics 383.

**AI in research** – Albeit never explicitly mentioned in the legislative provisions, the recitals of the AI Act Proposal demonstrate concern about the potential negative effects of the Regulation in the use of AI systems for research purposes, especially as it may hinder valuable research[854]. In recital 16, it is stated that the general prohibition of AI systems "intended to distort human behaviour" should not stifle research if a) it is carried out for ''legitimate purposes'', b) it does not relate to ''human-machine relations that expose natural persons to harm'', and c) if it is ''carried out in accordance with recognised ethical standards for scientific research''[855]. The rest of the provisions most likely to impact the uses of AI systems in the context of research activities are framed generally, without any specific reference made to research per se. Article 5, as previously discussed, lists several prohibited AI practices, consisting, for example, of using AI systems that, through subliminal techniques, distort a person's behaviour and cause either physical or physiological harm. The use of high-risk AI systems is also regulated, including when research organisations use these systems or when the use happens in a research context. In such cases, users may: 1) be subject to the same obligations of providers whenever they modify the intended purpose of a high-risk AI system or make substantial modifications (AI Act 28)[856]; 2) need to comply with a series of obligations specifically designed for users of high-risk AI systems (AI Act 29)[857], as discussed in Section 2.7.1. These provisions are reproduced verbatim in all versions of the AI Act. The recitals of the AI Act also reference an intention not to unduly hinder the use of AI in research at recital 16 AI Act Proposal and EP text, recital 12b AI Act Council text, and recital 2f AI Act EP text.

In the AI Act final version, the essence of these provisions is maintained, albeit the term "user" in Articles 28 and 29 of the AI Act Proposal is replaced by "deployer". This helps to sufficiently distinguish the term deployer by end user, reinforcing the idea that a deployer could also be a person integrating and using an AI system in their activity – e.g. a university using an AI system for grading[858].

854 See AI Act Proposal recital 16, 40, 45.

855 AI Act Proposal recital 16. In the literature, this recital was criticized for being too limited in scope – see The Guild of European Research-Intensive Universities, 'Proposals for the Artificial Intelligence Act' (The Guild Position Statement) (2021).

856 AI Act Art 28.

857 AI Act 29.

858 While avoiding confusion, all previous versions of the AI Act contained the same version of user/deployer - see Art 3(4) AI Act. The AI Act Council text was the first version adopting the term deployer.

**Research in AI** – Another dimension of the interface between AI and research is to consider research to design and develop AI systems, as well as to monitor and better understand their functioning. Generally, the EU institutions have expressed an intention to ensure that research in AI abides by ''the highest ethical standards and relevant EU law''[859]. The AI Act Proposal underlies the importance of research in the training, validation, and testing of AI systems, adding that researchers ''should be able to access and use high-quality datasets'', with European common data spaces explicitly identified as an example of a crucial instrument to facilitate such access[860]. However, the only provision in the AI Act Proposal that actively promotes research in AI systems is Article 53. The provision establishes a ''controlled experimentation and testing environment(s)''[861] (AI regulatory sandboxes). It is intended to facilitate the ''development, testing and validation of innovative AI systems'' before they are placed into the market, thus contributing to creating an environment for research in AI systems[862]. The special role of AI regulatory sandboxes is even more evident from Article 54a AI Act EP text, where priority access to these controlled environments is treated as a key tool to promote AI research in the public interest (e.g. to tackle climate change)[863]. However, this does not amount to a derogation from compliance with the AI Act[864], and participants operating within the ''regulatory sandbox'' framework remain liable under EU and national law for any damage caused during the course of their development activities[865].

In the AI Act Council text, a very broad exemption is granted for ''any research and development activities regarding AI'' (Art 2(7))[866], including product-oriented research activity[867]. This was welcomed by the open access community as providing ''useful clarity'' on the scope of the proposed Regulation and would ''enable the limited demo deployment of AI systems for research purposes"[868].

On the other hand, the EU Parliament introduced a similar provision, albeit much narrower in scope: it covers ''research, testing and development activities'' that happen *prior* to the placing on the market/put into service of the AI system (Art 2(5d))[869]. This exemption, however, does not extend to ''the testing in real-world conditions''[870] – namely ''outside of a laboratory or otherwise simulated environment''[871].

In the AI Act final text, the exemption in the EP text is ultimately retained: the AI Act "shall not apply to any research, testing and development activity regarding AI systems or models prior to being placed on the market or put into service"[872.] Real-world testing is also excluded from the scope of the exemption[873].

859 Eu institutions, 'Euoprean Declaration on Digital Rights and Principles for the Digital Decade'(2022) Chapter III point f.

860 AI Act Proposal recital 45.

861 Ibid recital 71.

862 AI Act Proposal article 53. See also recitals 71 and 72.

863 AI Act Parlaiment text art 54a(1).

864 Ibid recital 72.

865 AI Act Proposal Article 53(4). For further discussion, see Buocz et al (n x) p 384.

866 AI Act Council text Article 2(7).

867 See AI Act Council text recita 12b

868 Creative Commons, 'Supporting Open Source and Open Science in the EU AI Act' (Open Source Position Paper) (2023) p 13. Signatories: Creative Commons, EleutherAI, GitHib, Hugging Face, LAION, Open Future.

869 AI Act Council text Art 2(5d)).

870 Ibid.

871 AI Act EP text art 3(1)(44n)

872 AI Act final text Art 2(5b).

873 Ibid.

**Research in AI in research** – Such an exception exclusively appeared in the AI Act Council text. It specifies that AI systems – including their output – specifically developed and put into service for the sole purpose of scientific research and development should be exempted from the Regulation[874]. While the exemption has been generally welcomed, the literature also highlighted the difficulty in determining whether AI training and development activities are solely for the purpose of scientific research, leaving the scope of the provision uncertain[875]. The Council exemption serves the purpose of facilitating – by applying a less onerous regulatory regime based on the respect for ‘’fundamental rights and the applicable Union law’’[876] – the development of AI systems used in the context of scientific research.

No similar exemption can be found either in the AI Act Proposal or the AI Act EP text[877]. Interestingly, recital 2f of the AI Act EP text specifies that ‘’it is … necessary to exclude from its scope AI systems specifically developed for the sole purpose of scientific research and development’’[878]; despite the unequivocal tone of the recital, no exemption can be found in the articles of the AI Act EP text.

The AI Act final text reproduces the Council text exemption verbatim[879]. In addition, and albeit the recital exclusively refers to providers of general-purpose AI models (in this study referred to as foundation AI models for simplicity), the final text also specifies that "persons who develop or use[880] models for ... scientific purposes" do not need to comply "with the obligations foreseen for the providers of general-purpose AI models"[881].

874 AI Act Council text art 2(6).

875 Almeida et al., ‘Proposed EU AI Act – Presidency compromised text: select overview and comment on the changes to the proposed regulation’ (2022) 3 AI and Ethics 383.

876 It is important to stress that research institutions do not operate in a legal and ethical vacuum. This is made explicit in the newly proposed article 2(5d) of the AI Act EP text: ‘’[research, testing and development activities] are conducted respecting fundamental rights and the applicable Union law’’. See similarly AI Act Proposal recital 16, which mentions the ‘’ethical standards for scientific research’’ that bind researchers in the course of their activities.

877 European Parliament, Amendments adopted by the European Parliament on 14 June 2023 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts (2023) COM(2021)0206 (‘Artificial Intelligence Act proposal – Compromise version of the European Parliament’).

878 AI Act EP text recital 2f.

879 AI Act final text.

880 To the extent that it also refers to the "uses' of a general purpose AI models, the recital is also relevant for "AI in Research", described above.

881 AI Act final text recital 60g.

*Free and Open Source Artificial Intelligence in the AI Act*

The AI Act EP text is the only version of the AI Act specifying that the ‘’Regulation does not apply to AI components provided under free and Open Source licences’’ (‘’Free and Open Source AI’’) in Article 2(5e)[882]. The rationale for this exemption seems to be the contribution of the Open Source sharing of software and data to research and innovation in AI[883]. The Regulation, however, applies in full force when these components are placed on the market as part of an AI system falling within the scope of the AI Act – namely, when the latter qualifies as a high-risk AI system or a system falling under Title II (AI system used in the context of ‘’prohibited artificial intelligence practices’’)[884] or Title IV (transparency requirements for certain AI systems)[885]. While the introduction of an exemption for Open Source AI was welcomed by some commentators, it was also noticed how more emphasis should be placed on the broader role of Open Science in increasing transparency and reproducibility of results, two crucial elements in ensuring that AI systems are subject to ‘’more widespread scrutiny" and [to support a better] competitive environment for AI innovation[886].

Despite that Open Source developers are not considered to be acting as providers – either because of the application of an exemption or because they do not carry out a commercial activity[887]. At the same time, recital 12c of the AI Act EP text stresses that they are nonetheless ‘’encouraged to implement widely adopted documentation practices … to accelerate information sharing ... and allowing the promotion of trustworthy AI systems’’[888].

On the other hand, the Article specifies that there is no exemption for providers of foundation models[889], regardless of whether this model is made available Open Source[890]. As specified in the recitals, there is a need to ensure that foundation models are subject to ’’proportionate [to their particular nature] and more specific requirements and obligations [as laid out in Article 28(b)(2) of the AI Act EP text]"[891]. For this reason, an exemption for Open Source foundation models was deemed inappropriate.

882 AI Act EP text Article 2(5e).

883 AI Act EP text recital 12a. Academic research is singled out as an area where Parliament aims to promote the widespread development and deployment of AI technologies.

884 An example are AI systems that make use of ‘’subliminal techniques’’, or a system that exploits the ‘’vulnerabilities of a specific group of people’’ – see AI Act Proposal art 5(a)(b).

885 These transparency obligations are for example imposed on providers of AI systems intended to interact with natural persons, when it is not obvious from the circumstances and context of the use. See Article 52(1) AI Act.

886 Open Source Position Paper p 3.

887 See AI Act Art 3(9) and (10), where it is stated that only acts "in the course of a commercial activity" will amount to placing on the market of an AI system.

888 AI Act EP text recital 12c.

889 The AI Act EP text defines foundation models as an AI system model ‘’trained on broad data at scale, designed for generality of output’’ and that can be ‘’adapted to a wide range of distinctive tasks’’ – see AI Act EP text art 3(1)(c). See also AI Act EP text recital 60e.

890 AI Act EP text artt 2(5e) and 28b(1).

891 AI Act Council text recital 12c.

The AI Act final text alters the wording – and by a consequence, the scope – of the Open Source exemption in the EP text by referring more generally to "AI systems released under free and open source licences" rather than "AI components"[892]. The same exclusions from the scope of the exemption apply when the Open Source AI systems are placed on the market as a high-risk system or a system falling under Title II (prohibited practices and IV (transparency requirements for certain AI systems)[893]. The AI Act final text, however, substantially diverges from any of the previous versions by introducing a lighter regulatory regime for providers of general-purpose AI models (foundation models in AI Act EP text) made accessible to the public under free and Open Source licences[894]. These models are relieved from some of the transparency obligations to which general-purpose AI models are subject as long as certain information (e.g. weights or information on the model architecture and on data usage) is made publicly available and the model does not present systemic risks[895]. This addition reflects the broader and more systematic regulation on general-purpose AI models contained in the AI Act[896].

*Generative AI in the AI Act*

When considering how the AI Act may affect the use and reuse of data for research purposes, special attention should be paid to the obligations that the AI Act imposes on generative AI.

A reference to generative AI was first made in the AI Act Council text, where it is introduced as a subcategory of AI systems in Art 3(1); its defining characteristic is the production of content (e.g. text, video, or images) as output[897]. A more comprehensive regulation of generative AI systems appears in the AI Act EP text, which refines the definition of the Council text by specifying that generative AI models possess ‘’varying levels of autonomy’’ and produce content "such as complex text, images, audio or video’’[898].

Generative AI models are considered intrinsically unpredictable[899] and raise ‘’significant questions related to the generation of content in breach of Union law, copyright rules, and potential misuse"[900]; for this reason, the AI Act EP text subjects providers of foundation models used in ‘’generative AI systems’’ to ‘’specific requirements and obligations’’[901] listed in Art 28(b)(4) of the AI Act EP text[902].

892 AI Act final text Art 2(5g).

893 Ibid.

894 AI Act final text Art 52ca (5)

895 Ibid. For more details, see also AI Act final text recital 60f.

896 The AI Act final text includes new provisions concerning general purpose AI models in Artt 52a-52e.

897 AI Council text article 3(1) and recital 6.

898 AI Act EP text art 28(b)(4). Albeit quite generally framed, this definition is consistent with the literature – see Philipp Hacker, 'AI Regulation in Europe: From the AI Act to Future Regulatory Challenges' in I Ajunwa & J Adams-Prassl (eds), Oxford Handbook of Algorithmic Governance and the Law (OUP, 2023) p 10.

899 AI Act EP text recital 60g.

900 AI Act EP text recital 60h.

901 Ibid recital 60g.

902 AI Act EP text art 28b(4).

This special regulatory regime complements the obligations in Article 28b (AI Act EP text), aimed at providers of AI foundation models – of which generative AI can be considered a subcategory. As a result, providers of generative AI models have to mitigate risks, improve the data governance of datasets, and guarantee an appropriate level of performance, predictability, interpretability, corrigibility, safety, and cybersecurity of their AI systems[903]. On top of these more general obligations, providers of generative AI models also need to a) ensure that their systems comply with the transparency obligations of the AI Act[904], b) implement ''adequate safeguards'' against unlawful content[905] by design[906], and c) ''document and make publicly available a sufficiently detailed summary of the use of training data protected under copyright law''[907].

As previously mentioned, the AI Act's final text overhauls the provisions on generative AI and foundation models more generally. The latter term, for example, is discarded, and reference is made instead to general-purpose AI models. In doing so, it offers a more articulated and systematic approach. The resulting picture is, however, much more complex than the provisions in the AI Act EP text. For this reason, the focus will be exclusively on a few sets of obligations aimed at enhancing the transparency of generative AI models. In this regard, the AI Act final text obliges providers of generative AI models to "put in place a policy to respect Union copyright law" in particular with regard to the "reservations of rights expressed under Art 4(3) (exception for text and data mining – later discussed more in detail)[908]. The obligation to make publicly available "a sufficiently detailed summary" about the content used for training the generative AI model – already present in the AI Act EP text – is retained[909]; however, the scope is expanded to cover all types of data (not only protected by copyright), and more details are provided on the template and methodology to draw up these "detailed summary"[910].

### 2.7.2. Discussion

*A better understanding of the interSection between the AI Act and Research*

Throughout the legislative process, the relationship between the AI Act and research has gained a more prominent role. Commenting on the AI Act Proposal, the Guild of European Research-Intensive Universities acknowledged that the Regulation ''aims to regulate AI systems put on the market'', not ''to create obligations for research on AI and AI systems''[911]. After the passage of the original proposal through the Council and the Parliament, new articles were introduced to exempt research activities from the AI Act. These interventions appear to assume that research activities fall within the scope of the AI Act and consider that – as a consequence - it is necessary to introduce some form of exemption to allow innovation and knowledge to keep developing[912]. Both propositions should be critically assessed, in keeping with the distinction between AI in Research and Research in AI.

903 See article 28(b)(1)(2)(3).

904 AI Act Art 28(b)(4)(a).

905 This term is not used in the AI Act EP text. Instead, article 28(b)(4)(b) refers to ''content in breach of Union law''.

906 Ibid Art 28(b)(4)(b).

907 AI Act Art 28(b)(4)(a).

908 AI Act final text 52c(1)(c).

909 AI Act final text Art 52c(1)(d).

910 Ibid. See also recital 60k.

911 The Guild Position Statement.

912 See AI Act Council text recital 12b: ''This Regulation should not undermine research and development activity and should respect freedom of science''. In a similar vein, see also AI Act EP text recital 2f: ''This Regulation should help in supporting research and innovation and should not undermine research and development activity and respect freedom of scientific research''.

**AI in Research** -– AI systems are increasingly seen by researchers as a tool. In neuroscience, for example, AI systems have been used to analyse brain activity and predict human behaviour (e.g. hand movements in human participants)[913]. In such a scenario, the research organisations will only have to comply with the obligations in the AI Act for users of AI systems[914]. Some commentators expressed concerns about the ''additional burdens'' on researchers and the risk that they would be subject to ''*new* standards for responsible and ethical research'' (emphasis added)[915]. Whether these standards are actually *new,* however, is far from clear: for example, Article 5 (AI Act) almost exclusively prohibits the use of AI systems that are likely to cause physical or psychological harm to persons; it is difficult to imagine any academic ethical body approving such research even when measured by the ''recognised ethical standards for scientific research''[916]. It has yet to be demonstrated that the AI Act would impose on researchers anything more than a ''floor'' of ethical standards – for example, by requiring researchers to inform persons part of the research that they are exposed to the use of AI-powered biometric categorisation systems[917]. In other words, existing ethical requirements (e.g. for EU grants) are likely to impose more substantive obligations. Finally, whenever a conflict may arise between the ethical standard set by research institutions and the provisions of the AI Act, Recital 16 (AI Act Proposal and EP text) could be potentially relied upon to ensure that the Regulation is interpreted in such a way as to not ''stifle research for legitimate purposes''[918].

**Research in AI** – Researchers play a vital part in both developing AI systems and the foundational concepts underlying their existence, as well as in better understanding how they function and how to increase the security and trustworthiness of these systems. In addition, research in AI systems is also often a necessary preliminary step in complying with the obligations imposed by the Regulation (e.g. Article 9 of the AI Act requires providers to estimate and evaluate the risks of the use of high-risk AI systems)[919].

As a preliminary remark, research organisations acting as providers – a term which implies the placing of AI systems on the market [920] – will need to comply with the applicable provisions of the Regulation. The concept of provider implies that an AI system is made available on the market in the course of a commercial activity[921] – a concept that is likely to require some interpretation.

913 UCL, ''AI used to decode brain signals and predict behaviour'' (UCL news, 2021) AI used to decode brain signals and predict behaviour | UCL News - UCL – University College London. This application of an AI system is contemplated by the AI Act EP text recital 16, describing it as ''use of certain AI systems with the objective to or the effect of materially distorting human behaviour or psychological harms … including neuro-technologies assisted by AI system that are used to monitor, use, or influence neutral data gathered through brain-computer interfaces … materially distorting the behavior of a natural person''.

914 In this scenario, the following Articles would be relevant: Art 5 (prohibited ''artificial intelligence practices''), Article 29 (Obligations of users of high-risk AI systems – e.g., obligation to ''monitor the operation of the high-risk AI system), and Article 52(2) and (3) (Transparency obligation- e.g., informing persons exposed to AI emotion recognition system of its operation) AI Act Proposal. Unless justified, the Commission text is used as a baseline to assess the obligations to which research organisations would be subject.

915 (my emphasis) The Guild Position Statement.

916 This expression is used in Recital 16 AI Act Proposal/EP text. The AI Act Council text refers to them as ''recognised ethical and professional standards for scientific research'' in Recital 12b.

917 See AI Act Proposal art 52(2).

918 AI Act Proposal/EP text.

919 AI Act Proposal Art 9(5): ''High-risk AI systems shall be tested for the purposes of identifying the most appropriate risk management measures''. See also AI Act Proposal Art 9 (6)(7)and recital 46.

920 The notion of provider is defined in Art 3(1) AI Act. This term is further discussed below in sections on Open Source AI and the transparency obligations for Generative AI.

921 AI Act Proposal Art 3(10).

Neither the exemption in Council (Art 2(7)) nor in the EP text (Art 2(5d) seem to have a sufficiently broad scope of application to cover commercial acts of making available AI systems. The exemption in Art 2(7) covers ''any research and development activity regarding AI systems''; while it is not specified whether this also encompasses commercial research, mere research and development are unlikely to amount to an act of making available. On the other hand, Art 2(5d) EP text is even more explicit in specifying that it applies to ''research, testing and development activities … *prior to* [the AI] system being placed on the market'' (emphasis added). Based on a literal interpretation of the concept of "provider of an AI system" (implying the first making available of an AI system), none of the acts described under Art 2(7) Council text and Art 2(5d) EP text would fall within the scope of the AI Act[922]. For this reason, both provisions could be seen as clarifications rather than actual exemptions from the scope of application of the AI Act[923]. Researchers are, therefore, not required to comply with the obligations intended for providers of AI systems[924].

A degree of ambiguity may be caused by Art 2(5d) EP text specifying that the ''testing in real-world conditions'' should not be covered by this exemption[925]. Firstly, it is questionable whether such an exclusion is justified. After all, real-world testing is crucial to understanding how AI systems are operating ''in the hands of the intended users and not as stand-alone devices''[926]. This exclusion could also have the effect of hampering beneficial practices – such as the offering of ''demos of AI systems''[927]. An additional problem of this exclusion rests in that, as mentioned above, the testing activity of research organisations should not be construed as an act of ''placing on the market'' despite the fact that the AI system is made available to the public. The reason is that ''placing on the market'', as it was pointed out, has a specific meaning under the AI Act: it does not only suffice to make available an AI system; this also needs to be done ''in the course of a commercial activity''. A literal interpretation would suggest that the testing activities of research organisations do not constitute a ''placing on the market'' in light of their non-commercial nature. It will have to be seen how courts will define what is and what is not considered to be ''in the course of a commercial activity'. During the expert interviews, it was confirmed that Open Source developers making AI systems or components freely available should, in principle, not be subject to the Regulation as long as there is no commercial or economic interest served by such act. That said, there remains a plausible risk that these provisions may produce a chilling effect on non-commercial research activities.

In conclusion, research organisations should be wary that ''real-world testing'' of the AI systems will not be considered merely as ''research in the AI system'' itself but rather as a first ''placing on the market'' – unless the testing is not done in the course of a commercial activity''[928]. It remains difficult to predict how this term will be interpreted, and, as a consequence, the impact of the exemption in Art 2(5d) EP text on both commercial and non-commercial research in AI remains partially undetermined.

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922 See discussion of provider in Sections 7.1.2 and 7.2.3.

923 This is despite that Art 2(5) of the EP text is explicitly described as an ''exemption''. It should be kept in mind that the EP text can be effectively considered a draft, and language will be further refined before the Regulation is adopted. An unduly formalist and literal approach would be inappropriate at the moment.

924 This is likely to be the reason why the AI Act Proposal did not foresee any exemption for research in AI, as was also mentioned in our interviews. Several provisions were nonetheless aimed at facilitating testing of systems, such as regulatory sandboxes (see recital 71-72; Art 53) and ''Testing and Experimentation Facilities'' (see recital 74-75).

925 See AI Act EP text art 2(5).

926 Buocz et al. p 360.

927 Open Source Position Paper 12. In the paper, this is highlighted as a potential ''beneficial practices'' that could be hampered by the lack of exemption for real-world testing. A more proportionate approach is called for. The Open Source Position Paper recommended that some real-world testing on a limited scale should be allowed, as long as sufficient documentation is provided and transparency to users is guaranteed. See Open Source Position Paper p 19.

928 A commercial entity placing an AI system on the market may need to carry out testing in real-world conditions. In so far as such testing may risk being considered as placed on the market, there are other provisions on which providers may rely upon to avoid having to comply with the AI Act before the testing phase is over. As an example, see Art 54a Council text – ''Testing of high-risk AI systems in real-world conditions outside AI regulatory sandboxes''.

**Research in AI for Research** – The final variant of research exceptions in the taxonomy canvassed by the various versions of the AI Act is ''Research in AI for Research'', namely the building – e.g. developing, training, and releasing - of AI systems[929] or foundation models exclusively for research purposes. The Council text is the sole version of the AI Act providing for such an exemption[930].

Researchers developing systems internally for their own research purposes will not be considered as to ''place an AI system on the market''[931]: they neither ''make the AI system available'' nor they do so ''in the course of a commercial activity''[932]. However, the concept of provider does not only refer to acts of ''place[ing] on the market an AI system'' but also to ''putting [an AI system] into service''[933]. In the above analysis, the notion of ''putting into service'' has not been separately discussed, as these acts are largely subsumed under the concept of ''placing on the market''; in fact, the current definition of ''putting into service'' implies a placing on the market, and there is little difference between the two acts – in other words, if a research organisation does not make available the system it will also not be put into service[934]. There is one exception to that, now to be considered: ''putting into service'' also covers acts of ''supply of an AI system … for own use on the Union market for its intended purpose''[935]. The notion of ''supply of an AI system … for own use'' seems to specifically refer to AI systems developed and integrated into the services of an organisation without such an AI system being released in the market. An example could be a university developing and deploying an AI system to grade its students' exams.

In the context of Research in AI for Research, this raises the possibility that a research organisation developing a system specifically for research purposes may be considered liable even when the system is used solely internally – namely ''for own use''. Another example could be a research institution using an AI system developed specifically to analyse data from an empirical study, e.g. studying the linguistic influences on the names of places in a specific region[936]. In such a case, there is a risk that the research organisation will be considered to be ''putting the AI system into service'' thus triggering the obligations on the provider.

The exemption in Art 2(6) could be seen as a direct response to such a scenario, shielding organisations carrying out research from liability. This provision specifies that ''the Regulation shall not apply to AI systems … specifically developed and *put into service*[937] for the sole purpose of scientific research and development''[938].

929 For an example of purpose-specific AI systems, see Valeri et al., 'BioAutoMATED: An end-to-end automated machine learning tool for explanation and design of biological sequences' (2023) 14/6 Cell Systems 525.

930 EP text toys with the idea at recital 2 f yet without following through in any of its provisions. See AI Act EP text recital 2 f.

931 AI Act Art 3(9).

932 Ai Act Art 10(10).

933 AI Act Art 3(11).

934 Under AI Act Art 3(9) AI Act, ''placing on the market is considered ''the first making available'', a term referring to the ''supply of an AI system for distribution or use'' (see AI Act Art 3(10)); on the other hand, ''putting into service'' means ''to supply for first use directly to the user'' (AI Act Art 3(11)).

935 AI Act Art 3(11).

936 This example is based on a real application of AI technologies in toponymy – Matthew Sparkes, 'AI scheds light on the ancient origins of England's place names' (New Scientist, 5th January 2024) https://www.newscientist.com/article/2410129-ai-sheds-light-on-the-ancient-origins-of-englands-place-names/.

937 My emphasis. The provision curiously only refers to putting into service AI systems developed for the sole purpose of scientific research and development, not placing them on the market. The implications of that are unclear; it is possible to hypothesize that the providers of such AI systems will need to maintain a sufficient level of control to ensure that it is not used for any other purpose.

938 AI Act Council text Art 2(6).

There are merits in introducing such an exemption: research should enjoy a degree of liberty in experimenting with the use of AI systems, and the risks ensuing from adopting them in a research context are different than placing them on the consumer market[939]. Contrary to the provisions analysed above, Art 2(6) Council text could thus properly be considered an exemption. Without it, researchers developing these AI systems will be considered providers under the AI Act. The Council text, however, does not specify whether "scientific research" also extends to commercial research activities, potentially leaving the applicability of the AI Act to the activities of many research organisations unclear.

**Conclusion** -– In conclusion, common to all the above reflections on the interface between research and AI is the impelling necessity to 1) define whether the research activities in question fall within the scope of the AI Act and (only after this first point is established) 2) to assess which (specific) obligations imposed by the Regulation are likely to negatively affect research – and by proxy, innovation and knowledge production. A more analytic approach to research in AI is called for, as research activities have different facets that are unlikely to be recognised by broadly framed exemptions. A first step would be to clarify the reach of ''scientific research''[940] and better qualify the meaning of ''research organisations'', an omission to which no text has yet supplied a remedy. These concepts are also present in other DDL sources and copyright acquisitions. This also implies a clarification on whether scientific research extends to both commercial and non-commercial activities. As it will be discussed later (see Sec 9), a coordinated approach to such foundational concepts would be particularly important.

**UPDATE (8 February 2024):** There were no substantive changes to the text that would alter the above analysis. Despite the inclusion of two exemptions for research purposes in the AI Act final text (both for Research in AI[941] and AI in Research[942)], there is no attempt to provide a definition of research, develop an explicit taxonomy, and clearly outline the scope of these exemptions -–in particular with regard to commercial research.

939 As much had already been recognized in recital 16 of the Commission text, despite that no explicit exemption was then introduced.

940 For example, whether it includes research conducted in the context of public-private partnership or private R&D.

941 AI Act final text Art 2(5b).

942 AI Act final text 2(5b)

*Finding the appropriate regulatory regime for Open Source AI – balancing innovation and risks*

A considerable amount of research and experimentation in AI systems takes place in a collaborative context, with AI components (e.g. the pre-training dataset)[943] often made available under Open Source (OS) licences[944]. These projects not only promote access to AI resources to both non-commercial and commercial entities[945]; they also lay the basis for a more diversified research agenda in AI (e.g. to develop LLMs in non-English languages)[946], representing an alternative ''Open'' model of AI research in a sector where research funding is dominated by a handful of tech companies having access to large funds to invest in AI development[947]. In other words, due to its intrinsic characteristics, OS shares many common elements with "research" and therefore, the regulation of OS AI may impact, in one way or the other, the relationship between AI and research. The drafting of the AI Act (all versions) is focused on a "risk-based" regulation which – from this point of view – rightly targets large, commercial AI developers since, arguably, they may pose the biggest risk to EU core values. However, this approach may produce collateral damage to OS initiatives by imposing an unduly restrictive regulatory regime[948]. Whereas, particularly in the EP text, a number of measures have been adopted to address this peril, the next paragraphs will consider the nature of these exemptions.

As anticipated above, only the EP text provided for an exemption for OS AI components. Nonetheless, Art 2(5e) EP text reads more as a clarification than an exemption. In fact, legal or natural persons making available Open Source AI components would not generally be considered as ''providers of an AI system'' under the AI Act. The reason is twofold.

943 The term ''AI components'' is solely used in the EP text, mostly in the context of the exemption for Open Source AI (Art 2(5e) EP text) and related recitals. While there is no explicit definition of what ''AI components'' means, it is likely that the pre-training dataset would fit most interpretation of this term. This seems to be confirmed by recital 12a AI Act EP text, where ''data and software'' is mentioned as an AI component.

944 For an example, see 'Open Source Research' project, (Github) https://thesoundofaiosr.github.io/. See also development of non-profut AI research lab such as EleutherAI – 'About', (EleutherAI) https://www.eleuther.ai/about.

945 Shrestha et al., 'Building open-source AI' (2023) Nat Comput Sci.

946 An example in the context of Large Language Models (LLMs) is 'Polyglot' Project, aimed at extending the training of LLMs to a wider variety of languages in order to improve ''tools for non-English data documentation, curation, and analysis' - 'Polyglot' (EleutherAI, 2023) https://www.eleuther.ai/projects/polyglot.

947 M Spencer and C Guo, 'Is Big Tech monopolizing the AI boom?' (AI supremacy, 2023) https://aisupremacy.substack.com/p/is-big-tech-monopolizing-the-ai-boom.

948 An example is the obligation to establish a quality management system in relation to High-Risk AI (Art 17 AI Commission text). As pointed out by the Open Source Position Paper (commenting a similar provision applicable to foundation models – Art 28b AI EP text), the implementation of these standards requires an understanding of the final application of the AI components and resources that are often lacking in the case of Open Source collaborative projects. See Open Source Position Paper p 12.

Firstly, placing on the market implies an act of distribution carried out "in the course of a commercial activity"[949]. This condition remains open to interpretation, but it appears to imply that the party making the AI systems available needs to gain some form of commercial advantage or benefit. Further clarification is provided in recital 12b, stating that ‘’neither the collaborative development of free and Open Source AI components nor making them available on open repositories’’ should constitute a placing on the market[950], as long as this does not amount to a commercial activity[951]. OS developers should not be affected by ‘’requirements targeting the AI value chain and, in particular, not towards the provider that has used [the Open Source AI component]’’[952]. Implicit in the recital is that OS developers are treated as not taking part in a market transaction, almost suggesting they are not part of the AI value chain; the onus of complying with the AI Act should thus be shouldered exclusively by the natural and legal person placing the AI system on the market – namely, providers. While OS licences are often considered an alternative to direct forms of remuneration, they do not necessarily exclude indirect or even direct commercial advantages. However, in the majority of cases, OS developers will likely not qualify as providers as long as they limit their activities to the development of AI systems without placing them on the market in the course of their commercial activity.

There is also a second point worth considering. The AI Act regulates the placing on the market of ‘’*AI systems*’’ (emphasis added); the exemption in Art 2(5e) deals instead with "AI components". This term appears exclusively in the EP text, and, unfortunately, there is no definition as to what this may mean or why it is considered to fall within the scope of the AI Act. However, recital 12a EP text makes reference to ‘’data and software’’ providing an initial indication of what may fall under this term[953]. The term seems to suggest an element in the development of an AI system (e.g. data or software) preceding the stage of maturity of a system in the AI system's life cycle[954]. In fact, ‘’components’’ refers to a part of a system, albeit it is difficult to construe an AI system in components; rather, it is more natural to understand components as the input that is necessary to obtain a functioning AI model. In other words, an AI system cannot be merely considered as the sum of distinct components. This approach – looking at AI components as a preliminary stage in the development of an AI system – would require us to assess when an AI component is sufficiently advanced to be considered a system. From the definition of ‘’AI system’’, we know that these systems operate with a degree of autonomy[955]; therefore, answering the previous question would require us to evaluate at what stage in its development an AI system can be considered autonomous – a very challenging if not impossible task.

949 AI Act Art 2(9) and (10).

950 AI Act EP text recital 12b.

951 Indicia of a commercial activity are the chagrining of a price either for the AI component or for technical support services and the use of personal data for purposes not exclusively related to improving the security, compatibility, or interoperability of the software. See AI Act EP text recital 12b.

952 AI Act EP text recital 12 c. The same recital also mentions the need to encourage the implementation of ‘’widely adopted documentation practices … to accelerate information sharing along the AI value chain’’. This point will be taken up in the conclusions.

953 AI Act EP text recital 12a.

954 An illustrative metaphor is the distinction between the "bricks" and the "house": an "AI component" stands to the "bricks" as an "AI system" stands to the "house". Regulating mere AI components would considerably expands the scope of the AI Act, covering in some circumstances elements that may serve multiple purposes – for example, a dataset could be used for statistical analysis, even though it could also consitutes an AI component if used for the training of the system.

955 See Art 3(1) Council and EP text: ‘’a system that is designed to operate with elements of autonomy’’. In the Commission text autonomy plays a less prominent part in the definition of an ‘’AI system’’, stating instead that ‘’AI system can be designed to operate with varying levels of autonomy’’ (my emphasis) – see AI Act Proposal recital 6.

It is undeniable that at the current stage, several parts of the scope of the provision are still uncertain, with a number of constitutive elements still left undefined[956]. The EP text offers no clarification of the requirements that a licence will have to meet to qualify as ''Open Source''. As highlighted in our interviews, the current Open Source Definition (as developed by the Open Source Initiative) is specific to software; however, AI systems involve not only software but also involve data, models, and processes, making it more complex than traditional (Open Source) software. While there is no official definition yet[957], the community is currently working on finding an agreement on what ''Open'' means in the context of AI models[958]. Recital 12a EP text offers a minimal description of the rights that such a licence should convey, at least offering the ability to freely access, use, modify, and redistribute data and software, including ''modified versions'' of it[959]. In our interviews, mention was made of the need to directly reference a definition of Open Source AI in the law, or at least some mechanisms to establish how such a concept is to be defined and who has the authority to ultimately decide.

As the recital falls short of a definition, the scope of the provision remains at least in part undetermined. It may, therefore, be asked whether a licence that restricts some commercial uses of the Open Source AI components could still qualify as Open Source. A perfect illustration of this point is ''Llama 2'', a large language model made available by Meta on the basis of a self-defined 'OS licence'' restricting the redistribution and use rights to entities whose products and services do not reach 700 million active monthly users[960].

Beyond this definitional conundrum, from a regulatory perspective, whether something is considered Open Source matters mostly for two reasons: 1) it may contribute to characterising an act as of a non-commercial nature, and 2) is characterised by a higher level of transparency. The first aspect has been addressed, allowing us to conclude that to the extent that making available of Open Source components will be considered non-commercial, the obligations of the AI Act should not apply[961]. The second point is more difficult to assess. There is a correlation between transparency and Open Source, with Open Source companies generally disclosing more information about the AI system's architecture, hardware, training computing, dataset construction, and training method using data statements and model cards[962]. Moreover, when compared to closed models, open developers tend to share more information, especially on upstream resources, making more data and documentation available[963]. However, variations among developers still exist, with some Open Source AI models currently falling short of the transparency obligations imposed by the AI Act. A cogent case for not applying the same standards to AI models made available under Open Source licences is still missing. Nonetheless, the AI Act final text seems to take a proportionate approach and satisfactorily addresses this.

956 As explained in the update, some of the issues have been addressed by the AI Act final text.

957 However, standard licensing agreements have been developed for open data sharing in the context of the training of AI systems – see 'Enabling Easier Collaboration on Open Data for AI and ML with CDLAPermissive-2.0' (Linux Foundation, 2021) <https://www.linuxfoundation.org/press/press-release/enabling-easiercollaboration-on-open-data-for-ai-and-ml-with-cdla-permissive-2-0>.

958 The definition and scope of what "Open Source AI" should stand for are still being discussed by different stakeholders involved in the development and employment of AI systems. See Open Source Initiative, 'Defining Open Source AI', https://opensource.org/deepdive/. Ongoing projects are currently developing a working definition of OS AI. For example, the ZOOOM project elaborated a set of conditions with which OS AI would have to comply: transparency, enablement, and reproducibility. See I Emanuilov and J Suksi, 'Open Source AI: Building Blocks for a definition' (Zenodo, 2023) Open Source AI: Building Blocks for a Definition (zenodo.org).

959 AI Act EP text recital 12a.

960 Terms and Conditions of LLama 2, s 2 (Version Release 18/07/2023). https://ai.meta.com/resources/models-and-libraries/llama-downloads/. See also Emilia David, 'Meta's AI research head wants open source licensing to change' (The Verge, 30th October 2023).

961 In the course of our interviews parties involved in the drafting process of the AI Act, this interpretation has been confirmed.

962 Bommasani et al., 'The Foundation Model Transparency Index' (CFRM, 2023) Foundation Model Transparency Index (stanford.edu) pp. 4 and 43.

963 Ibid pp. 44-45.

Although it is too early to judge the effects of the provision, two observations can already be made. The focus on licences for AI components inevitably adds a high level of uncertainty. Not only is it not yet clear what a licence for AI system may mean, as a licence may imply the existence of a work (e.g. software); AI systems, on the other hand, would only uncomfortably fit such a concept, partially due to their complexity, the presence of multiple, often dynamic, components and their evolving nature. Moreover, while the EP text focuses on licences, the rationale for including this provision is to support the Open Source development model. It is unclear whether the current wording of the exemption sufficiently covers the programming, professional and community forms of interaction that are normally subsumed under this model.

An important aspect to consider is that, if the OS AI components ultimately find their way to commercial exploitation, providers will still most likely need the support of the OS developers to comply with the obligations of the AI Act. While Open Source is often synonymous with best practices in terms of transparency and documentation[964], developing collaborations and information exchange mechanisms between researchers/developers and providers of AI systems should be further explored to ensure that the latter can comply with all the obligations imposed on them[965].

**UPDATE (8 February 2024):** In the AI Act's final text, Art 2(5e) EP has been maintained in its form and substance[966]. Some of the issues raised in the above analysis have been addressed. Most importantly, the Open Source exemption replaces the ambiguous concept of ''AI components'' for ''AI systems''. In doing so, legal uncertainty is reduced.

Further developments in the provisional compromise text concern the information sharing provisions and the potential for 'Open Source providers' of general-purpose AI models to be exempted from the transparency-related requirements imposed on such models on condition that some specific information (e.g. parameters) is made publicly available[967]. This could be a welcome addition, considerably diverging from Art 2(5e) as it constitutes a ''conditioned'' and proportionate exemption aimed at fostering transparency while also promoting Open Source AI models. In the recitals, the AI Act final text also addresses the ambiguity of the notion of Open Source, acknowledging for example that an ''Open Source licence does not necessarily reveal substantial information on the dataset used for the training or fine-tuning of the model and on how thereby the respect of copyright law was ensured''[968]. For this reason, the obligation to produce a summary about the content used for model training and to respect copyright apply in full force[969]. Overall, the new version of the AI Act limits some of the critical issues highlighted in the above analysis.

964 An example of best practice could be the LLM Poro (Silo AI). The training process of the LLM will be documented by releasing checkpoints (Poro Research Checkpoints program), a solution that will increase transparency and facilitate compliance. See Bryson Masse, 'Silo AI unveils Poro, a new open source language model for Europe' (VentureBeat, 13rd November 2023) https://venturebeat.com/ai/silo-ai-unveils-poro-a-new-open-source-language-model-for-europe/. However, it should also be noted that Open Source in AI raises potential ''problem[s] of oversight and scrutiny'' (Widder et al., ''Open (For Business): Big Tech, Concentrated Power, and the Political Economy of Open Source AI'' (2023) SSRN) and there is a need to guarantee ''the mitigation of the potentially harmful impact of open source technologies on health, safety or fundamental rights'' (C Muller and M Rebrean, ''AI Act Trilogue Topics: Open Source'' (ALLAI, 2023) https://allai.nl/AI Act-trilogue-topics-open-source/#_ftnref2), especially as Open Source AI components could also be used for malicious purposes.

965 For example, providers cannot verify data provenance unless the information provided is correct. Initiatives such as the Data Provenance Initiative attempts to address this issue – see 'Data Provenance Initiative' https://www.dataprovenance.org/. For an overview, see Gent (n x).

966 AI Act final text Art 2(5g).

967 AI Act final text Art 52ca(5) and recital 60f.

968 AI Act final text recital 60f.

969 Ibid.

*Generative AI training on copyright-protected data – impact on researchers*

The AI Act EP text introduced a specific obligation on providers of Generative AI systems trained with copyrighted material in Article 28b(4)(c): to ''document and make a publicly available sufficiently detailed summary of the use of training data protected under copyright law''[970]. An interesting issue raised by the introduction of this provision is its interaction with Art 3 and 4 of the CDSM Directive on text and data mining of copyright-protected works[971].

While there is no explicit acknowledgement of the purpose of Article 28b(4)(c), recital 60h (EP text) mentions the ''significant questions'' that generative AI systems raise in terms of ''generation of content in breach of … copyright rules''[972]. The provision thus aims to facilitate the enforcement of copyright. Albeit beyond the scope of the present discussion, it is also worth noting that the practical feasibility of this requirement is yet to be demonstrated[973]. While the discussion so far has focused on training of AI systems, some of the experts in the interviews mentioned the future importance of fine-tuning these models after training. While this practice is likely to develop into a valuable market in the years to come, so far it has received little attention either in the literature or by regulators, finding no mention in the AI Act.

There is no doubt that Art 28b(4)(c) will have a significant impact on the training of AI systems with copyright-protected works[974]. Despite the uncertain legality of such a practice, the training of AI models using data available on the public web has so far been widespread[975]. Articles 3 and 4 of the CDSM Directive could henceforth thus provide a legal basis for the training of copyright-protected data.

970 AI Act EP text 28b(4)(c).

971 Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC [2019] OJL 130/92.

972 AI Act EP text recital 60h. See generally, Kretschmer, Martin, Margoni, Thomas; Oruc, Pinar; 'Copyright law, and the life cycle of machine learning models' (2024) International Review of Intellectual Property and Competition Law (IIC), Vol. 1/2024; iss. 1.

973 Kretschmer, M., Margoni, T. & Oruç, P. Copyright Law and the Life cycle of Machine Learning Models. *IIC* (2024). https://doi.org/10.1007/s40319-023-01419-3; Senftleben et al., 'Ensuring the Visibility and Accessibility of European Creative Content on the World Market – The Need for Copyright Data Improvement in the Light of New Technologies and the Opportunity Arising from Article 17 of the CDSM Directive' (2022) 13/1 JIPITEC 67; João Pedro Quintais, Generative AI, Copyright and the AI Act (2023) Kluwer Copyright Blog <https://copyrightblog.kluweriplaw.com/2023/05/09/generative-ai-copyright-and-the-ai-act/> (last accessed 16 October 2023). Specific challenges in identifying copyright-protected data may be raised by the ''low threshold of originality, the territorial fragmentation of copyright and its ownership, the absence of a registration requirement for works, and in general the poor state of rights ownership metadata''.

974 For a discussion on the copyrightability of data, see Martin Senftleben, ''Study on EU copyright and related rights and access to and reuse of data'' (2022, DG for Research and Innovation) p 10-11.

975 Kretschmer, Martin, Margoni, Thomas; Oruc, Pinar; 'Copyright law, and the life cycle of machine learning models' (2024) International Review of Intellectual Property and Competition Law (IIC), Vol. 1/2024; iss. 1 p 13; Schaul et al., 'Inside the secret list of website that make AI like ChatGPT sound smart' (*Washington Post*, 2023) https://www.washingtonpost.com/technology/interactive/2023/ai-chatbot-learning/.

In simple terms, Art 3 offers research organisations acting for research purposes an exception for text and data mining – a notion that encompasses the training of AI systems – for the purposes of carrying out scientific research, whereas Art 4 contains a similar exception for a broader category of users – e.g. commercial researchers – albeit foreseeing an opt-out option for rightsholders[976]. These provisions have already been the object of analysis[977]; in the context of Art 28b(4)(c), a new perspective emerges. Art 28b(4)(c) may have the effect of operationalising ''the possibility for rightsholders [who elected to opt-out of Art 4 CDSM] to monetise the use of their works'', pushing the training of AI towards a licensed environment[978]. More unclear is the interaction between Art 28(4)(c) and Art 3. Each Article will be discussed separately.

**Article 28b(4)(c) and Article 3 CDSM –** Article 3 CDSM allows research organisations and cultural heritage institutions to carry out text and data mining for the purposes of scientific research of copyright-protected data. Without such an exception, research organisations would require permission from each rightsholder for what in substance would be tantamount to an act of (technical) reproduction of their works. The exception aims to support scientific research activities, facilitating the use of digital technologies in research[979]. Other exceptions in the EU *acquis* may apply, however, their reach is likely to be partial[980]. Text and data mining in the Directive is construed broadly[981], encompassing ''automated analytical technique''[982] and ''automated computational analysis''[983] with the aim of extracting from data information ''such as patterns, trends and correlations''[984]. Based on this definition, it can be reasonably assumed that the training process of AI systems may fall within the scope of the exception[985]. This conclusion is now supported by the wording of Art. 28b(4)(c).

An assessment of the circumstances under which research organisations benefiting from Art 3 CDSM will also have to comply with Art 28b(4)(c) is necessary. The first aspect to consider is whether the research organisation is a ''provider of a [generative AI] foundation model''[986]. Under most scenarios, it should be easy to establish whether an AI system qualifies as a generative AI model[987]. More problematic is the assessment of whether the research organisation is acting as a provider[988]. Our interviews also revealed this to be a point of considerable uncertainty. A provider is defined in the AI Act as the legal person/entity that has ''developed or that has an AI system developed with a view to placing it on the market or putting it into service under its own name or trademark…"[989]. As clear from the definition, it is irrelevant whether the provider is also the person who designed or developed the system''[990].

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976 For further analysis, see section (provisional 1.1.4.I.iv) of this study on text and Data Mining (TDM). At time of writing at page 71 (16/02/2024).

977 T Margoni and M Kretschmer, 'A Deeper Look into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology' (2022)71/8 GRUR International 685; Fill-Flynn et al., 'Legal reform to enhance global text and data mining' (2022) 379/'6623 Science 951. Geiger et al., 'Text and Data Mining in the Proposed Copyright Reform: Making the EU Ready for an Age of Big Data?' 49/7 ICC 814; Martin Senftleben, 'Compliance of National TDM Rules with International Copyright Law: An Overrated Nonissue?' (2022) 53/10 IIC - International Review of Intellectual Property and Competition Law 1477; Marnyna Manteghi, 'In search of balance: Text, data mining and copyright in the Digital Single Market Directive from a fundamental rights perspective' (2023) 48/4 European law review 443.

978 Kretschmer, Martin, Margoni, Thomas; Oruc, Pinar; 'Copyright law, and the life cycle of machine learning models' (2024) International Review of Intellectual Property and Competition Law (IIC), Vol. 1/2024; iss.

979 CDSM recital 9

980 T Margoni and M Kretschmer, 'A Deeper Look into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology' (2022)71/8 GRUR International 685.

981 Ibid.

982 CDSM art 2(2).

983 Ibid recital 8.

984 CDSM art 2(2).

985 Margoni and Kretschmer (n x) p 686. It is however important to keep in mind that Art 3 and 4 CDSM were written in a different policy context, when the issues raised by generative AI were not under public scrutiny.

986 AI Act EP text Art 28b(1).

987 For a definition of generative AI models it is necessary to look at recital 60e, describing foundation models as ''designed to optimize for generality and versatility of output'', and Art 28b(4)(c): ''an AI systems specifically intended to generate, with varying levels of autonomy, content such as complex text, images, audio, or video''.

988 For a complementary discussion of the term ''provider'', see sections 7.1.2 and 7.2.1.

989 Article 3(2) AI Act Proposal.

990 AI Act (all versions) recital 53.

The concept of placing on the market is synonymous with ''first making available of a product on the Union market''[991]. In the specific context of the AI Act, making available refers to ''any supply of an AI system for distribution or use on the Union market *in the course of a commercial activity*, irrespective of whether there is an economic compensation'' (emphasis added)[992]. It therefore appears that research organisations will most likely not be considered providers. After all, in order to benefit from the exemption of Art. 3 the activities that research organisation may carry out are intended only for research purposes. However, it should be noted that whereas the definition of research organisations operating for research purposes practically excludes many forms of commercial research, it is not a overall ban of commercial purposes. In the legislative history of the CDSMD, there was an explicit choice to abandon the option of limiting the TDM exception of Art. 3 to "non-commercial" uses in favour of the "research purposes by research organisations". Part of the reason for this choice was the need to safeguard public–private partnerships, as evidenced from the preamble[993]. Accordingly, it cannot be fully excluded, even though it seems rather unlikely in most cases, that an Art. 3 research organisation may in fact be considered as a provider of Generative AI.

Therefore, in most circumstances, research organisations acting for research purposes will not be considered providers unless they are acting with a view to developing a specific product for future commercialisation. In any event, Generative AI – and foundation models, more generally – are characterised by a complex value chain. Art 28b itself proceeds on the basis that there are at least two providers in the value chain – the provider of the foundation model – defined by the generality and versatility of its output[994] – and the provider of a downstream application or adaptation of such model[995]. The recitals suggest that compliance with the obligations in the Regulation would require cooperation between the providers along the AI value chain[996]. This view presupposes that the (upstream) provider of the foundation model has sufficient control of the future (technical and commercial) development, design and testing of the AI system; this is questionable, especially given the still-evolving business models and ''complexity of the value chain for AI system[s]''[997].

991 See AI Act Proposal Art 3(10). In recital 52 of the Commission text, it is indicated that ''rules applicable to the placing on the market'' should be laid down consistently with the legislative framework on the marketing of products and accreditation system by surveillance authorities (Regulation (EC) No 765/2008; Decision No 768/2008/EC; and Regulation 2019/1020). The definition of ''placing on the market'' can be found in Art 2(2) of Regulation (EC) No 765/2008 and Regulation 2019/1020.

992 Article 3(2) AI Act Proposal.

993 In this respect, research carried out in the context of public-private collaborations represents an ambiguous case.

994 AI Act EP text recital 90e.

995 This is clear when reading recitals 60e to 60g AI Act EP text.

996 This cooperation is not necessary ''if the provider of the foundation model transfers the training model as well as extensive and appropriate information on the datasets and the development process of the system or restricts the service, such as the API access, in such a way that the downstream provider is able to fully comply with this Regulation without further''. AI Act EP text recital 60f. See also AI Act EP text Art 28(2)(e).

997 AI Act (all versions) recital 53. The recital refers to the placing on the market of high-risk AI systems; it is likely that it similarly applies, mutatis mutandis, to the obligations under Art 28b AI Act EP text.

However, even when research organisations are not acting as providers, it does not follow that researchers can ignore the provisions of the AI Act. To the extent that they contribute to the development of an AI system – even without actively placing it on the market – the future commercialisation by a third party of the AI system will need rely on the availability of information made available by researchers. Without this crucial exchange of information, compliance with the obligations of the AI Act may become impossible. Similarly, the implementation of a compliance-by design approach at all stages of the value chain – including those stages to which research organisations contribute – is necessary. This point is further reinforced by recital 60 AI Act EP text: "in the light of this complexity of the AI value chain, all relevant third parties ... involved in the development of ... software tools, components, pre-trained models or data incorporated into the AI systems ... should ... make available the required information, training or expertise and cooperate, as appropriate, with providers to enable their control over all compliance relevant aspects of the AI system that falls under this Regulation"[998]. In our interviews, reference was made to the importance of market dynamics and business models to ensure that compliance is incorporated by design and distributed more broadly along the value chain.

**Article 28b(4)(c) and Article 4 CDSM –** Art 4 CDSM provides an exception for text and data mining of lawfully accessible works, while reserving for rightsholders the possibility to opt-out by way of an express and machine-readable reservation. Contrary to Art 3 CDSM, this exception is wider in its scope of application, covering purposes other than scientific research[999].

Under this second point of view, Art. 28b(4)(c) represents a key enabler of this course of action. By providing rightsholders with the information necessary to verify whether the training process included their copyright-protected “data”, the AI Act EP text can be seen as a form of operationalising Art. 4 CDSM. At least in relation to generative AI.

Article 28b(4)(c) is also undoubtedly a significant step towards enabling a higher level of transparency in training material of generative AI models. Its purpose could even extend beyond copyright enforcement to serve other objectives of public interests, such as increasing understanding on the system risks that these models pose.

998 AI Act EP text recital 60.

999 See the opt-out mechanism foreseen in Art 4(3) CDSM: “the exception … shall apply on condition that the use of works … has not been expressly reserved by their rightsolders”.

Article 4(2) CDSM allows developers of AI systems to retain copies of copyright-protected data ‘’for as long as necessary for the purposes of text and data mining’’. In the case of generative AI models, the interaction of this provision with the obligation to make available a sufficiently detailed summary of the use of copyright-protected training data may have the effect of promoting the storage of large datasets of training data. These datasets, as argued by Margoni, could even be communicated to the public for non-commercial scientific research purposes by relying on a purposive interpretation of Article 5(3)(a) Info Soc Directive in those national copyright laws interested to exploit the full flexibility provided by EU law[1000]. In this scenario, Article 28(b)(4)(c) would assume a function not too dissimilar to that of Art 40 DSA: the latter aims to monitor – and possibly complement – the platforms’ activities in detecting and mitigating systemic risks posed by their large-scale operations[1001]. Similarly, Article 28 (b)(4)(c) could be used to allow researchers to attain an enhanced degree of transparency into the data used for training purposes, thereby allowing them to assess the quality, completeness and representatives of the data used for training. This enhanced degree of transparency will certainly impact first and foremost copyright management, but it would naturally also reflect on the preservation of other fundamental EU core values[1002].

Doubts remain on whether these detailed summaries can achieve a sufficient degree of granularity as to allow the identification, and consequently the monetisation, of each single work. The format in which these data will be presented will also be a crucial consideration. Despite these obvious limitations, the provision may nonetheless prove to be a catalyst for a more systematic approach. The feeling remains that a provision equivalent to that of Art. 40 DSA perhaps should have be introduced in the AI Act with consideration to the impact of certain AI applications, particularly those that are already recognised as high-risk or, anyway particularly impactful (such as generative AI or foundation models). Research, and access by researchers (vetted or not) for the attainment of public interest goals seem to be trying to remerge in the (imperfect) form of Art 28b(4)(c).

**UPDATE (8 February 2024):** The AI Act final text marks an improvement in many respects. First, it establishes a specific link between the AI Act and the CDSM Directive by requiring providers of general-purpose AI models to respect the reservations of rights expressed under Art 4(3) CDSM[1003]. It also extends the obligation to make publicly available a sufficiently detailed summary of content used for training the AI models to all types of data -– an extension that multiple interview subjects considered necessary or in any way already implicit[1004]. Whether this obligation can be operationalised, and whether it will be effective in improving the transparency of AI models, will have to be assessed once the AI Office releases the relevant guidelines and templates[1005.] As preliminary remarks, our interviews revealed optimism in the industry on the technical feasibility on keeping registries for data used for training AI systems.

1000 T Margoni, ‘Generative AI, data governance and the future of copyright’(2023) (work in progress).

1001 Ibid.

1002 A limitation of using Art 28b(4)(c) for these purpose is that it offers researchers access to copyright-protected training data; this is a natural consequence of the fact that broader researcher purposes were not part of the rationale for the introduction of this provision.

1003 AI Act final text Art 52c(c).

1004 AI Act final text 52c(d).

1005 An indication of what these summaries should contain is provided in recital 60k AI Act final text.

*The AI Act as an instrument to promote the use of 'quality data' to train AI systems*

High-quality data are considered essential for the training, validation, and testing of AI systems as well as ensuring that they perform both as intended and safely. The AI Act mentions the instrumental and strategic role of Data Spaces in providing trustful, accountable, and non-discriminatory access to high-quality data[1006].

Opportunity: The potential for the use of public datasets for the development of AI systems should be explored, and public initiatives should be encouraged, especially when AI systems are developed or used in pursuit of a public interest mission, such as in the context of research activities.

**Challenge:** The compliance costs of the AI Act, especially with regard to requirements for the quality of datasets for high-risk AI systems, may reduce innovation and investments in the EU, thereby hampering European research in AI.

*Leveraging access to data to promote research in AI systems*

When feasible, a data access regime for researchers could be an important tool for the development of a trustworthy and safe AI. This is beneficial both in better understanding how the AI system functions but also in guaranteeing the protection of the rights of third parties.

**Opportunity 1:** Research organisations should be given access to the data released in the context of transparency mechanisms under 28b(4)(c) EP text. The broadening of the scope of the provision, now covering all types of data, would make this a valuable resource for promoting research in AI systems.

**Opportunity 2:** The AI Act Proposal refers to digital innovation hubs, testing experimentation facilities[1007], and regulatory sandboxes, all tools to facilitate the development and testing of innovative AI systems. In the EP text, there is an explicit acknowledgement of the involvement of researchers in the activities of regulatory sandboxes. A prominent – and more formalised – role for researchers in the testing of AI systems should be encouraged[1008].

**Challenge:** The AI Act currently does not provide for an access regime for researchers – contrary, for example, to Art 40 DSA, where researchers can obtain access to data to monitor, identify and study systemic risks posed by very large online platforms[1009].

*Promote the OS model of AI development*

The AI Act EP text includes ad hoc exemptions to promote the OS development model of AI by ensuring that AI components can be made available without being subject to the obligations in the Regulation, as long as these components are made available on OS licences.

**Opportunity:** Research organisations should consider the benefits of using OS components either when developing AI systems or when making AI components available to third parties – thus avoiding the chilling effects that the regulation may have on research activities resulting from legal uncertainty.

1006 AI Act recital 45.

1007 AI Act Proposal recital 45.

1008 AI Act EP text Art 53a(2)(d)

1009 Art 40(4)

**Challenge:** Legal uncertainty is the main barrier to the OS exemption provisions. In particular, it needs to be clarified 1) what conditions an OS licence would need to include to qualify for the exemption and 2) what ‘’AI components mean, especially distinguishing this term from ‘’AI system’’.

## 2.8. European Open Science Cloud (EOSC)

*The content of this Section has been authored by Luca, Schirru; Thomas, Margoni; Emircan, Karabuga; Leona, King.*

The European Open Science Cloud (EOSC) is an ambitious initiative by the European Commission (EC) to create a federated ecosystem for data-driven research and innovation in Europe and the basis for a science, research and innovation data space[1010]. It is posited to “provide seamless access and reliable reuse of research data to European researchers, innovators, companies and citizens through a trusted and open distributed data environment and related services”[1011]. To "ensure dialogue and strategic coordination towards achieving the EOSC policy objectives", a tripartite governance structure has been established for EOSC. This structure involves the European Commission (acting as a representative of the EU), "the participating countries represented in the EOSC Steering Board[1012], and the research community represented by the EOSC Association[1013] to resource and support the implementation of the EOSC ecosystem in Europe".

1010 Commission Staff Working Document on Common European Data Spaces [2022] SWD (2022) 45 final <https://digital-strategy.ec.europa.eu/en/library/staff-working-documentdata-spaces>. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European strategy for data (the European Data Strategy), COM/2020/66 final [2020] ("European Strategy for Data"). European Commission, Directorate-General for Research and Innovation, EOSC, the transverse European data space for science, research and innovation : statement, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/140927.

1011 European Strategy for Data (2020).

1012 "The EOSC Steering Board (EOSC-SB) was established as an expert group of the European Commission to strategically advise on EU policy for research data infrastructures and services and the alignment of EU and national policy developments and investments with the EOSC objectives." (EOSC, 'EOSC Association and EOSC Steering Board', https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en#eosc-tripartite-governance.)

1013 The EOSC Association, "was set up in July 2020 as an international non-profit organisation under Belgian law" (EOSC, 'EOSC Association and EOSC Steering Board', https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en#eosc-tripartite-governance) and is currently composed of more than 250 members and observers. (EOSC, 'The EOSC Association', < https://eosc.eu/eosc-association/>). Its primary purpose is advancing "Open Science to accelerate the creation of new knowledge, inspire education, spur innovation and promote accessibility and transparency". (EOSC AISBL Articles of Association, 24 May 2022, art. 1.3. https://eosc.eu/wp-content/uploads/2023/08/20220524_EOSC-A_Revised-Articles-of-Association_PDF.pdf).

Unlike the acts of secondary legislation analysed in the previous items, EOSC is not a legislative instrument or a purely regulatory framework. Accordingly, its assessment requires a partially different approach. In this Section, existing studies and literature on the EOSC[1014] (including the Strategic Research and Innovation Agenda)[1015] and EOSC-related projects and/or initiatives[1016] will be used as a basis for our analysis. Policy documents on the European Research Area[1017], Open Science[1018] and the European Strategy for Data[1019] will also be reviewed to further analyse the role of EOSC within the research community and its role as a Data Space for Science, Research and Innovation[1020]. Furthermore, it is important to highlight that EOSC also benefits from networks and organisations, like OpenAIRE, that "contributes actively to EOSC via an open scholarly communication infrastructure: a set of services and an active European network of Open Science experts who provide guide and support in their countries"[1021].

### 2.8.1. EOSC-related projects and outputs

Even though EOSC does not possess the prescriptive elements of the legislation, it is nonetheless possible to identify components through which EOSC can impact research and research organisations within the relevant legal framework. Some of the main manifestations of this ability to impact research take the form of EOSC-related project deliverables, which provide relevant technical tools and legal and policy guidance on the FAIR management of research data and Open Science practices. The EC's "Horizon 2020 and Horizon Europe projects are key elements for the implementation of EOSC and for the development of the EOSC ecosystem" and "are part of the mechanism by which standards, services and tools are produced to support the sustainable and federated infrastructure for the sharing of scientific results (as openly as possible) known as the European Open Science Cloud"[1022].

Whereas Open Science and Research are not perfect synonyms, Open Science may have a significant role in fostering scientific research, as acknowledged in multiple sources[1023], including in the recent European EP text for the AI Act Act that, in its Recital 12a, states that "[s]oftware and data that are openly shared and where users can freely access, use, modify and redistribute them or modified versions thereof, can contribute to research and innovation in the market".

1014 European Commission, Directorate-General for Research and Innovation, "European Open Science Cloud (EOSC) main background documents" (2021) <https://eoscportal.eu/sites/default/files/eosc_main_background_documents.pdf>.

1015 European Commission, Directorate-General for Research and Innovation, Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC), Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/935288.

1016 Examples include EOSC Executive Board Skills and Training WG; EOSC Fair WG; EOSC-Life; EOSC Pillar; EOSC Pilot; EOSC Synergy; and Skills4EOSC.

1017 Council Conclusions on a Future governance of the European Research Area (ERA) (2021) <https://data.consilium.europa.eu/doc/document/ST-14308-2021-INIT/en/pdf> (last accessed 16 October 2023).

1018 European Commission, 'Open Science' <https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en> (last accessed 16 October 2023).

1019 European Strategy for Data (2020).

1020 European Strategy for Data (2020).

1021 OpenAIRE, 'OpenAIRE and EOSC', <https://www.openaire.eu/openaire-and-eosc> (last accessed 16 October 2023).

1022 Ilaria Nardello, Erik-Jan Bos, René Buch, and Ari Asmi (2022) Delivering for EOSC: Key Exploitable Results of Horizon 2020 EOSC-Related Projects (Summary Report), 4 < https://eosc.eu/documents>.

1023 On the relationship between Open Science and Research, see, e.g., UNESCO Recommendation on Open Science, https://doi.org/10.54677/MNMH8546, and OECD Principles and Guidelines for Access to Research Data from Public Funding (2007) https://www.oecd.org/sti/inno/38500813.pdf.

Considering their relevance to the scope of this project, below we address some of the main deliverables from the following EOSC-related projects: EOSC Pilot, EOSC Pillar, EOSC Sinergy, EOSC-Life, EOSC Future and SKills4EOSC. It must be highlighted that the list below is not exhaustive of the EOSC-related projects nor the relevant deliverables for researchers and research organisations[1024]. While we recognise that these deliverables have different effects, and a distinct role, in enabling greater access and reuse of data for the research community when compared with enforceable legal provisions, it is our understanding that these are relevant examples of project results that may be helpful to agents in the research ecosystem to navigate through the rich and complex legal landscape in the EU.

**Table 29. EOSC-related projects**

| EOSC-Related Project | Examples of deliverables relevant for researchers and research organisations |
|---|---|
| **EOSC Pilot** | Deliverable 3.6.: "*roadmap of practical policy actions to gradually establish the policy environment required for the effective operation of, access to and use of the European Open Science Cloud*". |
| **EOSC Pillar** | Deliverable 4.6.: "*Legal and Policy Framework and Federation Blueprint*" |
| **OpenAIRE** | Deliverable 3.2.: *"Toolkit for researchers on Legal issues"* |
| **EOSC Sinergy** | Deliverable 2.3.: "*Final report on EOSC integration*" |
| **FAIRsFAIR** | Deliverable 7.4.: *"How to be FAIR with your data. A teaching and training handbook for higher education institutions"* |
| **EOSC Future** | EOSC Observatory |
| **EOSC-Life** | Deliverable 4.3.: "*Guidance and policy on standards and tools to facilitate sharing and reuse of multimodal data (including imaging), cohort integration, and biosamples*"". |
| **Skills4EOSC** | Deliverable 2.2.: "*Methodology for FAIR-by-design training materials*". Deliverable 2.1.: "*Catalogue of Open Science Career Profiles - Minimum Viable Skillsets*". |

*Source: Compiled by the study team.*

1024 More information on EOSC-related projects results can be found at, for example, Ilaria Nardello, Erik-Jan Bos, René Buch, and Ari Asmi (2022) Delivering for EOSC: Key Exploitable Results of Horizon 2020 EOSC-Related Projects (Summary Report) < https://eosc.eu/documents>.

**EOSC Pilot** was the project responsible for supporting "the first phase in the development of the European Open Science Cloud"[1025], having, within its set of deliverables, instruments aiming "to refine the architectural design for the interoperation of various types of infrastructures, which could participate to the future EOSC"[1026], and a landscape report on relevant stakeholders for EOSC[1027]. Particularly important to the subject matter of this project are the deliverables addressing the legal and policy dimensions, from which we highlight deliverable 3.6.[1028], designing a "roadmap of practical policy actions to gradually establish the policy environment required for the effective operation of, access to and use of the European Open Science Cloud". Similar to EOSC Pilot, the EOSC-related project EOSC Pillar released in its deliverable 4.6., the "Legal and Policy Framework and Federation Blueprint", which "sketches a policy and legal framework by building upon the existing national policies, delivers recommendations, and considers the aspects that come with agreements on service delivery in a federated IT landscape"[1029]. From deliverable 4.6., two relevant practical tools were also released under the EOSC Pillar project: (I) a checklist for legal compliance aimed at researchers[1030] and (ii) a set of "recommendations for legal and policy harmonisation of Open and FAIR science in the EU"[1031]. The first aims to promote FAIR principles and deals with legal issues concerning intellectual property rights and personal and non-personal data protection, and "helps researchers comply with the legal requirements of publishing, sharing and integrating research data"[1032]. The latter provides a set of recommendations concerning copyright and (personal and non-personal) data protection laws that may help in addressing "regulatory gaps, remove obstacles and achieve EU-wide harmonisation to the realisation of FAIR ecosystems and the implementation of open access and Open Science policies"[1033]. Still on practical tools to support researchers to navigate through different legal issues, we refer to the “Toolkit for Researchers on Legal Issues”, Deliverable 3.2. of OpenAIRE Advance[1034], which “focuses on the emerging field of research data from a legal perspective [… and] looks at the proper legal and technological classifications and taxonomies for data […], their status, protection, reusability, licences, interoperability and [..] to any aspect that may make data more or better fit to meet open science goals.”[1035]

**EOSC Sinergy**, responsible for "liaising national bodies and infrastructures with other upcoming governance, data and national coordination projects"[1036], provided input on how to technically implement the FAIR data principles[1037] and on the integration of "national clouds, thematic resources, and data repositories conformant to common quality standards, and harmonised in terms of technological, policy, and legal aspects"[1038]. The implementation of FAIR principles was also at the core of the FAIRsFAIR project (‘Fostering Fair Data Practices in Europe’), which aimed to “supply practical solutions for the use of the FAIR data principles throughout the research data life cycle”[1039] from which we highlight deliverable 7.4. titled “How to be FAIR with your data. A teaching and training handbook for higher education institutions”[1040]. This deliverable provided “guidelines and model lesson plans for universities to integrate RDM and FAIR data-related content in bachelor's, master's, and doctoral education programmes”[1041]. Also relevant to the building of the technical infrastructure for EOSC is the EOSC Future[1042], responsible for the "EOSC Authentication and Authorisation Infrastructure (EOSC AAI Federation)"[1043] and the "EOSC Interoperability Framework"[1044], and the EOSC Observatory[1045], "a policy intelligence tool being developed by the EOSC Future project for monitoring policies, practices, and impacts related to the European Open Science Cloud (EOSC)"[1046].

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1025 EOSCPilot, ‘EOSCpilot brief’, https://eoscpilot.eu/about/eoscpilot-brief.

1026 EOSCPilot. Geneviève Romier, ‘Eric Fede (CNRS). D6.8: Final EOSC Architecture’ (2019) <https://eoscpilot.eu/sites/default/files/eoscpilot-d6.8-v2.4_0.pdf> (last accessed 16 October 2023).

1027 EOSCPilot. Manolis Terrovitis, Prodromos Tsiavos, Per Oster, Marie Sandberg, Claudio Gheller, Oriol Pineda, Philippe Segers, ‘D2.7: Final Stakeholder Map’ (2018) <https://eoscpilot.eu/sites/default/files/eoscpilot_d2.7_submitted.pdf> (last accessed 16 October 2023).

1028 EOSCPilot. Serena Battaglia (ECRIN), Neil Beagrie (Charles Beagrie Ltd/Jisc), Valentino Cavalli (LIBER), Elly Dijk (DANS), Christian Ohmann (ECRIN), Laura Molloy (Charles Beagrie Ltd/Jisc), Elli Papadopoulou (ARC), David Reeve (Jisc), Dale Robertson (Jisc), Paul Rouse (GÉANT), Scott Sammons (Lighthouse Information

Governance/Jisc), Ameli Schenk (Heidelberg Academy), Prodromos Tsiavos (ARC), 'D3.6: Final Policy Recommendations' (2019) <https://eoscpilot.eu/sites/default/files/eoscpilot-d3.6-v2.7_0.pdf> (last accessed 16 October 2023).

1029 Foggetti, Nadina, Gerin Laslier, Maryvonne, Di Giorgio, Sara, Haile Gebreyesus, Netsanet, Müller, Sabine, van Nieuwerburgh, Inge, Romier, Geneviève, Van Wezel, Jos, Hönegger, Lisa, Bodlos, Anita, & Vernet, Marine, 'D4.6 Legal and Policy Framework and Federation Blueprint' (2023) Zenodo. <https://doi.org/10.5281/zenodo.7615533> (last accessed 16 October 2023).

1030 Sganga, Caterina, Gebreyesus, Netsanet Haile, van Wezel, Jos, Foggetti, Nadina, Amram, Denise, & Drago, Federico, 'EOSC-Pillar Legal Compliance Guidelines for Researchers: a Checklist (interactive digital version)' (2022) Zenodo <https://doi.org/10.5281/zenodo.6327668> (last accessed 16 October 2023).

1031 Sganga, Caterina, Gebreyesus, Netsanet Haile, van Wezel, Jos, Foggetti, Nadina, & Amram, Denise, 'Recommendations for Legal and Policy Harmonisation of Open and FAIR Science in the EU' (2022) Zenodo <https://doi.org/10.5281/zenodo.6451312> (last accessed 16 October 2023).

1032 Sganga, Caterina, Gebreyesus, Netsanet Haile, van Wezel, Jos, Foggetti, Nadina, Amram, Denise, & Drago, Federico, 'EOSC-Pillar Legal Compliance Guidelines for Researchers: a Checklist (interactive digital version)' (2022) Zenodo <https://doi.org/10.5281/zenodo.6327668> (last accessed 16 October 2023).

1033 Sganga, Caterina, Gebreyesus, Netsanet Haile, van Wezel, Jos, Foggetti, Nadina, & Amram, Denise, 'Recommendations for Legal and Policy Harmonisation of Open and FAIR Science in the EU' (2022) Zenodo 4 <https://doi.org/10.5281/zenodo.6451312> (last accessed 16 October 2023).

1034 Margoni, T., & Tsiavos, P. (2018). Toolkit for Researchers on Legal Issues. Zenodo. https://doi.org/10.5281/zenodo.2574619. More info about the OpenAIRE Advance can be found at: https://explore.openaire.eu/search/project?projectId=corda__h2020::70ea22400fd890c5033cb31642c4ae68.

1035 Margoni, T., & Tsiavos, P. (2018, 4).

1036 EOSC Sinergy, 'about', <https://www.eosc-synergy.eu/about/> (last accessed 16 October 2023).

1037 Aguilar, Fernando; Gomes, Jorge; Bernal, Isabel; Steinhoff, Wilko; Tykhonov, Vyacheslav, 'EOSC-SYNERGY EU DELIVERABLE D3.5: Final report on technical framework for EOSC FAIR data principles implementation' (2022) <https://doi.org/10.20350/digitalCSIC/14888> (last accessed 16 October 2023).

1038 Hardt, Marcus; Tran, Viet; Palacio, Aida; Pardo, Alfonso; Esteban, Borja; Fernández, Carlos; Martínez, Daniel; Reznicek, Frantisek; Krenkova, Ivana; Pospieszny, Marcin; David, Mario; Gorczyca, Paweł; Díez, Rubén; Kozlov, Valentin, 'EOSC-SYNERGY EU Deliverable D2.3: Final report on EOSC integration' (2021) <https://doi.org/10.20350/digitalCSIC/14751> (last accessed 16 October 2023).

1039 More information about the FAIRsFAIR project can be found at https://www.fairsfair.eu/the-project.

1040 Engelhardt, C., Biernacka, K., Coffey, A., Cornet, R., Danciu, A., Demchenko, Y., Downes, S., Erdmann, C., Garbuglia, F., Germer, K., Helbig, K., Hellström, M., Hettne, K., Hibbert, D., Jetten, M., Karimova, Y., Kryger Hansen, K., Kuusniemi, M. E., Letizia, V., McCutcheon, V., McGillivray, B., Ostrop, J., Petersen, B., Petrus, A., Reichmann, S., Rettberg, N., Reverté, C., Rochlin, N., Saenen, B., Schmidt, B., Scholten, J., Shanahan, H., Straube, A., Van den Eynden, V., Vandendorpe, J., Venkataram, S., Wiljes, C., Wuttke, U., Yeomans, J., Zhou, B.; Hochstenbach, P., Barthauer, R., Vieira, A. (2022). D7.4 How to be FAIR with your data. A teaching and training handbook for higher education institutions (V1.2.1) [Computer software]. Zenodo. https://doi.org/10.5281/zenodo.6674301

1041 Engelhardt, C., Biernacka, K., Coffey, A., Cornet, R., Danciu, A., Demchenko, Y., Downes, S., Erdmann, C., Garbuglia, F., Germer, K., Helbig, K., Hellström, M., Hettne, K., Hibbert, D., Jetten, M., Karimova, Y., Kryger Hansen, K., Kuusniemi, M. E., Letizia, V., McCutcheon, V., McGillivray, B., Ostrop, J., Petersen, B., Petrus, A., Reichmann, S., Rettberg, N., Reverté, C., Rochlin, N., Saenen, B., Schmidt, B., Scholten, J., Shanahan, H., Straube, A., Van den Eynden, V., Vandendorpe, J., Venkataram, S., Wiljes, C., Wuttke, U., Yeomans, J., Zhou, B.; Hochstenbach, P., Barthauer, R., Vieira, A. (2022). D7.4 How to be FAIR with your data. A teaching and training handbook for higher education institutions (V1.2.1) [Computer software]. Zenodo. https://doi.org/10.5281/zenodo.6674301

1042 EOSC Future, 'EOSC Future: Discover the latest project results' <https://eoscfuture.eu/results/> (last accessed 16 October 2023).

1043 EOSC Future, 'EOSC AAI Federation' <https://eoscfuture.eu/eosc-aai> (last accessed 16 October 2023).

1044 EOSC Portal, 'The EOSC Interoperability Framework' <https://eosc-portal.eu/eosc-interoperability-framework> (last accessed 16 October 2023).

1045 EOSC Observatory, 'home' <https://eoscobservatory.eosc-portal.eu/home> EOSC Observatory, 'home' <https://eoscobservatory.eosc-portal.eu/home> (last accessed 16 October 2023).

1046 ibid.

While providing the characteristic approach from EOSC-related projects of raising awareness and addressing data from different angles aiming at its FAIRisation and responsible use via toolboxes and other practical tools, some of the outputs of EOSC-related projects, as is the case of the EOSC-Life focuses on specific fields of research, in this case, life sciences[1047]. This is the case of the "EOSC-Life Guidance and policy on standards and tools to facilitate sharing and reuse of multimodal data (including imaging), cohort integration, and biosamples", a toolbox that provides "links to recommendations, procedures, and best practices, as well as to software (tools) to support data sharing and reuse", especially for data that may be relevant from the point of view of data protection and intellectual property laws[1048]. EOSC-Life Deliverable 9.3. provides an overview of developing learning materials and organising training activities (courses, workshops and in-person training)[1049].

When it comes to training and competence building, the Skills4EOSC project ('Skills for the European Open Science commons: creating a training ecosystem for Open and FAIR science')[1050] is of particular relevance. The project aims to "develop common methodologies, activities and training resources to unify the current training landscape into a collaborative and reliable ecosystem and to provide dedicated community-specific support to leverage the potential of EOSC for open and data-intensive research"[1051]. Even though the project is still ongoing, preliminary versions of the deliverables have been released to the public in the past months. Some of them are of particular interest to researchers and research organisations, as is the case of D2.2. "Methodology for FAIR-by-design training materials"[1052], D2.1. "Catalogue of Open Science Career Profiles – Minimum Viable Skillsets"[1053], and D6.1. "Mapping of existing professional networks"[1054].

As seen from the examples above, deliverables from different EOSC-related projects provided input on legal, policy and technical aspects of the implementation of FAIR principles and other measures towards the achievement of EOSC goals. The analysis also found relevant contributions of EOSC-related projects in the training, competence building and awareness raising on FAIR, Open Science and other issues relevant to researchers and research organisations.

1047 For an overview of the project's results, see Blomberg, Niklas, Schmidt-Tremmel, Friederike, & Ahern, Caitlin, 'Life Science in EOSC: Summary of EOSC-Life impact and key results' (2021) Zenodo <https://doi.org/10.5281/zenodo.5179992> (last accessed 16 October 2023).

1048 Boiten, Jan-Willem, Ohmann, Christian, Adeniran, Ayodeji, Canham, Steve, Cano Abadia, Monica, Chassang, Gauthier, Chiusano, Maria Luisa, David, Romain, Fratelli, Maddalena, Gribbon, Phil, Holub, Petr, Ludwig, Rebecca, Th. Mayrhofer, Michaela, Matei, Mihaela, Merchant, Arshiya, Panagiotopoulou, Maria, Pireddu, Luca, Richard, Audrey, Sanchez Pla, Alex, … Gorianin, Sergei, 'EOSC-Life Guidance and policy on standards and tools to facilitate sharing and reuse of multimodal data (including imaging), cohort integration, and biosamples' (2021) Zenodo <https://doi.org/10.5281/zenodo.4591011> (last accessed 16 October 2023).

1049 Ludwig, Rebecca, Duquenne, Lauranne, Gurwitz, Kim, Swan, Anna, Thomas Lopez, Daniel, Lloret Llinares, Marta, & Delgado, Claudia, 'EOSC-Life Final report on EOSC-Life training activities and their impact' (2023) Zenodo <https://doi.org/10.5281/zenodo.8083414> (last accessed 16 October 2023).

1050 One of the partners in this study (CiTiP – KUL) is also a partner in the Skills4EOSC part, acting in multiple WPs on Ethical, Legal and Societal issues.

1051 Skills4EOSC, 'about' <https://www.skills4eosc.eu/about> (last accessed 16 October 2023).

1052 Filiposka, Sonja, 'D2.2 Methodology for FAIR-by-Design Training Materials (1.4)' (2023) Zenodo <https://doi.org/10.5281/zenodo.8305540> (last accessed 16 October 2023).

1053 Whyte, Angus, Green, Dominique, Avanço, Karla, Di Giorgio, Sara, Gingold, Arnaud, Horton, Laurence, Koteska, Bojana, Kyprianou, Katerina, Prnjat, Ognjen, Rauste, Päivi, Schirru, Luca, Sowinski, Claire, Torres Ramos, Gabriela, van Leersum, Nida, Sharma, Curtis, Méndez, Eva, & Lazzeri, Emma, 'D2.1 Catalogue of Open Science Career Profiles - Minimum Viable Skillsets (v1.2)' (2023) Zenodo. <https://doi.org/10.5281/zenodo.8101903> (last accessed 16 October 2023).

1054 Buss, Mareike, Athanasaki, Evangelia, Bernier, Mathilde, Drachen, Thea Marie, Fogtmann-Schulz, Alexandra, Hadrossek, Christine, Horton, Laurence, Janik, Joanna, Moldrup-Dalum, Per, Pasquale, Valentina, Schöller, Emily Thorsson, Sharma, Curtis, Torres Ramos, Gabriela, Ulfsparre, Sanna Isabel, & Vlachos, Evgenios, 'D6.1 Mapping of existing professional networks (v.2.0)' (2023) Zenodo <https://doi.org/10.5281/zenodo.7591920> (last accessed 16 October 2023).

### 2.8.2. EOSC as a Data Space

*Common European Data Spaces*

According to the Commission Staff Working Document on Common European Data Spaces, data spaces are designed to "overcome legal and technical barriers to data sharing by combining the necessary tools and infrastructures and addressing issues of trust by way of common rules"[1055]. The intention is that these data spaces will "include: (i) the deployment of data-sharing tools and platforms; (ii) the creation of data governance frameworks; (iii) improving the availability, quality and interoperability of data – both in domain-specific settings and across sectors"[1056]. Today, in addition to the nine thematic data spaces mentioned in the European Strategy for Data (Industrial (manufacturing); Green Deal; Mobility; Health; Financial; Energy; Agriculture; Public Administration; and Skills)[1057], there are additional data spaces as is the case of the Media and the Cultural Heritage data spaces[1058]. Regardless of the sector, they should follow some common principles, as is the case of "Data Control", "Governance", "Respect of EU rules and values", "Technical data infrastructure", "Interconnection and interoperability", and "Openness"[1059].

Another resource providing information on the definition, scope, function and properties on data spaces using different formats, as is the case of concrete examples, common questions and answers, and comparative analysis with other similar concepts (e.g. data marketplaces, data lakes), is the White Paper "What is a Data Space?" published by GAI Act-X Hub Germany[1060]. As identified by a recent JRC Report, one of the main concerns on building and operating within data spaces is the "**trustworthy and effective data governance**", requiring these data spaces to "put in place an appropriate governance structure to ensure fair, transparent, proportionate and non-discriminatory access to, sharing and use of data"[1061]. As an important contribution to address some of the main questions concerning data spaces and their operation and design, the report also provides sets of technical and organisational "How-to guides", and "an interactive dashboard that is designed as a tool to explore the JRC Knowledge Base on data spaces"[1062]. Recent literature also addresses the general and sectoral issues on the design and development of Data Spaces[1063], the role of Data Spaces within the observed transition from Data Property to Data Governance[1064], and the interplay with the existing rules on the GDPR concerning uses for research purposes[1065].

1055 Commission Staff Working Document on Common European Data Spaces [2022] SWD (2022) 45 final, at 2 <https://digital-strategy.ec.europa.eu/en/library/staff-workingdocument-data-spaces> (last accessed 16 October 2023).

1056 European Strategy for Data (2020, 17).

1057 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a European strategy for data (COM(2020) 66 final) <https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52020DC0066&from=E> (last accessed 16 October 2023).

1058 Commission, 'Staff working document on data spaces' <https://digital-strategy.ec.europa.eu/en/library/staff-working-document-data-spaces> (last accessed 16 October 2023).

1059 Commission Staff Working Document on Common European Data Spaces [2022] SWD (2022) 45 final, at 4 <https://digital-strategy.ec.europa.eu/en/library/staff-workingdocument-data-spaces> (last accessed 16 October 2023).

1060 Reiberg, Niebel, Kraemer (2022), 'What is a Data Space?', GAI Act-X Hub Germany, White Paper 1/2022.

1061 Farrell, E.; Minghini, M.;Kotsev, A.; Soler-Garrido, J.; Tapsall, B.; Micheli, M.; Posada, M.; Signorelli, S.; Tartaro, A.; Bernal, J.; Vespe, M.; Di Leo, M.; Carballa-Smichowski, B.; Smith, R.; Schade, S.; Pogorzelska K.; Gabrielli, L.; De Marchi, D., 'European Data Spaces: Scientific insights into data sharing and utilisation at scale', (2023) 8 Publications Office of the European Union, Luxembourg <doi:10.2760/400188, JRC129900> .

1062 Id. 8.

1063 See E. Curry; S. Scerri; T. Tuikka (eds), 'Data Spaces: Design, Deployment and Future Directions" (Springer, 2022) <https://doi.org/10.1007/978-3-030-98636-0> (last accessed 16 October 2023). https://doi.org/10.1007/978-3-030-98636-0> (last accessed 16 October 2023);. B. Otto; M. ten Hompel; S. Wrobel (eds), 'Designing Data Spaces: The Ecosystem Approach to Competitive Advantage' (Springer, 2022) <https://doi.org/10.1007/978-3-030-93975-5> (last accessed 16 October 2023).

1064 T. Margoni; C. Ducuing; L. Schirru, Data Property, Data Governance and Common European Data Spaces, 116 Computerrecht: Tijdschrift voor Informatica, Telecommunicatie en Recht, 2023.

1065 Comandè, G; Schneider, G. It's time. Leveraging the GDPR to shift the balance towards research-friendly EU Data Spaces. Common Market Law Review 59: 739–776, 2022.

*EOSC as a Data Space, interaction with other Data Spaces and its role in Cross-Border Research*

The link between EOSC and the Common European Data Spaces is clear. Already in 2020, EOSC was recognised in the European Strategy for Data (2020) as "the basis for a science, research and innovation data space". In a recent statement published by the European Commission, it is stated that the "EOSC ambition is to provide European researchers, innovators, companies, and citizens with a federated and open, cross-border and multi-disciplinary data space (or data commons) where they can publish, find, and reuse data, tools and services for research, innovation, and educational purposes"[1066]. On that opportunity, the EOSC Steering Board recognised EOSC "as the overarching transverse European Data Space for research"[1067]. This new data space will supplement the nine existing thematic data spaces, which "in turn should capitalise on expertise and solutions developed in the context of EOSC"[1068]. Therefore, when considered in the field of research, it is expected that a data space, i.e. the EOSC, "will bring together data resulting from research and deployment programmes"[1069].

Regardless of the recent formal recognition of EOSC as a Common European Data Space (CEDS), EOSC was arguably already envisioned as a data space, a term that, particularly in the recent past, enjoyed a certain degree of flexibility. The already existing framework that approximates EOSC to what today is seen as a CEDS puts EOSC in an advantageous position when compared to the other newly created Data Spaces, given the existing know-how at the technical level (e.g. interoperability, governance), and expertise on the content level (data and software). This set of expertise could be an asset in the interaction with other sectoral data spaces. These exchanges, as we learned from additional data collection methods, seem to be in a nascent stage, predominantly through meetings within the EOSC Community and between EOSC and other sectoral Data Spaces.

On the technical level, and focusing on the creation and interaction between Data Spaces, the European Commission has procured the middleware platform “Simpl”, which will be implemented in 2024-2027. It is designed to "support data access and interoperability among European data spaces", a system that is supposed to "play a major role in the creation of the Common European Data Spaces" and "give data providers full control over who accesses their data in such data space"[1070]. Moreover, recently, the European Commission announced the results of the EOSC Procurement for the EOSC EU Node, "a fully operational enabling infrastructure for EOSC"[1071]. Among the objectives of the EOSC EU Node are the following: (i) to facilitate "the creation of the ‘Web of FAIR data and interoperable services’ (referred as the EOSC Federation) under the Open Science Policy."; (ii) to offer "core services for scientific research infrastructures to federate [...] and common horizontal services for end users to benefit from"; (iii) to define "the pathway and blueprint [...] for other potential EOSC Node operators to join the federation"[1072].

1066 Commission, Directorate-General for Research and Innovation, EOSC, the transverse European data space for science, research and innovation : statement, 3, (2022) Publications Office of the European Union <https://data.europa.eu/doi/10.2777/140927> (last accessed 16 October 2023).

1067 Id. 3.

1068 Id. 3.

1069 European Strategy for Data (2020).

1070 European Commission, 'SIMPL: Streamlining cloud-to-edge federations for major EU data spaces' (14 Dec 2023, Shaping Europe's digital future), https://digital-strategy.ec.europa.eu/en/policies/simpl.

1071 European Commission, ' The Commission announces winners of the EOSC Procurement' (24 Nov 2023, Shaping Europe's digital future), https://digital-strategy.ec.europa.eu/en/news/commission-announces-winners-eosc-procurement.

1072 European Commission, 'EOSC Infrastructure Node through Public Procurement' (European Open Science Cloud, 24 Nov 2023), https://digital-strategy.ec.europa.eu/en/policies/open-science-cloud.

When it comes to collaboration on the global level, and as provided in the SRIA, “international dimension of EOSC is framed by the (i) regulatory framework, the *Acquis Communautaire*, (ii) Open Science culture, as well as (iii) the existing infrastructures and initiatives of the Economic Partnership Agreement (EPA) members”[1073]. EOSC has been working on principles (e.g. data portability, interoperability, openness and security) that must be met by third parties, which “may be seen as a burden or an exclusionary tactic, [but] in reality these ground rules enable a competitive, transparent Open Science ecosystem that enables quality science”[1074]. Finally, it is worth highlighting that, together with “Regional and national Open Research Data Commons and/or Open Science Clouds”[1075], existing global organisations (e.g. RDA, CODATA and Go FAIR) and initiatives (e.g. the RDA Open Research Commons) are also key players in fostering Open Science worldwide[1076].

### 2.8.3. The role of the Data and Digital Legislation

Data Spaces are closely linked to Data and Digital Legislation (DDL). Even though additional data collection methods indicate that there is room for improvement when it comes to provisions specifically directed towards the needs of the research community, some of the main legal texts pertaining to the DDL are, either directly or indirectly, connected to EOSC. Firstly, the Data Act is referred to as part of the plan to "put in place an **enabling legislative framework for the governance of common European data spaces**"[1077]. In addition, from surveys and interviews conducted under this project, it emerged that the Open Data Directive and the Data Governance Act, also occupy a central role in the activities carried out by researchers and research organisations.

While for the surveyed Research Organisations, the impact of these acts and EOSC itself on their activities is more likely to be representative of opportunities[1078], when considered as a whole, the Data and Digital Legislation also pose challenges to researchers and research organisations[1079]. Issues like the legal uncertainty concerning the application of certain rules to specific organisations and practices, the number of existing legal texts potentially applicable to their activities, and the costs of compliance were just some of the issues raised in the additional data collection methods.

These factors were commonly referred to as potential causes for researchers and other players in the research community not to share data, concerned about the consequences of sharing it in a manner different from what the existing law requires. Also, these contribute to the lack of awareness of the existing rules on data sharing and other relevant uses for research purposes. Ultimately, the lack of awareness may impact the way institutions manage research, as was highlighted in the additional data collection phase, concerning the risk of a negative relationship between the lack of awareness regarding legal provisions and the content of access policies.

1073 European Partnership, EOSC Association AISBL, Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC) (V. 1.1., Nov. 2022), 54 < https://eosc.eu/wp-content/uploads/2023/08/SRIA-1.1-final.pdf>.

1074 European Partnership, EOSC Association AISBL, Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC) (V. 1.1., Nov. 2022), 55 < https://eosc.eu/wp-content/uploads/2023/08/SRIA-1.1-final.pdf>.

1075 To visualise EOSC Policies and Practices in Europe, we recommend visiting the EOSC Observatory: https://eoscobservatory.eosc-portal.eu/home.

1076 European Partnership, EOSC Association AISBL, Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC) (V. 1.1., Nov. 2022), 54 < https://eosc.eu/wp-content/uploads/2023/08/SRIA-1.1-final.pdf>.

1077 European Strategy for Data (2020, 12).

1078 See Questions 67 and 69 of the RPO Survey.

1079 See Question 69 of the RPO Survey.

In addition to the role of the DDL in the achievement of the EOSC principles, the role of funders' requirements in the shaping of policies and obligations to make data and research outputs FAIR and openly available was highlighted. This was confirmed by the survey responses by researchers, where 43.2 % (360 of the 834 respondents) confirmed that they had to comply with an obligation to share research data after the conclusion of the project[1080]. Among the main reasons for sharing research data are obligations deriving from third parties, notably funders (68.5%, which represents 243 of the 354 respondents), journals – as a requirement to publish research results - (42.5%, which represents 151 of the 354 respondents) and their own institution (19.2%, which represents 68 of the 354 respondents)[1081]. Funders' requirements and institutional policies were also referred to as often preferred resources of information on rules and best practices for researchers and research organisations practices than the legislation itself.

### 2.8.4. Copyright Limitations and Exceptions (L&Es) and their role in data access, share and (re)use

Copyright law is a central element in Open Science practices. It ensures that the moral and economic entitlements of authors are recognised, and it provides for a set of limitations intended to exempt certain activities due to their general public interest scope. However, the lack of full harmonisation in the EU Copyright Law (see Annex I, Section 1.1.4, "Disablers of Open Science"), which is particularly true in the field of exceptions and limitations, as well as due to the economic effects originating from forms of national market segmentation, may be perceived and actually operate, as barriers to a proper flourishing of an EU wide EOSC and European Research Area (ERA).

Issues pertaining to the interplay between Open Science and Copyright can be seen in multiple parts of this Project. For the purposes of this Section, we refer to Annex I literature review, especially its Section 1.1.4., which provides an "Analysis of the EU Copyright framework vis-à-vis the EU Open Science goals" by individually discussing the existing Copyright L&Es that allows for "access and reuse of software (i) and databases (ii) research-related E&Ls [...] (iii), general E&Ls complementary to research-specific E&Ls [...] complemented by an analysis of related CJEU case law."

Here, it is important to highlight the general role of copyright exceptions and limitations as powerful allies to researchers and research organisations, as they allow the reuse of copyrighted materials without the need for prior authorisation from rightsholders. While both the EU Copyright Law and in the Data and Digital Legislation could be improved to better serve the needs of the research community, there are existing exceptions that offer important legal options for researchers and research organisations. These exceptions include the research exception in Art. 5 (3)(a) ISD and the exception for text and data mining for research purposes in Art. 3 CDSM. Additionally general L&Es can also be used in research contexts, as is the case of the quotation exception in Art. 5(3)(d) ISD and the exception for temporary reproductions in Art. 5(1) of the same Directive). Specifically referring to the DDL, it is worth noting that it provides specific provisions for research data (ODD), for access by vetted researchers to certain platform data (DSA) or for the sharing of certain data in cases of exceptional need (DA), as discussed in the previous chapters.

1080 See Question 52 of the Researchers' survey.

1081 See Question 53 of the Researchers' survey.

Notwithstanding other challenges previously described in Annex I, Section 1.1.4, Item II ("Disablers of Open Science"), some of the aspects concerning Copyright L&Es should be highlighted here, since they may have a negative impact of EOSC's goals. EU Copyright Law is still characterised by its national territorial dimension, and despite having been the subject of several harmonising interventions, in many areas, national rules still vary sometimes decisively. This national and not fully harmonised status of EU Copyright law may pose challenges to EOSC and, more broadly, to the effective achievement of the ERA. Specific areas of attention can be found in cross-border uses, legal and technical interoperability, and in the areas left out from harmonising interventions. The lack of harmonisation is further aggravated by the optional nature of several existing L&Es, including some of those relevant to research activities. The mandatory and imperative[1082] nature of an exception, as is the case of Art. 3 CDSMD, is an important factor in the light of the borderless nature of research in general and of EOSC. Therefore, thanks to Art. 3 CDSMD, researchers and research organisations will have the certainty that regardless of the domestic law applicable, a TDM exception structured on Art. 3 CDSM will exist. This is a fundamental element of certainty for research in the field of TDM[1083].

### 2.8.5. Open Licensing as a tool for facilitating data reuse

Open licences serve as valuable tools to facilitate the reuse of copyright and related rights-protected subject matter[1084]. An open licence is a licence that "grants permission to access, reuse and redistribute a work with few or no restrictions"[1085]. A popular example is Creative Commons[1086]. Though not the sole category of open licences, they stand out as one of the most widely adopted licensing frameworks, particularly prevalent in EC documents and outputs from EU-funded projects[1087]. As previously indicated, 'open licences' is an encompassing term covering a variety of existing licensing frameworks, some of them tailored to the use of a particular type of work, as is the case of the FLOSS (Free, Liber and Open Source Software) licences, which is also a rich and broad category of (different) licences when it comes to their origin, scope and adherence[1088].

1082 Art. 7 (1) of the CDSM provides that "Any contractual provision contrary to the exceptions provided for in Articles 3, 5 and 6 shall be unenforceable".

1083 However, it is worth noting that there is relevant criticism of the narrow scope of this exception, especially concerning the fact that it is limited to the acts of reproduction, extraction and storage (this latter one is limited to the scope of art. 3(2) CDSM). See, e.g., Thomas Margoni, Martin Kretschmer, A Deeper Look into the EU Text and Data Mining Exceptions: Harmonisation, Data Ownership, and the Future of Technology, GRUR International, Volume 71, Issue 8, August 2022, pp. 685–701, https://doi.org/10.1093/grurint/ikac054.

1084 On Open Access and the licenses related to it, we also recommend reading sections 2.1.4.2. and 2.4.6. of this Study. On the use of copyrighted content licensed under open licenses, see, e.g.: Lucie Guibault, 'Open Content Licensing: From Theory to Practice – An Introduction." In Open Content Licensing: From Theory to Practice, edited by Lucie Guibault and Christina Angelopoulos (Amsterdam University Press 2011). Marie-Christine Janssens, Arina Gorbatyuk, Sonsoles Pajares Rivas, 'Copyright Issues on the use of images on the Internet' In Research Handbook on Intellectual Property and Cultural Heritage (Edward Elgar 2022). Severine, Dusollier. The Master's Tools v. The Master's House: Creative Commons v. Copyright (March 8, 2006). Columbia Journal of Law & Arts, 2006, vol. 29, p.271-293, Available at SSRN: https://ssrn.com/abstract=2186187. Thomas Margoni & Luca Schirru, 'The Role of Licensing in Data FAIRization' ín Publier, partager, réutiliser les données de la recherche : les data papers et leurs enjeux. Presses universitaires du Septentrion (PUS) (forthcoming).

1085 Open Knowledge Foundation, 'Open Definition: Defining Open in Open Data, Open Content and Open Knowledge' (n.d.).

1086 More information on Creative Commons can be found on their website: https://creativecommons.org/.

1087 See, e.g. Commission Decision of 12 December 2011 on the reuse of Commission documents (2011/833/EU).

1088 Several examples of FLOSS Licenses can be found at GNU Operation System, 'Various Licenses and Comments about Them', < https://www.gnu.org/licenses/license-list.html> accessed 18 Jan 2023.

Considering the reliance of the research community on FLOSS and Open Licences to perpetuate data reuse, and the variety of existing licences and their scope, licence compatibility is a sensitive issue in the interplay between Copyright and Open Science, particularly in cases of the combined use of various sources (e.g. a training dataset of millions of works would likely require a licence compatibility assessment of the corresponding licences)[1089]. A similar issue is present at the technological level where different standards may not be interoperable. Whereas the DDL has indicated the need for compatibility in relation for instance to Data Spaces, it emerged from the additional data collection methods that the actual adoption of one or a few compatible standards is one of the current challenges in the field of EOSC and more broadly of Data Spaces.

### 2.8.6. Opportunities and challenges for researchers and research organisations

*The role of the Data and Digital Legislation in EOSC*

**Opportunities:** In light of the identified challenges, EOSC-related project outputs may represent valuable tools for researchers and research organisations to acquire understanding and tailor legal compliance on multiple research-related aspects, including but not limited to: (i) legal and technical implementation of FAIR principles; (ii) legal (e.g. copyright exceptions and limitations, licences) and technical (e.g. software) tools to promote sharing and reuse of data; (iii) legal compliance on issues related to Personal and Non-Personal Data, Intellectual Property and related rights, especially when related to access, sharing and (re)use of data; (iv) learning, teaching, and training material on FAIR management of Data and Open Science; (v) existing regulations and policies (including national policies) that may impact EOSC and Open Science.

**Challenges:** As reported above, from the desk research and additional data collection methods, it emerged that the amount of existing (EU and domestic) laws that may regulate research activities and/or activities carried out by researchers and research organisations, as well as the additional rules coming from different sources (e.g. funders' requirements, institutional policies, journals' requirements) could overwhelm researchers, create legal uncertainty, and generate compliance costs (e.g. time, resources, expertise) that may potentially affect the achievement of EOSC and Open Science goals.

*The role of the Copyright Law in EOSC*

**Opportunities:** Copyright Limitations and Exceptions can be powerful allies to researchers and research organisations, as they often provide access and use of copyrighted materials without the need for prior express authorisation from rightsholders. While there is room for improvement in both the EU Copyright Law and in the Data and Digital Legislation when it comes to the needs of the research community, there are already L&Es that are useful for researchers and research organisations, both directly (e.g. the research exception in Art. 5 (3)(a) ISD and the exception for text and data mining for research purposes in Art. 3 CDSM) and indirectly (e.g. general L&Es that can also be used in research contexts, as is the case of the quotation exception in Art. 5(3)(d) ISD and the exception for temporary reproductions in Art. 5(1) of the same Directive). For uses of copyrighted content not covered by exceptions, and considering that the work is not in the public domain, Open Licensing may represent a valuable opportunity for researchers and research organisations seeking to utilise such materials.

1089 For more information on License Compatibility, see, e.g.,: https://wiki.creativecommons.org/wiki/Wiki/cc_license_compatibility and https://www.gnu.org/licenses/license-list.html.

**Challenges:** When it comes to copyright matters, the EU legal landscape is just partially harmonised, as copyright is a matter to be regulated at the national level. Therefore, the Directives may still be implemented differently among the Member States, which may be a challenge for EOSC, especially for its needed interoperability, both in the technical and legal levels. The expansive direction that copyright law has embraced in the last decades, particularly towards data and digital technologies, combined with often highly concentrated information markets may contribute to situations where significant portions of scientific and cultural resources remains accessible only through costly and restrictive licences for a considerable period of time.

FLOSS and Open Licensing are important options for scientific research but researchers must ensure compliance with the licences, particularly in terms of licence compatibility.

*EOSC as the Research Data Space*

**Opportunities:** The outcome of the recent EOSC EU NODE and Simpl procurements represents relevant opportunities to fostering data sharing and interoperability, especially at the technical level. In addition, the existing know-how on technical interoperability and Open and FAIR data can be a powerful tool not only to untap the full potential of EOSC as a Data Space, but also to facilitate the interaction with other Common European Data Spaces. On the normative level, additional issues on data access, including technical interoperability, can also be further explored within EOSC-related projects and activities, considering their potential of being further regulated in the future, as they were expressly referred to as examples of topics that may be amongst the priorities for upcoming legislation on data access and (re)use (See Rec. 115 and Art. 44 of the Data Act).

**Challenges:** On the role of EOSC as the Common European Data Space for Research, the investigation carried out within the study showed that there is still room for further research on the impact for researchers and research organisations, and how they can realise the potential of EOSC as a Data Space. Another issue raised during the study, though not fully addressed with the adopted data collection methods, pertains to the interaction of EOSC with other Data Spaces and how such interaction could positively impact research in multiple areas.

## 2.9. Interplay between relevant legislative acts and frameworks

The regulation of research is not the declared objective of the surveyed Data and Digital Legislation (DDL[1090]). Nevertheless, a noticeable impact on research has emerged from the previous analysis. What could be termed as a fragmented regulatory approach to research in the DDL shows certain common characteristics including: the use of a similar yet not identical taxonomy, a substantive and functional partial overlap across different regulatory interventions, and the occasional use of identical terms whose meaning plausibly varies across specific instruments depending on their scope. For these reasons this Section identifies some common patterns and interplays across DDL. In the first part of the Section three overarching concepts are discussed in further detail below: (i) data; (ii) research and (iii) research organisations. The objective is twofold: *i*) to highlight the presence, even if only implicitly, of research as a key regulatory element in DDL; and *ii*) to point out possible areas of improvement at the definitory or coordinatory levels. In the second part of this Section we identify specific links and connections in DDL and assess their relationship. The goal is to enhance legal certainty and identify opportunities and potential obstacles for a coordinated and consistent interpretation of DDL. This Section, together with the previous analysis, will form the basis for the identification of the opportunities and barriers (Sec. 2.10) and for the final recommendations of the study (Sec. 2.11).

### 2.9.1. Overarching definitions

*Data*

The DDL regulates the possible uses of various types of data. However, the precise delineation of 'data' as a category (e.g. IoT data) or as the qualifier of a certain activity (e.g. data access obligations) is often functionally determined by the specific policy objective of the individual legislative instrument or, sometimes, even of a specific provision.

The ODD's overarching definition is not of data, but of document ("any content whatever its medium", Art. 2(6) ODD), a term already used in its predecessor, the 2003 Public Sector information Directive. The term "document" is commonly used in access to information laws, on which the ODD builds. The ODD distinguishes various categories of documents to which special rules apply, e.g. research data, dynamic data and high-value datasets. It makes no clear distinction between document and data.

By contrast, Articles 2(1) DGA and DA define data broadly, as "any digital representation of acts, facts or information and any compilation of such acts, facts or information, including in the form of sound, visual or audiovisual recording." The DA further develops sub-categories, such as "data generated by the use of products or related services" (IoT data). The DGA contains rules for promoting reuse of certain "protected data held by public sector bodies." The AI Act Proposal currently contains a definition of various categories of data, such as training and validation data.

1090 Although reference is made to legislation in this abbreviation, for present purposes it also includes the European Open Science Cloud (EOSC), as this framework has also been subject of this study.

The rationale for defining sub-categories of data are linked to the scope of the new regulatory provisions about data, however, such functional delineations make navigating EU DDL increasingly complex. This is compounded by copyright legislation which has moved closer to the field of data. Examples are the Database Directive offering its own definition of *database* (Art. 1(2) Database Directive), or the Copyright in the Digital Single Market Directive which speaks of text- and datamining (Art. 2(2) CDSMD). Whereas the data-expression dichotomy is certainly present in the EU copyright *acquis*, legislative and interpretative developments in the last decade have undoubtedly refocused, at least in part, on copyright's attention on "data". Whether and to what extent this is the same conceptualisation of "data" found in DDL remains open for discussion in the literature[1091].

As a matter of fact, the exact relationship of the various definitions of "data" is not directly addressed in the surveyed instruments. From a historical and literal perspective, the relationship may certainly be of coexistence. The DA regulates certain types of data transactions depending on the nature of the data and of the transaction, particularly – yet not exclusively – in the private sector. The AI Act aims at creating a risk-based approach to AI and its regulation of data are functional to this objective. The copyright *acquis* protects original expressions and its dealing with data could be said to be exclusionary (mere facts and data are not protected). Other similar examples could be made for other elements of DDL. From this first perspective, we are dealing with distinct categories that belong to different policy fields. Interactions across these fields will be minimal and their precise contours will be arguably left to the courts. This view could be said to be confirmed by the abundant use of the "without prejudice" clause employed by the EU legislator. A great deal of recent legislation particularly in DDL states that the legislation is "without prejudice to" a list of other legislative sources, often including copyright and IP rights as well as the General Data Protection Regulation (GDPR). A good example to the contrary is the Data Act directly addressing the *sui generis* database right of the Database Directive. However, this solution, also called "legal interlinker" in the literature, is rather uncommon[1092].

From a different perspective, looking more realistically at the socio-technological and economic developments that have characterised the last decades, it would seem rather unlikely that DDL and copyright categories will be able to survive unaffected by each other. In fact, it seems more likely that the real-world data transactions among various private and public operators in dedicated data spaces will trigger both the complementarity as well as the possible incompatibilities in the definitions of such a broad category as "data". It seems unavoidable that the interpreter, with or without the guidance of policymakers, will play a major role in defining these relationships in the many areas left uncovered by the legislator.

1091 Van Eechoud, M., Study on the Open Data Directive, Data Governance and Data Act and their possible impact on research, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/71619; Martin Senftleben, ''Study on EU copyright and related rights and access to and reuse of data'' (2022, DG for Research and Innovation) p 10-11.

1092 Margoni, Thomas; Strowel, Alain; 2024. "Contractual freedom and fairness in EU data sharing agreements", in de Werra&Calboli (Eds), Research Handbook on Intellectual Property Licensing; Edward Elgar, Forthcoming.

*Research organisations*

EU DDL addresses research organisations, directly or indirectly, depending on the type of instrument and its scope, but does not offer a precise definition. Instead, copyright law, as emerged from the first part of this Project, provides possibly the most detailed definition of research organisation currently present in EU law. Under the CDSMD (Art. 2(1)), the defining characteristic of a "research organisation" is that its "primary goal … is to conduct scientific research or to carry out educational activities involving also the conduct of scientific research." This can be on a not-for-profit basis, but also on a for-profit basis as long as the organisation pursues a public interest mission recognised by a MS or reinvests all its profits in its scientific research. Therefore, private corporate research, for instance the R&D department of a company whose objective is not education or research, seems outside the perimeter of this definition. The fact that the research organisation is a public body or is publicly funded is not a formal requirement of the CDSMD, although in many instances in the EU this will be the case.

By contrast, the ODD's provisions on research data follow the logic of the Directive in its focus on Public Sector Bodies (PSBs), a term so broadly defined that it includes universities and (other) research institutions established under public law as well as (simply put) certain private legal entities with a general interest mission. The ODD requires Member States to direct open access policies at "research performing organisations" and "research funding organisations" (Art. 10(1)). These are not defined (although universities are) but considering the scope of the ODD should be public sector bodies. If this is so, the ODD's provisions affecting research organisations and the CDSM's definition of research organisations, despite being framed on different policy objectives and areas of law, seems fairly aligned. They are not wholly consistent; however, the non-overlapping areas of the definitions do not seem to be a particular problem in most cases.

The DGA mimics the terminology of the ODD with respect to research performing organisations but does not clearly distinguish them from educational establishments (it is silent on universities) or (university) libraries. This is a relevant aspect because the DGA recitals suggest both categories are excluded from the scope of its reuse provisions. The DA does not define research organisations but seems to echo in part the CDSMD's distinction between not-for-profit research and public interest research. It specifies in its recitals that to benefit from the mandatory regime of data sharing (Article 21 Data Act), research organisations should be sufficiently autonomous to be able to grant access to the results of such scientific research on a non-preferential basis (Recital 76 Data Act and Art 2(1) CDSMD). The specific case of for-profit-organisations that reinvest all their profits in scientific research (explicitly admitted by the CDSMD), are not addressed in the DA which only refers to not-for-profit or of a public interest mission recognised by the State. In the AI Act Proposal (all versions) no reference is made to research organisations or institutions; the AI Act EP text refers only to researchers as individuals – scientific researchers (Article AI Act EP text 69(3)), researchers (recital 45, recital 61a, recital 85, Article 53 a) or scientists (recital 85)[1093]. These concepts and their relationship to each other remain unexplained. In the ODD, researchers are not defined either. In the context of the reuse of data made public in repositories, 'publicly funded' researchers are addressed in tandem with research organisations and funders (Article 10(2) ODD). Interestingly, Art. 40(8) DSA regulating the data access by vetted researchers refers explicitly to the definition of "research organisation" provided for in Art. 2 CDSMD.

1093 By contrast, the AI Act Proposal refers solely to researchers once (recital 45); the Council text refers to researchers twice (article 40; article 56(3).

*Research, scientific research and non-commercial scientific research*

In the various Data and Digital Legislation instruments analysed, different terminological solutions are employed, such as research, scientific research, non-commercial scientific research, academic research, or research activities. There is no evidence in the preparatory materials or legislative history that the reason for using different expressions should be correlated to an explicit and informed intention by the legislator to identify distinct situations within the broader category of research. Whereas this may certainly be the case in some situations, in others the legislative history, the drafting technique and the objective of regulation may have influenced a specific linguistic choice without a real intention to create a separate category. A necessary consequence of this linguistic approach is an unavoidable degree of terminological vagueness.

Scientific research, i.e. research based on the scientific method, is perhaps one of the key characteristics of modern societies, yet a precise and commonly accepted definition is lacking[1094]. As is perhaps natural given the wide area of activities covered and the epistemological implications of a precise definition of scientific research, competing conceptions coexist, each focusing on different constitutive elements[1095]. Moreover, the terms science, scientific research, and research are often used interchangeably[1096]. It seems thus unsurprising that a similar approach also characterises EU law.

Some attempts to define scientific research at an institutional level exist. For example, in the UNESCO Recommendation on science and scientific researchers (2017), scientific research is described as "those processes of study, experiment, conceptualisation, theory-testing and validation involved in the generation of scientific knowledge''[1097]. An international nomenclature for fields of science and technology has also been introduced by UNESCO, encompassing a broad field of knowledge spanning from chemistry to history[1098]. While scientific research was not defined when the Commission set out its 2016 EU research and innovation policy agenda[1099], the term research often appears to be closely connected to knowledge production and innovation. A cardinal point in the 2016 policy agenda was that the knowledge produced by scientific research (and its associated benefits) should be spread more widely across society[1100]. This objective seems reflected, for example, in the definition of research organisation adopted in the CDSMD (Art 2(1)) and Data Act (recital 76).

As anticipated above, scientific research may be characterised more or less broadly (e.g. including or excluding corporate commercial research) depending on the specific scope and aims of the legislative instrument. However, some general observations can be made about the use of the term in EU copyright and data and digital legislation:

1094 EDPS Preliminary Opinion 6 January 2020 p. 9. Different competing descriptions coexist, each focusing on different constitutive elements of science. Popper identifies in the criterion of falsificationism the defining characteristic (Karl Popper, The Logic of Scientific Discovery, 5th edition. New York: Routledge, 2002. Original publ. 1935); Kuhn, on the other hand, focuses instead on the values, interactions, and activities of scientists; Ackermann emphasises experimentation; seeing scientific progress as ''the steady buildup of experimental knowledge''. See Christensen, L. B. et al. (2015) Research methods, design, and analysis. Twelfth edition, global edition. Harlow: Pearson, p 12.

1095 Popper identifies in the criterion of falsificationism the defining characteristic (Karl Popper, The Logic of Scientific Discovery, 5th edition. New York: Routledge, 2002. Original publ. 1935); Kuhn, on the other hand, focuses instead on the values, interactions, and activities of scientists; Ackermann emphasises experimentation; seeing scientific progress as ''the steady buildup of experimental knowledge''. See Christensen, L. B. et al. (2015) Research methods, design, and analysis. Twelfth edition, global edition. Harlow: Pearson, p 12.

1096 Feuer, M. J. et al. (2002) Scientific Culture and Educational Research. Educational researcher. 31 (8), 4–14, p. 5.

1097 UNESCO's Recommendation on science and scientific researchers (2017) Art 1(c)

1098 Proposed International Standard Nomenclature for Fields of Science and Technology', UNESCO/NS/ ROU/257 rev.1, 1988.

1099 European Commission, Open innovation, open science, open to the world: A vision for Europe, 30 May 2016.

1100 Ibid.

**Scientific research can encompass both commercial and non-commercial research**. The notion of scientific research is not intrinsically linked with the non-commercial nature of either the entity carrying out the research or the nature of the purpose itself. In the GDPR, for example, the processing of personal data for scientific research also extends to commercial research[1101]. Accordingly, it seems plausible that, unless commercial purposes are explicitly excluded (as done for example in DGA recital 12[1102], or in the InfoSoc Directive Art. 5(3)(a)), the term scientific research in EU law should be understood to cover scientific research activities which serve both commercial and non-commercial purposes. Note, however, that not every research activity is referred to as "scientific" which could lead to controversies over its correct qualification.

**DDL often employ specific expressions relating to scientific research, however these expressions are not always clearly defined nor is their scope clearly delimited.** In the DGA for instance Recital 25 explains that ''in that specific context [referring to the charging of fees for reuse of data], scientific research purposes do not include ''research … with the aim of developing, enhancing or optimising products or services''[1103]. Whereas it is a fully legitimate exercise of the regulatory lever to identify special situations or sub-categories receiving a special treatment, the danger with this approach is the creation of an uncoordinated and fragmented taxonomy of special situations. It would appear desirable that, when faced with such a situation, law and policymakers provide a consistent and logically structured taxonomy (e.g. in the now common "definitions" Section of the Act) of the various situations. This would need to ideally take place at the drafting stage, but could also offer beneficial effects during the scheduled reviews of existing instruments.

- **Links between scientific research and ethical standards** – Ethics is emerging as an important safeguard for research activities in DDL, albeit its usage currently lacks consistency. Examples can be located in Recital 46 DGA which encourages recognised data altruism organisations to incorporate "oversight mechanisms such as ethics councils or boards" and other measures to ensure "high standards of scientific ethics". The AI Act Council text similarly refers to "recognised ethical and professional standards" (Recital 12(b)). It could be argued that adherence to ethics constitutes a relevant element for qualifying as "scientific" research activities that are carried out under EU law. This approach seems to find some support in the current DDL particularly in situations where, given the complexity and subject matter specificity, a self-regulatory approach (ethics) may be preferred. At the same time, it seems that DDL admits that high ethical standards, likely due to a well pondered assessment of the public vs private interests, justify the introduction of exemptions or lighter regulatory regimes for scientific research purposes. This is an important aspect because regulation, even good regulation, comes with compliance costs, and research organisations, due to their intrinsic characteristics, often disproportionately suffer from these costs in comparison with the private sector.

1101 GDPR recital 159 'For the purposes of this Regulation, the processing of personal data for scientific research purposes should be interpreted in a broad manner including for example technological development and demonstration, fundamental research, applied research and privately funded research'. For a discussion on the link between research and the commercial sector, see EDPS Preliminary Opinion 6 January 2020 p. 12.

1102 DGA Recital 12: '… the exchange of data between researchers for non-commercial scientific research purposes, should not be subject to the provisions of this Regulation concerning the re-use of certain categories of protected data held by public sector bodies''. The recital refers to the provision on the charging of fees by public sector bodies for the re-use of data - see DGA Art 6.

1103 DGA recital 25. It is important to note that Art 6, to which the recital refers, explicitly mentions ''non-commercial research purposes, including scientific research''. Therefore, this ad hoc exclusion of product research may directly follow from the fact that only non-commercial research purposes fall within the remit of the provision (DGA Art 6).

The assessment of these three key overarching concepts in data and digital legislation leads to the following interim considerations: 1) data, particularly non-personal data, represent a very broad category. Attributing it a prescriptive and autonomous regulatory function may be premature. This can be done for specifically identified categories or sub-categories, e.g. IoT data, high-value datasets, research data, personal data. However, a general regulatory theory of non-personal data does not seem to emerge from the surveyed legislation. 2) Research organisations have attracted a degree of attention both on the definitory level as well as in terms of the special provisions attributed to them in the light of their special function. They do not receive an entirely consistent definition across copyright and DDL, however a few common elements emerged. The public interest function or role recognised by the State and independence from corporate interests appear as the common minimum denominator of this definition. This does not necessarily amount to the absence of commercial or even for-profit activities, but when they are explicitly admitted (e.g. in the CDSMD) this is only under restrictive conditions (e.g. the obligation to reinvest all the profits in the scientific research activity). 3) The concept of scientific research is often used in combination with that of research organisations, however. the precise meaning of the term and its exact relationship with the organisation performing scientific research are not standardised and its assessment seems to require a case-by-case approach. Scientific research appears to be a broad enough category which, unless explicitly excluded by legislation (as often done in the surveyed instruments), should also include commercial and for-profit scientific research. Ethics and the respect of ethical standards is emerging as a noteworthy requirement in some of the surveyed instruments particularly in relation to highly complex and subject matter specific situations. This may be an important development in the law as it could effectively reduce compliance costs for research organisations in an increasingly complex legal framework.

### 2.9.2. Interplay between frameworks

Below we identify specific overlaps across the surveyed DDL sources. The following Sections will identify: (a) the provisions involved in the interplay, (b) the nature of the interplay and (c) provide an analysis of this interplay. To help the reader navigate through the different interplays identified in the study, Table 30 below summarises them and identifies the Sections where they were addressed. For systematic treatment the interplay is classified as:

(i) Consistent (e.g. a legal provision in one law is consistent with an obligation or provision inanother law);
(ii) Complementary/clarification (e.g. a definition or legal provision clarifies the scope of another law or legal provision);
(iii) Derogation/exemption (e.g. a legal provision has the potential of limiting the scope of another provision or exercise of an existing right; a legal provision may not apply to a certain type of situation and/or to certain individuals/organisations);
(iv) Contradiction (e.g. a legal provision of one law is contradictory to another pre-existing law, provision and/or definition);
(v) Unclear (while there is a potential interplay, its nature is not absolutely clear).

**Table 30. Interplay**

| Section | Interplay |
|---|---|
| I | Open Data Directive and Data Governance Act |
| II | Open Data Directive and Data Act |
| III | Open Data Directive and EU copyright law |
| IV | Data Governance Act and EU copyright law |
| V | Data Governance Act and Data Act |
| VI | Data Governance Act, Open Data Directive and Digital Services Act |
| VII | European Open Science Cloud and EU copyright law |
| VIII | European Open Science Cloud and Data Act |
| IX | European Open Science Cloud, Open Data Directive and Data Governance Act |
| X | Data Act and EU copyright law (Database Directive) |
| XI | Artificial Intelligence Act and EU copyright law |
| XII | Digital Services Act and Digital Markets Act |
| XIII | Digital Services Act and EU copyright law |

*Source: Compiled by the study team.*

*Open Data Directive and Data Governance Act*

**Subject/provisions:** enabling reuse of data; scope of application (Art. 1 ODD, Art. 1 and 3(1) DGA);

**Nature of the interplay:** complementary; consistent.

**Explanation:** The DGA complements and extends the ODD as it applies key principles of the ODD to certain categories of data that are not covered by the ODD[1104]. Both frameworks encourage wider availability of public sector information. The DGA is consistent with the ODD where it concerns the conditions under which public sector information become available for reuse by research performing organisations and others, as the rules in the DGA clearly track those in the ODD (e.g. on terms and conditions being non-discriminatory, transparent, proportionate). There are similar provisions on e.g. the prohibition of exclusive arrangements, and on the request procedure for reuse. Because the reuse provisions of the DGA target data that cannot be shared 'as is', the DGA contains more rules on how public sector bodies that can make data available for reuse should safeguard e.g. data protection and (third party) intellectual property rights. Differences in the level of detail regulated for reuse request procedures can also be traced back to the fact that allowing reuse under the DGA is not mandatory and that due to the protected nature of such data resources, a less standardised approach is called for.

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**Subject/provisions:** applicability of DGA to research data and research performing organisations – Article 3 DGA

**Nature of the interplay:** unclear (possible discrepancy)

1104 Article 3(1) DGA.

**Explanation:** A potential discrepancy between the ODD and the DGA concerns the treatment of research organisations as data holder. The ODD defines research data and is clear that only Article 10 (and specifically the obligation to allow reuse of research data already published in repositories) contains obligations for RPOs and RFOs. By contrast, it is less clear what the position of research data is in the DGA's chapter on reuse. The DGA reuse provisions apply to data held by public sector bodies, but not to data held by educational establishments (without defining those)[1105]. It is silent on research data, universities and RPOs in the provisions itself, and the recital addressing this point is opaque[1106]. The recitals can be read as suggesting that public sector RPOs are subject to all the DGA's reuse provisions, since only educational establishments and libraries are exempted. It further creates a fuzzy exception for situations where research performing organisations (public and/or private, this is not clear) cooperate with other public or private parties. This produces legal uncertainty, because for example, public universities are both educational establishments and RPOs (and libraries), which also engage in collaboration with private partners. It also seems inconsistent that the DGA's scope of application is wider for research performing organisations (mostly public universities) than that of the ODD.

*Open Data Directive and Data Act*

**Subject/provisions:** exceptional need B2G data sharing – Article 17(3) DA

**Nature of the interplay:** clarification

**Explanation:** In case of 'exceptional needs'[1107] (e.g. natural disasters) public sector bodies can obtain data from private sector data holders[1108]. A potential consequence of this could have been that such obtained information would become available for reuse requests under the ODD and DGA (should the PSB decide to make the information publicly available). However, Article 17(3) DA clarifies that "exceptional need data" cannot become subject to reuse requests under the ODD or DGA. A reason advanced for this is that those data may be commercially sensitive[1109]. However, the ODD and the DGA already contain safeguards against disclosure of commercially sensitive data. For research performing organisations, the implication is when they have obtained access to "exceptional need data" in the context of assisting authorities, the ODD and DGA provide no basis in law for subsequent (re)use of such data, nor for making it available to others. This is also underlined by Article 21(3) DA, stating that researchers who received "exceptional need data" shall not make that data available for reuse as referred to in the ODD and DGA. This is another instance where the societal interests of safeguarding research integrityeseem insufficiently accounted for. Arguably, researchers should be able to provide restricted access for the purposes of verification of research results where scientific integrity so demands.

**Open Data Directive and EU copyright law**

**Subject/provisions:** Exclusion of IPR-protected documents from ODD's scope – Article 1(2)(c) ODD

**Nature of the interplay:** Consistent

1105 Article 3(2)(c) DGA.

1106 Recital 12 DGA.

1107 Article 15 DA sets out in which circumstances an exceptional needs shall be deemed to exist.

1108 Article 14 DA.

1109 Recital 70 Data Act.

**Explanation:** The ODD explicitly excludes documents protected by third-party intellectual property rights from its scope[1110], notably copyright, related rights and database protection. Third parties are, briefly put, any party other than the public sector body that is the data holder. The exemption safeguards the intellectual property of, e.g. citizens, businesses and other private parties that provide information to public sector bodies. This is consistent with e.g. the Infosoc Directive and CDSMD. The ODD explicitly states that EU and international copyright law should be respected (Article 2(5) ODD, recitals 54-56).

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**Subject/provisions:** Limitation of exercise of copyright and related rights by public sector bodies and researchers – Article 1(6) ODD – Article 8 ODD – Article 10 ODD

**Nature of the interplay**: Derogation

**Explanation:** Copyright and database law accord rightsholders exclusive rights. The ODD derogates from intellectual property law, as public sector bodies are bound to exercise their copyright in a reuse facilitating manner, which limits the freedom they have as owners of intellectual property[1111]. Since 'open by default' is the guiding principle of the ODD, the obligations to allow reuse severely limits the exercise of any copyright or related rights the public sector body might have. This is also the case for research performing organisations, funders and individual researchers, for research data made available in repositories (Article 10(2) ODD) or as a result of open access policies to be developed by Member States (Article 10(1) ODD). Of note, Article 40(8)(g) DSA explicitly requires researchers aiming to become 'vetted' to get access to certain platform data with the sole purpose of, in short, conducting research into systemic risks (mitigation) to make "their research results publicly available free of charge" within a reasonable time. This goes beyond the obligation of Article 10(2) ODD. With respect to *sui generis* database rights[1112] owned by public sector bodies, the ODD limits their exercise outright, by stipulating in Article 1(6) that public sector bodies may not exercise them, unless it is to further ODD compliant reuse. Of note, this prohibition does not seem to apply to RPOs that are public sector bodies, since the ODD only applies to research data held by them and contains specific provisions on those. The unclarities around the DGA in relation to *sui generis* database protection are discussed below.

*Data Governance Act and EU copyright law*

**Subject/provisions:** Interplay between DGA and *sui generis* database protection – Article 1 DGA, Article 3 DGA, Article 5 DGA, Database Directive

**Nature of the interplay:** Derogation; unclear

1110 Article 1(2)(c) ODD.

1111 Recital 54 ODD.

1112 Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, as amended by Directive (EU) 2019/790, consolidated version available at ELI: http://data.europa.eu/eli/dir/1996/9/2019-06-06

**Explanation:** The Database directive creates exclusive exploitation rights, and public sector bodies generally, RPOs, RFOs or individual researchers can be holders of such rights. Like the ODD, the DGA prohibits the exercise of *sui generis* database rights by public sector bodies. What this means for research performing organisations and researchers is less clear than under the ODD[1113]. To the extent that the reuse provisions of the DGA apply to research organisations under the DGA's broad definition of public sector bodies (see above at 0), it would seem that when research organisations can make data available, they have to meet the corresponding obligations. This entails inter alia ensuring that any *third* party intellectual property is respected (Article 5(7) DGA), as data in which third parties hold rights is not exempt from the DGA but targeted by it (see Article 3(3) DGA). This can be done by securing the proper permissions (also from researchers where they qualify as owners) and imposing restrictions on re-users through licensing or by not making data available. Of note, the entire idea behind the DGA regime is to make 'protected' data available for reuse, which implies some extra effort needs to be made to clear rights.

To the extent that research performing organisations that are public sector bodies own database rights the rights may not be exercised (Article 5(7) DGA). Presumably, it does not matter whether the research performing organisation is the initial owner or has acquired the rights from third parties. But it is unclear whether this prohibition only applies where a research performing organisation is the full owner of rights or has a 'mere' exclusive licence. Whatever the case may be, the DGA obviously curtails the *sui generis* database right. By contrast, copyright and related rights (e.g. in audiovisual materials) are not under such a ban.

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**Subject/provisions**: Interplay between reuse regime DGA, ODD and text- and data mining (CDSM Directive) – Article 3 DGA, Article 10 ODD, Article 3-4 CSDM

**Nature of the interplay**: Consistent; (potential) contradiction

**Explanation**: The ODD and DGA do not specifically address the relationship between the reuse provisions and the TDM exceptions (or any other of the limitations and exceptions enshrined in copyright law). In a more general sense, the data instruments require that third party copyright is respected; a third party being someone other than the holder of data on which obligations under the ODD or DGA rest. Of note, such a third party could also be a researcher-employee or other research organisation.

Complex situations can occur in the interplay between TDM exceptions and reuse regimes, resulting in legal uncertainty. This is the case, for example, when TDM is done on repositories or when research data that results from TDM are stored in a repository.

The ODD recognises the importance of institutional and thematic repositories to make research data accessible. Repositories (the data collections they contain) can also be sources for TDM. Researchers that want to mine data in repositories can do so if they stay within the boundaries of the TDM exceptions set out in the CDSM. That 'their' research organisation has lawful access to the data is one such important precondition. Where research data are deposited, especially without access restrictions, the researcher or research organisation responsible for the deposit must ensure they respect any third party copyright or related right in the data (although for reuse of public sector data in which a public sector body owns database rights is more complicated, (see Section on Open Data Directive and EU copyright law).

1113 Some argue it is unclear for both ODD and DGA, see Bernier, Busse & Bubela 2023.

What can be done with corpora derived from protected content is unclear. The TDM exception for scientific research (Article 3 CDSM) prescribes that "[copies of works] shall be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results." Obviously, making corpora publicly available for commercial and non-commercial reuse as per the ODD's provisions is not allowed without rightsholders' permissions, but what level of access (and for whom) still falls within the boundaries of the TDM exception remains to be seen. The fact that the CDSMD, the ODD and the DGA employ different conceptions of research organisations complicates matters.

It is important to remember that (research) data have a very broad meaning in the ODD and DGA, The meaning includes audio, images, text, and even software and can easily include materials protected under copyright or related rights.

*Data Governance Act and Data Act*

**Subject/provisions:** B2G data sharing – Article 17(3) DGA

**Nature of the interplay:** complementary/clarification

**Explanation:** as regards the interplay between the DGA and the Data Act on B2G data sharing in case of an exceptional need, compare with Section above on Open Data Directive and Data Act.

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**Subject/provisions:** definitions of 'data' and 'data intermediation services' – Article 2(1) Data Act, Article 2(10) Data Act

**Nature of the interplay:** consistent

**Explanation:** the Data Act uses the same definitions of 'data' and 'data intermediation service' as the DGA.

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**Subject/provisions: (**Definition of) data intermediation services – Article 2(20c) DA; Article 2(11) DGA;

**Nature of the interplay:** complementary

**Explanation:** In addition to taking over the definition of DISs from the DGA, the Data Act foresees a role for DISs as referred to in the DGA to stimulate wider data sharing by users with data recipients of non-personal data[1114]. Such DISs can "facilitate a data economy by establishing commercial relationships between users, data recipients and third parties and may support users in exercising their right to use data", e.g. by ensuring anonymisation or aggregation[1115]. It also notes that DISs have the potential to play "an instrumental role" in the aggregation of access to data from a large number of data users for big data analysis or machine learning[1116]. Providers of data intermediary services and data altruism organisations can use the portability facility of the Data Act in order to receive data generated by the use of 'smart products' (Internet of Things), which in the Data Act are described as a "connected product", i.e. "an item that obtains, generates or collects data concerning its use or environment and that is able to communicate product data via an electronic communications service, physical connection or on-device access, and whose primary function is not the storing, processing or transmission of data on behalf of any party other than the user"[1117].

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*Data Governance Act, Open Data Directive and Digital Services Act*

**Subject/provisions:** Chapter 3 DGA, regulating data intermediation services, Chapter 4 DGA, promoting data altruism, Article 10(2) ODD on reusability of research data in repositories, Chapter II DSA, containing obligations for providers of intermediary services

**Nature of the interplay:** Unclear

**Explanation:** The DGA and DSA do not reference each other directly. Nevertheless, there may be overlap as regards data intermediaries introduced in the DGA, e.g. data intermediation services and data altruism organisations. These might qualify as an intermediary service under the DSA[1118]. DSA recitals name services "enabling sharing information and content online, including file storage and sharing" as examples of potential hosting services[1119]. Whether a certain service constitutes one of the intermediary services as regulated by the DSA, should be assessed on a case-by-case basis[1120]. Uncertainty thus exists about whether a particular data altruism or intermediation service is subject not just to the DGA but also the DSA. Legal uncertainty also exists as regards research data repositories ("institutional or subject-based" repositories in the ODD)[1121]. It is not clear whether or not research data repositories fall within the scope of the DSA, and thus are subject to the rules targeting intermediary services. This is especially relevant for RPOs as users (in case the repository is hosted by a third party) and hosters (where they host the repository themselves).

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1114 Recital 26 Data Act.

1115 Ibid.

1116 Recital 33 Data Act.

1117 Article 2(5) Data Act.

1118 Discussed in the Explanatory Memorandum of the proposal to implement the DGA in Dutch law, in Dutch: Kamerstukken II 2023/24, 36 451, no 3 (Memorie van Toelichting – Uitvoering van verordening (EU) 2022/868 van het Europees Parlement en de Raad van 30 mei 2022 betreffende Europese datagovernance en tot wijziging van Verordening (EU) 2018/1724 (Uitvoering datagovernanceverordening).

1119 Recital 29 DSA.

1120 Explanatory Memorandum of the proposal to implement the DGA in Dutch law, in Dutch: Kamerstukken II 2023/24, 36 451, no 3 (Memorie van Toelichting – Uitvoering van verordening (EU) 2022/868 van het Europees Parlement en de Raad van 30 mei 2022 betreffende Europese datagovernance en tot wijziging van Verordening (EU) 2018/1724 (Uitvoering datagovernanceverordening), p. 21.

1121 See also sections 4.1.1 and 4.3 in Chapter 4 on the Digital Services Act.

**Subject/provisions:** Copyright Limitations & Exceptions, open licensing and the general policy objectives of EOSC.

**Nature of the interplay:** Complementary; contradiction

**Explanation:** Copyright exceptions and limitations can be powerful allies to researchers and research organisations, as they allow, in certain special cases, reuse of copyrighted materials without the need of prior authorisation from rightsholders. While there is room for improvement in both the EU Copyright *acquis* and in the DDL when it comes to the needs of the research community, this Project has identified the provisions in copyright law (Part I) and DDL (Part II) that may be conducive to a more balanced access and use of works and data for researchers and research organisations.

Among the challenges that must be considered by researchers and research organisations when it comes to the combined role of EU copyright, data and digital legislation in enabling an adequate environment for EOSC are the following: **(i) Territorial copyright rules and the European ambit of EOSC and most DDL:** EU copyright law is still characterised by its national territorial dimension. Despite having been the object of several harmonising interventions, in many areas national rules still vary, sometimes decisively. This national and not fully harmonised status of EU copyright law may pose challenges to EOSC and more broadly to the effective achievement of a European Research Area (ERA). Specific areas of attentions can be found in cross-border uses, legal and technical interoperability, and in the areas left out from harmonising interventions. On the other hand, DDL has followed a different route. With the exception of the ODD (which as a Directive suffers from some of the harmonising complications found also in copyright), all the other instruments have taken the form of a Regulation. This choice reflects positively on the availability of uniform rules and obligations across the internal market thereby enhancing legal certainty for research and research organisations. **(ii) Open Science and barriers to sharing:** copyright law plays an important role in Open Science practices. It ensures that the moral and economic entitlements of authors are recognised and provides for a set of limitations intended to exempt certain activities due to their general public interest scope. However, given the reported lack of full harmonisation, particularly in the field of exceptions and limitations, and also due to the incentives originating from forms of national market segmentation, elements of EU copyright law may still be perceived, and actually operate, as barriers to a proper flourishing of an EU-wide EOSC and ERA. The DDL on the other hand has been predicated on the need to facilitate the free flow of (non-personal) data across the internal market. Whereas only limited provisions have been dedicated specifically to research and research organisations, they represent a clear example of the internal market dimension of the data economy. **(iii) Licence compatibility and technological interoperability:** Whereas FLOSS and Open Licences have become common in the research area, there is an enduring issue with their compatibility, particularly in cases of the combined use of various sources (e.g. a training dataset of millions of works would likely require a licence compatibility assessment of the corresponding licence)[1122]. A similar issue is present at the technological level where different standards may not be interoperable. Whereas the DDL has addressed, to a certain degree, the need for compatibility in relation, for instance, to data spaces, the actual adoption of one or a few compatible standards has emerged from the additional data collection methods as one of the current challenges in the field of EOSC and more broadly of data spaces.

1122 For more information on License Compatibility, see, e.g. https://wiki.creativecommons.org/wiki/Wiki/cc_license_compatibility and https://www.gnu.org/licenses/license-list.html.

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*European Open Science Cloud and Data Act*

**Subject/provisions:** Art. 33 of the DA, providing information for the interoperability of Data Spaces

**Nature of the interplay:** Complementary

**Explanation:** Article 33 of the DA introduces requirements for the interoperability of data spaces and is addressed to "[participants] of data spaces that offer data or data services to other participants" (Art. 33(1)). The requirements for such data space participants are elaborated in Art. 33(1), with further provisions being included regarding the EC delegated acts, (Art. 33(2)) harmonised standards, (Art. 33(4)) EC's implementing acts regarding common specifications, (Art. 33(5)) and EC's guidelines, (Art. 33(11))[1123].

These requirements may contribute to greater data interoperability as a component of "FAIR" data practices[1124] and have important implications for researchers and RPOs, for instance, where they are active within the scope of EOSC as a data space. One of the main implications concerns the recipient of the obligation, i.e. the parties that must comply with the requirements, which could arguably be a researcher or research organisation.

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**Subject/provisions:** Article 44 and Recital 115 of the Data Act (providing an avenue for further legislation in the context of data access and use for researchers and RPOs)

**Nature of the interplay:** Complementary

**Explanation:** While stating that the Data Act should be "without prejudice to rules addressing needs specific to individual sectors or areas of public interest", Rec. 115 provides a set of examples that may be considered in future legislation and that are of interest to researchers and research organisations, since they are focusing on access and (re)use of data. These areas include: "additional requirements on technical aspects of the data access, such as interfaces for data access, or how data access could be provided", and "limits on the rights of data holders to access or use user data". They are also referred to in Art. 44 and constitute potential areas of further investigation considering their relevance to research and EOSC, and the fact that they were expressly referred to as examples of topics that may be amongst the priorities for upcoming legislation on data access and (re)use.

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**European Open Science Cloud, Open Data Directive and Data Governance Act**

**Subject/provisions:** Article 10 ODD, regulating research data, Chapter 2 DGA, promoting availability of more data, Chapter 4 DGA promoting data altruism.

**Nature of the interplay:** Complementary

1123 Cf. Art. 33(8) Data Act.

1124 Cf. Linda Kuschel and Jasmin Dolling, 'Access to Research Data and EU Copyright Law' (2022) 13 JIPITEC <https://www.jipitec.eu/issues/jipitec-13-3-2022/5558/kuschel_13_3_2022.pdf/> (last accessed 16 October 2023).

**Explanation:** Considering the role of EOSC in providing "seamless access and reliable reuse of research data"[1125] and fostering FAIR management of research data, Art. 10 of the ODD assumes a crucial position in enabling these objectives. Article 10 does so not only by providing in Art.10(2) that "research data shall be reusable for commercial or non-commercial purposes [...] insofar as they are publicly funded and [...] publicly available through an institutional or subject-based repository" but also by requiring that Member States support "availability of research data by adopting national policies and relevant actions aiming at making publicly funded research data openly available ('open access policies'), following the principle of 'open by default' and compatible with the FAIR principles" (art.10(1) ODD). The DGA, by promoting increased availability of data from public sector bodies and through data altruism organisations, also fits well with EOSC ambitions.

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**Subject/provisions:** Chapter 3 DGA, regulating data intermediation services, Chapter 4 DGA promoting data altruism

**Nature of the interplay**: Unclear

**Explanation:** It is not clear to what extent data intermediary services as regulated by the DGA have a role to play in EOSC. Recital 27 of the DGA foresees a role for data intermediation services, which may include public sector bodies not-for profit data sharing, "in the context of the establishment of common European data spaces" including for scientific research. Article 15 DGA holds an exception for not-for-profit entities from the Chapter III rules (regulating commercial data intermediation services) insofar as not-for-profit entities collect data for objectives of general interest. What remains unclear is to what extent research performing organisations and other actors engaged in publicly funded research may qualify as a data intermediary service provider, especially in case of public-private partnerships[1126].

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**Subject/provisions:** Articles 5, 8 and 9 ODD. Format and conditions for public sector information and the EOSC FAIR Principles

**Nature of the interplay:** Complementary

**Explanation***:* Although most of the ODD's provisions on the technical and organisational aspects of making public sector data suitable for reuse predate FAIR (a concept specific to the realm of research), they sit together well. For example, by providing that documents must wherever reasonably possible be "open, machine-readable, accessible, findable and reusable, together with their metadata. Both the format and the metadata shall, where possible, comply with formal open standards" (Art. 5(1) ODD). Likewise, the ODD promotes findability, by obliging Member States to make practical arrangements facilitating search, also "cross-linguistic search for documents, in particular by enabling metadata aggregation at Union level." (Art. 9 ODD). Compliance with these provisions will contribute to EOSC.

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1125 European Strategy for Data (2020).

1126 For a detailed discussion of research organisations and the regime for data intermediation services, see Tervel Bobev and others, 'White Paper on the Definition of Data Intermediation Services' (CiTiP Working Paper Series 2023), 53ff; for a theoretical discussion of data intermediation services and the public interest, see Leander Stähler, 'The Problem of Regulating Data Intermediaries: Insights from the Public Utilities Doctrine' (2024, forthcoming).

*Data Act and EU Copyright Law (Database Directive)*

**Subject/provisions:** Article 43 Data Act and the *sui generis* database right

**Nature of the interplay:** Clarificatory

**Explanation:** Art. 43 of the Data Act states that the *Sui Generis* Database Right (SGDR) established by Art. 7 Directive 96/9/EC (Database Directive) does not apply when data are obtained from or generated by a connected product or related service falling within the scope of the DA. According to Rec. 112, this clarification is needed to "eliminate the risk that holders of data in databases obtained or generated by means of physical components, such as sensors, of a connected product and a related service or other machine-generated data, claim Article 7 SGDR, and in so doing hinder, in particular, the effective exercise of the right of users to access and use data and the right to share data with third parties under this Regulation". Art. 43 has been presented as a clarification of the law in this specific area, given the underlying uncertainty surrounding the distinction between data creation and the obtaining of data in relation to machine-generated data, especially when these data are collected from the surrounding environment[1127]. It should be noted, however, that Art. 43 only applies to IoT data, not to the broader category of machine-generated data or to non-personal data in general. It also does not address other related rights such as first fixations of films or sound recordings which might be relevant in cases of environmental recordings.

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*Artificial Intelligence Act and EU Copyright Law*

**Subject/provisions:** Obligation to provide detailed summary of training copyright-protected data – Art. 28b(4)(c) AI Act EP text; exception for text and data mining in Art. 3 and Art. 4 CDSMD.

**Nature of the interplay:** Complementary.

**Explanation:** Art. 28b(4)(c) AI Act EP text can be seen as an enabling mechanism for Art. 4 CDSM offering the possibility to rightsholders to verify whether their works have been employed for the training of generative AI. However, the same article may apply also to Art. 3 CDSMD cases (text and data mining by research organisations and cultural heritage institutions for purposes of scientific research) and require them to document and make available a sufficiently detailed summary of uses of copyright-protected content in training data.

**Art 28b(4)(c) and Art 3 CDSM –** Art. 28b(4)(c) AI Act EP text may impose on research organisations an obligation to document and make publicly available a sufficiently detailed summary of works/data used for training purposes. This depends on whether research organisations can be considered providers of generative AI models. This will depend on the specific activities put in place by the research organisation and therefore, its correct classification will likely need a case-by-case analysis. The relevant assessment will focus on whether they engage in an act of placing the model on the market, which in turn will depend on whether this act is done ''in the course of a commercial activity''[1128].

1127 European Commission, Commission Staff Working Document 'Evaluation of Directive 96/9/EC on the legal protection of databases' [2018] SWD(2018) 146 final <https://digitalstrategy.ec.europa.eu/en/policies/protection-databases> (last accessed 16 October 2023); T Margoni, C Ducuing and L Schirru, 'Data Property, Data Governance and Common European Data Spaces' (April 25, 2023). Computerrecht: Tijdschrift voor Informatica, Telecommunicatie en Recht, 2023, 6.

1128 AI Act Art 2(10).

**Art. 28b(4)(c) and Art. 4 CDSM** – Art. 28b(4)(c) AI Act EP text can be seen as an enabling mechanism for Art 4 CDSM (which allows rightsholders to reserve the use of works for TDM) by requiring providers of a generative foundation AI model to document and provide a summary of data used to train their AI systems. The specificities of what is required in the documentation and making available obligation, i.e. how granular a sufficiently detailed summary has to be, will likely play a major role in the actual effectiveness of this provision.

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*Digital Services Act and Digital Markets Act*

**Subject/provisions:** Research access and other data access provisions

**Nature of the interplay:** Complementary

**Explanation:** Contrary to the DSA, the DMA does not envisage a stand-alone data access regime for researchers. However, it still contains a number of provisions which are relevant from a data access perspective, creating opportunities for researchers. In general, for the purposes of this study, it is interesting to look at the data access provisions laid down by the DMA (for instance, under Articles 5 and 6) and by the DSA (notably, Article 40) in conjunction, mapping out and comparing the type of data made accessible, the parties involved (specifically, which party can access the data and which party is targeted in a data access request), the modality of access and type of access regime.

Moreover, some of the companies designated as gatekeepers under the DMA have also been designated as Very Large Online Platforms (VLOPs) or Very Large Online Search Engines (VLOSEs) under the DSA. These actors are, therefore, subject to the combination of transparency and data access obligations established under the two regulations. In practice, **r**esearchers could use both sets of rules, in different ways, to carry out research on companies which have been designated as VLOPs/VLOSEs and/or as gatekeepers**.**

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*Digital Services Act and EU copyright law*

**Subject/provisions:** Art. 40 DSA; Art. 2 CDSM

**Nature of the interplay:** Complementary

**Explanation:** Article 40(8)(b) DSA on research access to the data of the largest online platforms (VLOPs and VLOSEs) refers to Art. 2 CDSM for the definition of research organisation.

### 2.9.3. Conclusion

The foregoing analysis shows a network of provisions often regulating tangent or even overlapping areas that research organisations operating within the field of EU data and digital legislation must comply with. The common denominator, especially from the point of view of research and research organisations, is that of regulatory complexity. This complexity is not a negative element in itself and it is often justified by the complexity that characterises the underlying economic, technological and social dynamics object of regulation. However, a complex regulatory environment has higher compliance costs and these costs tend to disproportionately affect parties with less availability of financial resources such as researchers and research organisations. Under this point of view, it is of particular importance to unpack the reported regulatory complexity. As argued, this can be done on various levels and in various moments of the law and policymaking process. This Section has attempted first and foremost to offer a holistic view of this complexity and, for the identified interplays, propose either a clarification on the conceptual and/or normative level, when possible, or alternatively, denounce a possible contradiction across the surveyed instruments. The following Sections 2.10 and 2.11 will advance further this analysis, identify with precision the most problematic provisions and suggest to law and policy makers, as well as to the interpreter, possible options for addressing the identified issues.

## 2.10. Synthesis: Main challenges and opportunities for research under the EU data and digital legislation

This Section presents the opportunities and challenges for research and research organisations arising from EU data and digital legislation. The opportunities and challenges per legal instruments, which have been analysed in Sections 2.2 – 2.8 are compiled and further synthesised in this Section in order to derive a complete picture of the legal landscape. This Section specifically aims to present if and how researchers, research organisations, and other actors of the research ecosystem can comply with the rights and obligations deriving from the body of EU data and digital legislation. Compliance is understood to comprise all strategies, competencies and resources that are required on behalf of RPOs and researchers to realise the benefits and conform with the obligations of EU data and digital legislation.

This Section is structured according to the two different perspectives that RPOs and researchers commonly occupy vis-à-vis EU data and digital legislation[1129]. Under the first perspective, RPOs and researchers are considered as *users* of data and digital technologies, with these assets becoming the input for research activities. An example of this perspective is researchers accessing public sector bodies' documents pursuant to the ODD. Under the second perspective, RPOs and researchers are *providers* of (research) data and digital technologies, with these assets becoming the output of the research activities. A fitting example can be found in the potential qualification of digital research repositories as a hosting service under DSA which triggers certain legal obligations.

1129 See: Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 49.

Our findings on the opportunities and challenges of complying with EU data and digital legislation are presented for each of the two perspectives relevant to research activities. While some provisions in the legislation may be useful from the perspective of RPOs and researchers as 'users', they may simultaneously raise challenges for RPOs and researchers from their qualification as 'provider' of (research) data and digital technologies. The Section starts by taking the perspective of RPOs and researchers as *users*. Afterwards, the main opportunities and challenges from RPOs' and researchers' perspectives as *providers* are discussed. There may be some overlapping opportunities and challenges.

### 2.10.1. Research Organisations and Researchers as *users* of data and digital technologies

*Opportunities*

The Sections below set out the main opportunities that have been identified in the DDL from the perspective of RPOs and researchers as *users* of digital technologies and data.

#### Wider availability and reusability of public sector data

One of the main opportunities that the DDL is posited to offer to researchers and RPOs as users of data and digital technologies is a wider availability and reusability of public sector data. This is predominantly seen in the ODD and the DGA, as both these frameworks target public sector bodies and public sector information, as discussed in detail in Sections 2.2 (ODD), 2.3 (DGA) and 2.9 (interplays between ODD and DGA). In this context, it is important to differentiate between *access* and *reuse* as neither of those two frameworks provides a right to access information, except with respect to high-value data sets. Both frameworks aim to ensure that information that is already publicly available (or eligible to become so) can be reused and is made fit for reuse both technically and legally, thereby benefiting the overall availability of public sector data and information.

The ODD and DGA are also linked to some of the other instruments in DDL, creating a more cohesive environment for access and reusability of public sector data. For example, in the AI Act proposal high-quality data[1130] are considered essential for the training, validation and testing of AI systems as well as for ensuring that they perform as intended and safely[1131]. The ODD repeatedly clarifies the importance of the availability of public sector data including for the development of artificial intelligence applications (e.g. Rec. 3, 9, 10). The AI Act proposal further mentions the instrumental and strategic role of Data Spaces in providing access to trustful, accountable and non-discriminatory high-quality data, thus linking to provisions on data spaces, such as interoperability of data, data sharing mechanisms and standards (Art. 33 DA).

Accordingly, DDL attributes to a wider availability and reuse of public sector data a great deal of potential for social, economic and cultural uses, including for scientific research activities. The enhanced availability of public sector data will likewise contribute to the development of a data economy based on European core values (Rec. 103 DA). This framework requires an active management of any eventual intellectual property rights existing on these "data" (a broad concept). With respect to managing public sector-owned intellectual property, the ODD and DGA already contain important building blocks, aimed at facilitating reuse.

1130 Quality of data refers to the properties of the data – e.g., being representative and free of errors -, including the statistical properties of the model – e.g., on which persons an AI system is intended to be used. See AI Act Proposal recital 44 and Article 10.

1131 AI Act Proposal recital 44.

### Wider opportunity to reuse research data (including through infrastructures)

Scientific research has a long tradition of data sharing within research communities and the European research sector has a strong commitment to Open Science and open research data. Of specific interest for RPOs and researchers is Article 10 ODD, which requires research data that have been publicly funded and already made publicly available through certain repositories to be made reusable[1132]. This constitutes a relevant opportunity for RPOs and researchers as users of research data. This availability of research data are strengthened by the fact that Article 10 ODD requires EU Member States to adopt national policies with the aim of making research data publicly available (open access policies). The FAIR principles, intended to make research data more Findable, Accessible, Interoperable and Reusable, should play a prominent role in these national access policies.

Of course, actual research data infrastructures are needed to reap the full benefits of open research data. There are some promising instances where they have evolved in response to a particular need for data sharing of a specific discipline or research network. There are also prototypes for RPOs operating or contributing to secure processing environments as foreseen in the DGA to make protected data reusable, however, the practice is very much in its infancy requiring further nurture and support to take hold and expand. This is where EOSC could play a guiding key role, considering the existing expertise on technical and legal interoperability and in FAIR and Open Data management.

The AI Act does not regulate the making of data available per se; however, the EP text proposed the introduction of an exemption for "AI components" provided under OS licences[1133]. This does not bring the mere sharing of data within the scope of the AI ACT. Yet, AI research and development presupposes the existence of high-quality datasets, point to the strategic importance of European Common Data Spaces and therefore may hint at the need of a similarly structured infrastructure for access and sharing of high-quality training and validation data[1134].

1132 See sections 2.3.1 and 2.3.4 in chapter 2 on the Open Data Directive.

1133 AI Act EP text Art 2(5e).

1134 AI Act Proposal recital 45.

### Clarity over charging fees gives recognition to scientific research

Several instruments recognise the importance of RPOs in relation to the monetary compensations due in exchange for data access or sharing obligations. The most prominent example in this regard is the ODD, which states that the reuse of research data shall be free of charge for the user[1135]. The DGA allows public sector bodies to charge fees for the reuse of public sector data, but they are required to incentivise reuse for (inter alia) scientific research. Public sector bodies are allowed to make data available for reuse for free or at a discount for certain categories of users, like researchers[1136]. The DDL also contains examples of reduced fees for private sector data access for research purposes. The Data Act regulates the calculation of compensations agreed upon between a data holder and a data recipient for making data available in business-to-business relations. It clarifies that when the data recipient is a not-for-profit research organisation, this compensation cannot exceed the marginal cost (Art. 9(4) DA). Interestingly, Art. 9(6) DA establishes that other Union law or national legislation adopted in accordance with Union law could exclude compensation for making data available or provide for lower compensation. This could be seen as an invitation for MSs to establish more favourable conditions for research and research organisations, which they should make use of in the interest of promoting data reuse for public interest research.

### Researchers' access to private sector data

Within the broader vision for a European strategy for data, the EC has certainly reserved a special role to the enhanced access to both publicly and privately held data[1137]. Whereas the principal tools adopted in the case of public sector data often take the form of direct interventions mandating data access and/or reusability obligations (e.g. high-value data sets, public sector information, research data, etc.), in the case of privately held data, such direct interventions are limited to special cases, such as the DA B2G data sharing obligations[1138]. In the case of privately held data, direct access and reuse obligations are instead often replaced by an indirect approach that takes the form of a semi-regulated market for data or, in other words, of Common European Data Spaces. Under this perspective, the many rules identified in the previous Sections of this study delineate a new figurative place within the single market where data transactions of privately held datasets are not mandated but incentivised thanks to a regulated market. In this market, data holders can exchange data in a semi-controlled and trusted environment that is protective of EU core values such as personal data, freedom to conduct a business, consumer protection, freedom of expression, or intellectual property, with mutual benefits for all the participants. It is from this perspective that the full potential of the many rules on FAIR, FRAND and non-abusive data transactions, as well as those on portability, interoperability and switching of processing services, can be appreciated.

Additional provisions that can represent relevant entry points to datasets that would otherwise be under the factual control of certain digital intermediaries can be found in the DSA and DMA.

1135 Article 6(6)(b) ODD. See section 2.1.4 in the chapter on the Open Data Directive.

1136 Article 6(4) DGA. See also recital 25 DGA.

1137 I.a., European Commission, A European strategy for data, Brussels, 19.2.2020 COM(2020) 66 final.

1138 Margoni, Thomas; Strowel, Alain; 'Contractual freedom and fairness in EU data sharing agreements', in de Werra&Calboli (Eds.), 'Research Handbook on Intellectual Property Licensing'; 2024 Publisher: Edward Elgar.

Art. 40 DSA is a pertinent example as it introduced a new data access regime specifically dedicated to researchers. This access mechanism – which is unique in the context of the data legislation analysed in this study – enables researchers, under several specific conditions, some of which are aligned to the definition of research organisations found in the CDSMD, to gain access to the data of the VLOPs and VLOSEs. It should be noted that access and use of these data are permitted "for the sole purpose of conducting research that contributes to the detection, identification and understanding of systemic risks in the Union", within the meaning of Art. 34 DSA. Yet, researchers are not only allowed, but in fact, required to make "their research results publicly available free of charge, within a reasonable period after the completion of the research". As for the case of IoT data, it is arguably too early to say whether the purpose limitations or the many conditions to qualify as "vetted" will dissuade researchers from pursuing this opportunity to access platform data. Certainly, Art. 40 DSA represents a rather innovative provision that could allow researchers to access privately held data previously unavailable. A similar provision could prove helpful in the context of AI, particularly high-risk AI, where some of the risks connected with data (mis-)use appear akin to those identified in the case of core platforms.

To a more limited extent, the Digital Markets Act (DMA) also contributes to the broader availability of certain privately held data, through the transparency obligations imposed on gatekeepers in relation to their core platform services, vis-à-vis their business users and end users. These are, in particular, the rules on access to data relating to advertising and real-time data generated in the use of the relevant core platform service (Art. 6(10) DMA). Whereas the DMA does not make specific reference to research purposes or any other use in relation to the access to business users' data, Art. 6 represents another instrument to access certain privately held data. Its practical relevance for research purposes remains to be demonstrated.

These provisions, even if not entirely homogeneous in nature or purpose, possess as a common denominator the ability to provide the – usually – weak party in data transactions (users, including business users, SMEs and IoT users, as well as researchers) the legal means to reach datasets that would otherwise remain under the factual and/or technical control of certain manufacturers or platforms due to their economic or industrial highly integrated structure. From the point of view of researchers and research organisations, these new possibilities certainly constitute an unprecedented opportunity. Whether this opportunity can be fully grasped will depend, at least in part, on the challenges connected with data access rules.

#### *Challenges*

The Sections below set out the main challenges that have been identified in the DDL from the perspective of RPOs and researchers as *users* of digital technologies and data.

**Complexity and legal uncertainty in data access and reuse for research purposes**

As outlined in the study, there are multiple instances where DDL recognises the public interest served by scientific research through special access or reuse regimes for researchers and research organisations. However, the current approach, particularly for privately held datasets, appears fragmented. A homogeneous right to access and reuse data for scientific research, a sort of Business-to-Research (B2R) provision, either general in scope or with regard to specific subsets of data categories, cannot be located in DDL. Instead, various specific and often divergent research-related provisions could be identified. As shown in the previous Section, these specific research-related provisions are undoubtedly crucial additions to the toolbox of researchers who need to access previously inaccessible datasets. However, the variety of such case-specific provisions, often characterised by an inconsistent taxonomy and by diverse types of ensuing legal obligations – often conditional to additional specific requirements – leads to a situation where researchers and researcher organisations have to bear the burden of legal complexity and uncertainty. This seems to be one of the main challenges for researchers and research organisations emerging from the surveyed DDL. In complex regulatory frameworks, agents interested in journeying through the complexity to capture the benefits created for them by legislation need to learn the "rules of the game". These rules, as this study testifies, are increasingly complex. Complexity has many reasons. As noted above, to a certain degree, it is unavoidable inasmuch as the underlying economic, legal and social dynamics are complex in their own right. In a number of other situations, however, this complexity could be avoided or mitigated. This would substantially reduce the compliance burden for researchers and research organisations and greatly enhance their ability to effectively benefit from the research provisions of the DDL. Below we identify some areas of attention.

In the context of the DA, B2G data-sharing requires compliance with the conditions established in Art. 21 DA for researchers and research organisations. These conditions have temporal and purposive dimensions, entailing for instance that the data received can only be retained for 6 months after it has been erased by the requesting government entity[1139].

Data in the Data Act definition potentially includes subject matter protected under copyright and related rights. Related rights such as sound recordings, the first fixation of films, or in some MS non-original photographs could acquire relevance given the likely absence of originality from automatically IoT recorded data. Article 43 DA clarifies that IoT data are not protected under the *sui generis* database rights but is silent on other rights related to copyright. For researchers as users of IoT data the exclusion of database rights creates clarity, but the residual risk that IoT data may be subject to (third-party) intellectual property rights creates legal uncertainty.

Legal uncertainty regarding data access for research purposes may also arise from the lack of a precise definition delineating the scope of a specific legislation.

1139 Art. 21(4) Data Act.

For instance, the uncertainty regarding the conditions under which research organisations will be deemed providers under the AI Act may hinder acts of sharing training datasets or more mature AI systems, as there may be a concern whether such actions might trigger the obligations outlined in the AI Act. There is no clear-cut exclusion from the AI Act for research organisations and, despite several exceptions for research (see Section 2.7 on the AI ACT, item 'Research in AI and AI in Research') having been introduced, this term is left undefined. This is exacerbated by the fact that testing of an AI system under real-world conditions is considered to fall within the scope of the Act, even when it happens prior to the placing on the market of the AI system[1140]. This statement gives rise to considerable interpretative uncertainty.

Similar deterrents to data access and sharing may be found in the ambiguity of the exemption for AI components made available under OS licences[1141]. The lack of a definition of OS will leave some research organisations reconsidering whether to make available AI components (e.g. data) developed by them out of fear that such licences will fall beyond the scope of the exception. On the other hand, the existence of an exemption for AI components – as distinct from AI systems, normally considered to be the sole object of the AI ACT1142 – may have a chilling effect on research organisations by suggesting that mere data or other AI components cannot be made available unless under OS licences.

### The need to address the interplay of legal frameworks regulating access and reuse of data for different purposes

Similar to the challenges associated with legal uncertainties within specific DDL frameworks as outlined in the previous Section, this Section delves into the challenges stemming from legal uncertainties arising from the *interplay* between the frameworks. While, the various potential interplays are described in Section 2.9, this Section will address some of the main challenges faced by researchers and research organisations in their roles as users of digital technologies and data.

One example of legal uncertainty related to interplay between DDL frameworks is whether the data altruism organisations (as foreseen in the DGA) would qualify as intermediary service under the DSA. As discussed in Section 2.3.4, Data Altruism Organisations (DAO) are expected to become particularly relevant for data sharing for research purposes, while at the same time this formal category is questioned because of the high bar (and thus, costs) to comply with the DGA's requirements to become a registered DAO. Additional uncertainty regards the applicability of the relevant DSA provision to data altruism organisations[1143]. Other requirements deriving from the DSA's obligations on intermediary services may further deter organisations active within the field of data sharing and data altruism to become an official EU-registered DAO. Furthermore, even if DAOs do not apply for the official EU DAO label, they may still have to comply with the DSA's obligations for intermediary services.

Another example of a legal uncertainty related to interplay between DDL frameworks refers to research data repositories ("institutional or subject-based" repositories in the ODD), especially when the repository is hosted by a third-party and research organisations are acting as users[1144]. It is not clear whether (certain) research data repositories fall within the scope of the DSA, and thus are subject to the rules targeting intermediary services.

1140 In this respect, see Art 2(5d) AI Act EP text, specifying that "the testing in real world conditions shall not be covered by this exemption".

1141 Art 2 (5e) AI Act EP text.

1142 See section 6.1.5 of this Study.

1143 In case they apply for registration as an 'official' data altruism organisation, see section 3.1.3 in the chapter on the DGA.

1144 See also sections 4.2.1 and 4.3 in Chapter 4 on the Digital Services Act.

Whereas the legislative instruments belonging to DDL find some common elements of coordination in relation at least to some shared definitions or provisions, the same cannot be said for the relationship between DDL and copyright. With the exception of a few notable cases[1145], a common characteristic of DDL is the use of the "without prejudice" clause. While this solution may represent a clever technical answer to the difficulties encountered at the drafting table, perhaps even essential given the sophistications of the legislative process, from a general theory point of view it will almost certainly lead to situations of interpretative complications.

Another aspect that places the copyright *acquis* at odds with DDL is the choice of instrument: mostly Directives for copyright and mostly Regulations for DDL. There are institutional and primary law considerations that, at least in part, justify this distinction. Nevertheless, the essentially national nature of copyright and the essentially uniform nature of DDL often lead to another layer of complexity. This is due to the fact that researchers and research organisations who may for instance be collaborating through EOSC may find themselves in situations where DDL imposes upon them identical obligations, which, however, may lead to different outcomes due to the interaction with national and only partially harmonised copyright rules. This effect will be particularly evident in the field of exceptions and limitations to copyright, particularly those based on the InfoSoc, Software and Database Directives.

The AI Act EP text introduced a new provision in Art 28b(4)© to address the potential infringement of copyright in the training data by developers of foundation models. Whether this obligation applies to research organisations acting for research purposes depends on whether they can be classified as providers of generative AI models. This qualification remains uncertain, which may lead research organisations to adopt the more demanding standards originally meant chiefly for commercial developers.

When considering all the regulations and framework addressed throughout this study, and as reported in Section 1.8 (EOSC), the amount of existing (EU and domestic) laws that may regulate research activities and/or activities carried out by researchers and research organisations, as well as the additional rules from different sources (e.g. funders' requirements, institutional policies, journals' requirements) could exacerbate legal uncertainty, and generate compliance costs (e.g. time, resources, expertise) when carrying out research-related activities. The lack of awareness of the existing data access mechanisms and the compliance costs involved in understanding and operationalising all existing obligations, resources and data access mechanisms available in DDL, copyright law and EOSC may negatively impact the access and (re)use of data by researchers and research organisations.

1145 Two identified exceptions are the SGDR and IoT provisions and the definition of research organisations in the DSA referring to the CDSMD, see above.

### Academic freedom and increased influence of third parties on research

The fundamental right to academic freedom has institutional dimensions but is also a right of the individual academic; it encompasses the freedom of scientific research[1146]. It safeguards the (relative) autonomy of researchers to define the aims and objectives of the research and to select the research methods; to select and develop theories and new ideas; to gather empirical evidence; to cooperate with other researchers both nationally and internationally; to publish their findings and share scientific data and analysis with other scientists and the wider public[1147]. The regulatory environment affects academic freedom in multiple ways. One clear example is where researchers are obliged to make their research findings and supporting data available under particular licences that allow anyone a right to unfettered reuse (something the ODD promotes). In some of the legal frameworks analysed in the context of this study, researcher data access rules do not seem to have taken shape as a direct expression of the principle of academic freedom. In fact, these access mechanisms appear to have been conceived as tools aimed to (primarily) serve other purposes and policy goals.

A notable example of this tendency is Article 40 DSA, which introduces an access regime specifically dedicated to researchers, and that was hailed as a groundbreaking innovation in platform regulation. Article 40 DSA certainly represents a decisive step in the direction of increasing public scrutiny over the societal impact of the largest platforms and the functioning of their systems. On closer inspection, however – particularly when analysed through an academic freedom lens – this novel regime presents a number of (structural and procedural) limitations that warrant further scrutiny. Crucially, the scope of possible access does not extend to all the questions that researchers might consider relevant and worthy of inquiry but is pre-determined by the definition of the research purposes that make the access request (potentially) eligible.

Specifically, under Article 40(4) DSA, the scope of possible access is limited to research which has the sole purpose of contributing "to the detection, identification, and understanding of systemic risks in the Union, as set out pursuant to Article 34(1), and to the assessment of the adequacy, efficiency and impacts of the risk mitigation measures pursuant to Article 35". More in general, research access is conditional upon the researchers satisfying all the vetting requirements listed in Article 40(8), and on the regulator of establishment (competent to take the final decision on the researchers' applications) granting such access.

From this perspective, research access under the DSA seems primarily framed as a tool which enables researchers, under certain conditions, to support and contribute to regulatory supervision and enforcement. While a higher level of interaction between regulators and researchers is to be welcomed, researchers should not be deputised to carry out supervisory tasks. In the public consultation on the delegated regulation on Article 40, many submissions emphasise the importance of academic freedom, and propose several solutions to protect their independence (e.g. the creation of an independent advisory mechanism to coordinate peer review of the research applications and/or support the relevant regulators).

1146 E.g. Article 13 CFREU; Recommendation 1762 (2006) of the Parliamentary Assembly of the Council of Europe on Academic freedom and university autonomy; Article 1.6. of the Dutch law on higher education.

1147 See Bonn Declaration on Freedom of Scientific Research (2020); ECtHR 25 August 1998, Appl. No. 59/1997/843/1049 (Hertel v. Switzerland), para. 44, 50.

### 2.10.2. Research organisations and researchers as providers of data and digital technologies

This part of the study will review the opportunities and challenges of the legal framework from the perspective of researchers and research organisations as providers of (research) data and technologies.

*Opportunities*

In this Section we identify the opportunities as they have emerged from the previous analysis in relation to the role of research sand research organisations as providers of data and digital technologies.

**Wider availability of legal and technical resources to enable and foster access, (re)use and sharing of data**

Within both the DDL and EOSC, researchers and research organisations can find provisions and additional resources that serve as valuable tools for navigating the extensive array of data access mechanisms and legal obligations including when they are the recipients of these obligations.

On the EOSC dimension, outputs from EOSC-related projects can serve as valuable tools for researchers and research organisations, offering insights and facilitating tailored legal compliance across various research-related areas, including but not limited to: (i) legal and technical implementation of FAIR principles; (ii) legal (e.g. copyright exceptions and limitations, licences) and technical (e.g. software) tools to promote data sharing; (iii) legal compliance on issues related to Personal and Non-Personal Data, Intellectual Property and related rights, especially when related to access, sharing and (re)use of data; (iv) learning, teaching, and training material on FAIR management of Data and Open Science; (v) existing regulations and policies (including national policies) that may impact EOSC and Open Science.

On the DDL dimension, but still connected to Common European Data Spaces, it is worth recognising the role of the DA interoperability requirements, which may provide an important technical benchmark for data sharing in the EU, especially within the context of data spaces and the EOSC, and thus, in the long-term, facilitate access and sharing of data, as well as research collaborations relating thereto.

**Recouping costs for provision of data/information**

The ODD exempts libraries, including university libraries, from its general principle that reuse is free of charge, or that at most the costs for the reproduction, provision and dissemination of documents may be charged. University libraries are thus allowed to charge full costs[1148]. However, regarding research data, RPOs cannot charge any fees for the reuse of research data made available in repositories. This can form a significant challenge in turn, which is further discussed in Section 2.10.2 on expertise/resources/capacity). Of note, documents held by RPOs and RFOs (other than research data) are exempt from the ODD[1149]. Article 4(6)(b) explicitly mentions that educational establishments, RPOs and RFOs are not subject to the procedural requirements set out to process reuse requests. This reduces the administrative burden for compliance with the ODD.

1148 Article 6(2)(b) and 6(5) ODD.

1149 Article 1(2)(l) ODD.

*Challenges*

While RPOs and researchers strongly support the rationale and ambition of Open Science and open research data, complying with legal obligations to make research data resulting from publicly funded research available for reuse comes with a sizeable administrative and financial burden. This burden which touches upon deeply structural conditions of research and RPOs poses challenges for compliance as will be further explained below. Additional legal obligations could arise from EU data and digital legislation which are based on the EU's competence to establish an internal market (Article 114(1) TFEU). Typically, these legal instruments are not directly addressed to researchers and RPOs but research activities could be caught in their scope of application, thereby creating compliance obligations.

**Legal uncertainties**

Both the ODD and the DGA have as one of their objectives to open up public sector data, including covered research data, for reuse. What stands in the way of compliance for RPOs are legal uncertainties about the interpretation of key notions in each legal instrument and certain discrepancies between these two legal instruments. To begin with, there are uncertainties when interpreting certain key notions of the ODD, such as the scope of repositories and the meaning of publicly funded research. As was explained in Section 2.9.2 there are potential discrepancies between the ODD and the DGA concerning the treatment of RPOs and the concept of research data.

What complicates compliance for RPOs and researchers further are the various ins and outs from the scope of application for educational activities, libraries, research funding organisations and public-private partnerships which also do not fully converge between ODD and DGA. Finally, addressing exceptions and limitations in the recitals (e.g. recital 12 DGA) is not conducive to legal certainty.

A related legal uncertainty is whether research data repositories in scope of the ODD would also fall within the scope of the DSA[1150]. If they were to (partially) fall within scope of the DSA, this means that such repositories, which can be hosted by universities, would also be subject to the relevant DSA provisions.

In the AI ACT, the EP text introduces an obligation to provide a "detailed summary" of the copyright-protected training data. Whether research organisations need to comply with this condition is still uncertain depending on their correct classification as providers of generative AI. Additionally, the term ''detailed summary'' is currently left undefined in the EP draft text. Public sources discussing the ongoing trilogue indicate that technical bodies set up to implement the Regulation – the AI Office – could make available templates.

Besides EU law, Member States' national and regional laws also govern research activities and/or activities carried out by research organisations, and more rules stemming from different sources (e.g. funders' requirements, institutional policies, journal requirements) can overwhelm researchers, generate legal uncertainty, and generate significant compliance costs (e.g. time, resources, expertise).

1150 See sections 9.2.6, 10.1.2.2 and 4.2.1 (chapter on DSA).

## Resources needed for compliance when sharing (research) data

As described in the previous Section, certain legal uncertainties can pose challenges to RPOs and researchers as providers of digital infrastructures and data. Indeed, it may be difficult for RPOs and researchers individually to simply find out what regulations, rules and obligations apply to them in which situations[1151]. Having a clear understanding of what rules are applicable and what the concrete consequences of those rules are requires legal knowledge in order to address compliance. Research projects can pose many different legal issues and bespoke legal expertise and compliance efforts require legal expertise and resources.

However, various uncertainties remain, as set out in this study. This may cause RPOs and their affiliated researchers to find themselves in a 'stalemate'; they are not sure whether certain rules apply to them, but they may also not be sure that such rules do *not* apply to them. The question would then be whether an RPO makes use of certain data provision rights (and thus risks the obligation to comply with accompanying obligations), which demands serious investments and resources.

Once RPOs and researchers have a (clear) understanding of what is required of them when providing digital infrastructure or making (research) data available, a need for investments in resources remains. Put simply: compliance with various obligations deriving from DDL is costly both in terms of acquiring legal expertise (e.g. assessment of the correct legal frameworks and connected obligations, protection of third-party rights when opening up data), but also costly in terms of e.g. the necessary technical infrastructure[1152].

*Legal expertise*

In addition to legal expertise being needed to establish what rules apply to RPOs and researchers when opening up data or providing digital infrastructure, specialised legal expertise may also be necessary to take the required protection of third-party rights into account. Intellectual property law, contract law (licensing), and personal data protection law pose challenges to researchers and research organisations as providers of research data. It may require substantial expertise and resources to ensure that data provenance is properly established and that any eventual intellectual property rights, contractual obligations and personal data protection compliance have been adequately addressed. These challenges become more complex as more data are combined from different sources. This is, for example, of importance for researchers making their data reusable under Article 10(2) ODD, which they have to do in accordance with several third-party rights and interests. As studies on the provenance and licensing of Open Source training datasets shows, it is often difficult to offer a proper account of data provenance and whether licences are appropriately used.

*Time and effort to prepare open and FAIR research data*

The promotion of open science through the wider sharing of research data are connected to the costs and investments required to prepare research data for reuse[1153]. The costs involved may be hard to recoup, as Article 6(6)(b) ODD notes that the reuse of research data shall be free of charge due to the fact that they were produced using public funding. RPOs and researchers are therefore not allowed to charge any fees when allowing reuse of research

1151 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, pp. 51-52.
1152 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part II. Access to Data for Research. Amsterdam: September 2023.
1153 See sections 2.4.4 and 2.4.5 in chapter 2 on the ODD; Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, pp. 60-62.

data. Yet, in short, the preparation of research data for publication and reuse can take a significant amount of time, efforts and can thus, be costly.

*Risk of liability under third party protective regimes*

And although the DGA does not require PSBs and covered RPOs to make covered data available for reuse, they can decide to do so. In such cases, the preparation of protected data for reuse similarly requires substantial expertise and resources. However, making protected data available for reuse while ensuring that the protected nature of data are preserved can involve compliance risks, such as the risk of liability under the legal regimes protecting the data.

*Technical investments*

Open data legislation tends to presuppose that data sharing infrastructures are in place. From the perspective of RPOs providing institutional support for research data management as well as setting up and maintaining research data repositories, require long-term investments. Here too, it should be noted that – while RPOs share the commitment to open science policy – practices of individual institutions and the research sector at large are still at an early stage. Notable examples of functioning data-sharing infrastructures often arise out of a specific need for research data sharing of a particular discipline or research network. Such bottom-up developments should be strengthened and (financial) incentives should be offered to a research network making a creditable effort to set up new data sharing infrastructures.

### Lack of incentives to register data altruism organisation

Although data altruism is codified in the DGA, the need for compliance with the legal requirements of Chapter IV of the DGA can disincentive RPOs from setting up a registered DAOs in the first place[1154]. RPOs may prefer to use the unregulated forms of data altruism in addition to continuing their customary data collection practices such as surveys, panel research, focus groups, and data donation. In order to keep with academic and scientific freedoms, the voluntary nature of registering as a DAO should be maintained.

One important innovation of the DGA is the introduction of the European data altruism consent form foreseen in Article 25 DGA[1155]. The European data altruism consent form would indeed respond to a need for trans-European mechanisms to register research participants' consent in a GDPR compliant way. It is advisable to not limit the European data altruism consent form to registered DAOs but open up the use of the consent form more broadly for data sharing in the context of scientific research which adheres to "recognised ethical standards for scientific research".

1154 See section 3.4.2 in chapter 3 on DGA.

1155 See section 3.3.3 in chapter 3 on the DGA.

*Restrictions on academic freedom*

As noted throughout the study, academic freedom is a normative value that is recognised in EU Member States' legal systems and EU primary law. There is a certain tension between normative rationales for protecting academic freedom and the market-making language of the ERA and research activities being caught in internal market legislation. There is a growing urgency in the calls for better recognition and alignment with the normative value of academic freedom in ERA policies and DDL more broadly[1156]. Relatedly, research funding organisations have assumed an increasing influence over the release of research data and (the conditions of) reuse. While in many cases open research data policies and researchers' interests align there can be situations when mandating open research data could encroach on academic freedom (e.g. filing for a patent, confidential information from research participants) which require some flexibility.

With a view to recognised research methodologies involving research participants, such as interviews, panel research or focus groups, among others, EU data legislation and Open Science policy should not overwrite current scientific research practices. That means for example that the DGA should not be interpreted as to require publishing preparatory research data or introduce a new requirement for research involving human participants. The ODD, in its definition of research data, stays close to "the practices commonly accepted in the research community" data which aligns well with academic freedom. However, it also strongly favours licensing that effectively makes researchers yield control over what happens to their research data. This creates tension with academic freedom, especially where researchers must use standardised open licences, and where MS Open Science policies mandate the deposit of research data in repositories, triggering a situation where anybody is free to use the data for any purpose. Of note, obliging researchers to (not) exercise their intellectual property in a certain way can not only be problematic from the perspective of the fundamental right to academic freedom. Intellectual property rights are also protected as fundamental rights.

## 2.11. Recommendations on the legislative and non-legislative levels

In this final chapter we identify key findings and ensuing recommendations. We first present a set of instrument-specific findings and recommendations, followed by some overarching ones. Recommendations are addressed to: researchers and research organisations, policy- and law makers, interpreters and enforcers and the private sector.

### 2.11.1. Key findings and recommendations: Instrument-specific

*Open Data Directive*

**Recommendations to researchers and research organisations**

**A) Key finding:** Article 10 ODD will have major impact on RPOs, in particular the requirement to make publicly funded and publicly available research data reusable. This requirement can generate administrative, financial and compliance costs. It requires adequate capacity and knowledge in RPOs and researchers to manage data in a complex legal environment.

1156 Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 65f.; Vasiliki Kosta, The commercialisation challenge to academic freedom: a matter for EU law, European Law Blog 52/2023, 11 December 2023. <https://europeanlawblog.eu/2023/12/11/the-commercialisation-challenge-to-academic-freedom-a-matter-for-eu-law/#more-9587>.

**A1) Recommendation:** Adequate resources must become available to open up research data for reuse. Member States are encouraged to ensure RPOs can invest in legal and technical expertise and resources, in order to achieve compliance with the requirements set out in the ODD when making research data reusable.

### Recommendations to law- and policymakers

**A) Key finding:** As regards the ODD, it has been set out in this study that several uncertainties revolving around Article 10 ODD and the (required) reusability of research data remain. Those uncertainties can have serious impacts on RPOs and researchers.

**A1) Recommendation:** Pursuant to Article 18(1) ODD, the Commission will evaluate the ODD next year at the earliest. Paragraph 2 of that provision sums up what factors should be particularly considered in the evaluation. It does not mention the impact of the ODD's new rules on research data. It is advisable that the impact of the research data reuse provisions is taken on board explicitly in the evaluation, and that the interplay with other instruments is also considered. This should allow for the design of targeted policies and interventions where necessary to ensure the regulatory framework for research data safeguards the interests of RPOs, researchers and the wider public interest in research.

Member States shall also provide the Commission with information to prepare the evaluation report to be written up by the Commission[1157]. It is encouraged that the input from various stakeholders, including those active (in public research) are included in this information, and subsequently will be taken into thorough consideration.

*Data Governance Act*

### Recommendations to researchers and research organisations

**a) Key finding**:
The DGA regulates the reuse of certain categories of protected data (Chapter II), codifies commercial data intermediation services (Chapter III) and provides for registered data altruism organisations (Chapter IV).

**a1) Recommendation**:
Ensure there are adequate resources, (legal) expertise and processes in place to ensure that before releasing protected data as open research data (under Article 3 DGA), the protected nature of data is safeguarded.

**a2) Recommendation**:
Put in place processes that ensure researchers and RPOs are aware of the possibilities to seek access to certain categories of protected data from public sector bodies pursuant to Chapter II of the DGA.

**a3) Recommendation**:
RPOs and researchers engaged in data sharing activities with private sector actors should seek legal advice about their compliance with Chapter III of the DGA regulating data intermediary services.

1157 Article 18(1) ODD.

**Recommendations to law- and policymakers**

**a) Key finding**:
Considering the DGA, researchers and RPOs face legal uncertainty about the situations in which they are falling within the scope of application of Chapter II of the DGA, not the least because the exception for certain RPOs in recital 12 of the DGA are non-binding.

**a1) Recommendation**:
In the next review process for the DGA, address the issue of the scope of application with respect to RPOs. Meanwhile, consider offering official guidance on the application of the DGA to RPOs and researchers.

**b) Key finding**:
Preparing protected data for release and reuse involves the risk of liability for any infringements of third-party rights and interests as guaranteed by, for example, the GDPR, intellectual property rights and contractual confidentiality.

**b1) Recommendation**:
Safeguard the voluntary nature of the extended reuse of protected (research) data at EU level under Chapter II of DGA, in the interest of avoiding administrative burdens for RPOs and researchers, and to ensure respect for academic freedom.

**b2) Recommendation**:
Consideration should be given to practical solutions to offset the considerable legal risks that RPOs and researchers would face which, when they make protected data available for reuse, *unintentionally* infringe upon third parties' rights. For example, Member States' competent bodies could operate the requisite secure processing environments for research data which contain categories of protected data and thereby assume liability risks and professionalise the reuse of protected data.

**c) Key finding**:
Data sharing infrastructures are key for open science and open research data and benefit the European Research Area, researchers and RPOs alike.

**c1) Recommendation**:
The EU should (continue to) support data sharing infrastructures in the area of research and promote the creation and maintenance of data sharing infrastructures by RPOs and their networks.

**c2) Recommendation**:
With a view to supporting the reuse of protected data as foreseen under the DGA the EU should (continue to) promote the sharing of knowledge and technical solutions for safe processing environments, including offering open source software.

**d) Key finding**:
Concerning Chapter IV of the DGA, researchers and RPOs are cognizant of the benefits of Data Altruism Organisations but they may be less likely to set up and notify as registered Data Altruism Organisations.

**d1) Recommendation**:
Ensure registration processes are efficient for RPOs and researchers and that the added value is made clear; consider additional positive incentives should take-up prove to be low.

**d2) Recommendation**:
Pan-European research would benefit from opening-up the European data altruism consent form more broadly for data sharing in the context of scientific research which adheres to recognised ethical standards for scientific research.

*Digital Services Act*

**Recommendations to law- and policymakers**

**a) Key finding**: Article 40 DSA on research access to the data of VLOPs and VLOSEs - which is specifically addressed to researchers – emerges as the most innovative and potentially generative DSA provision from a data access perspective. However, its concrete impact on researchers and RPOs will depend on how this access mechanism is implemented in practice to inform the operationalisation of the DSA's systemic risks framework. The upcoming Commission delegated act on Article 40 DSA will play a crucial role in this regard, as it will detail the technical conditions to share data with vetted researchers. Ultimately, the approach of national regulators (in particular, the Digital Services Coordinators of establishment) in processing and deciding on researchers' access requests under Article 40(4) DSA, and the Commission's enforcement of Article 40(12) DSA on access to publicly available data, will be key in shaping the practice of research access under Article 40.

**a1) Recommendation:** The DSA regulators (the Digital Services Coordinators and the Commission, also in the context of the Board for Digital Services) should prioritise monitoring the concrete implementation of Article 40 DSA across the EU and how it affects broader DSA enforcement goals. In particular, they should regularly engage and facilitate discussions with researchers' and RPOs to identify relevant challenges in using this access mechanism and realising its full potential in the context of the DSA enforcement framework.

**b) Key finding:** The status of RPO-provided services under the DSA requires a case-by-case assessment to determine which DSA obligations might apply to the specific service. In their effort to organise compliance with the DSA, some RPOs (in particular, universities governed by public law) could incur into organisational burdens and financial costs, which might in turn favour the decision to further externalise and opt for services provided by third-parties.

**b1) Recommendation**: The DSA regulators (national Digital Services Coordinators and the Commission, also in the context of the Board for Digital Services) should promote discussion on the status of RPOs-provided services under the DSA, including by engaging with the relevant RPOs organisations, and provide clarifications on the potential obligations of the latter under the DSA framework.

*Digital Markets Act*

**Recommendations to law- and policymakers**

**a) Key finding**: the DMA includes a number of transparency provisions which are of potential relevance for researchers and RPOs as they allow for some form of data access. However, a low level of awareness of this legal framework, and possible procedural complexities (in particular, on acquiring the authorisation to access data as third-parties) could limit the potential benefits of these provisions for researchers and RPOs.

**a1) Recommendation**: The Commission, as regulator competent to enforce the DMA, could provide guidance and raise awareness on the transparency provisions under the DMA. These initiatives could increase the potential positive impact of the DMA on researchers and RPOs.

*Data Act*

### Recommendations to researchers and research organisations

**a) Key finding**: The DA regulates data sharing between Internet of Things (IoT) data holders, users and third parties. These provisions may require data holders to share "readily available data" and relevant metadata generated by a connected device or related service with users or with third parties, including relevant sensor data[1158].

**a1) Recommendation**: Ensure (knowledge) resources are in place that allow researchers in their capacity as users of IoT products, to familiarise themselves with the access and portability rights as well as with the connected limitations that can offer them access to IoT data.

**a2) Recommendation**: Ensure knowledge resources and processes are in place that enable researchers seeking access IoT data as third parties, to comply with the DA's requirements, notably as regards their communication with IoT users, the potential limits that data holders may be able to impose on the scope of the data, especially regarding trade secrets, and compensation due to the data holder under Art. 9 DA.

**b) Key finding**: The DA provides a mechanism for business-to-government (B2G) data sharing that can involve data being shared by the relevant governmental bodies with researchers and research organisations. These provisions may require researchers and research organisations to take appropriate measures for the handling of data received from such governmental bodies[1159].

**b1) Recommendation**: In order to benefit from these provision, researchers and research organisations should familiarise themselves with and adopt relevant data handling measures, including via technical infrastructure and/or other best practices such as data management plans, so that governmental bodies are able to share data with them.

### Recommendations to law- and policymakers

**a) Key finding**: The DA regulates unfair contractual terms unilaterally imposed on another enterprise and provides the Commission with the power to develop model contractual terms and standard contractual clauses. Such unfair contractual terms may also be imposed upon researchers and research organisations where they suffer from power asymmetries.

**a1) Recommendation**: In the interest of research, the Commission should monitor the application of the rules on unfair contractual terms as they apply in research contexts, and in developing model contractual terms and standard contractual clauses, should take into account, and potentially directly address, research use cases.

1158 See sections 6.1.2 and 6.1.3.

1159 See section 6.1.5.

**b) Key finding**: The DA provides mechanisms for the establishment of interoperability, including of data, of data sharing mechanisms and services, of common European data spaces, of data processing services, as well as of smart contracts for executing data sharing agreement[1160]. Such interoperability requirements are likely to set a technical benchmark for realising the stipulations of the DA, including in the context of EOSC as a common European data space. The Commission has the power to guide the development of relevant interoperability requirements, including via delegated acts, implemented acts, as well as guidelines.

**b1) Recommendation**: The Commission should ensure that such interoperability requirements are achievable for a wide range of operators, including via supporting measures for their implementation, and the positive encouragement of their adoption. The specific role of research organisations, in particular the way in which complex compliance legal and technical requirements could disproportionately affect them, should be taken into consideration in this process.

**b2) Recommendation**: The Commission should ensure that the technical implementation of such interoperability requirements do not run counter to alternative legal and policy objectives, including the facilitation of research access to data in the public interest.

**c) Key finding**: The DA sets the amount of compensation due to data holders by data recipients to the level of marginal cost when the recipient is a research organisation, but leaves open the possibility to other EU or national law to reduce or exclude compensation (Art. 9(6)).

**c1) Recommendation**: National legislators should work to ensure the flexibility offered by Art. 9(6) DA is used to ensure costs for research organisations do not hinder data access.

### Recommendations to interpreters and enforcers

**a) Key finding**: The DA regulates unfair contractual terms unilaterally imposed on another enterprise. In its current formulation, the DA leaves open the question of whether researchers and research organisations qualify as an “enterprise”, such that they would benefit from the protections afforded by the DA[1161].

**a1) Recommendation**: Courts addressing questions related to unfair contractual terms concerning access to and the use of data or liability and remedies for the breach or the termination of data-related obligations should interpret the scope of these provisions so that the rationale for the adoption of the provisions is appropriately substantiated, including, where relevant, as it applies to researchers and research organisations.

**b) Key finding**: The DA clarifies the role of the *sui generis* database right in the context of IoT data sharing. Some legal uncertainty persists regarding the scope and language of Article 43 specifically, and how it is to be given legal effect in practice.

**b1) Recommendation**: Competent authorities and courts addressing questions concerning the *sui generis* database right and IoT data covered by the DA should take due account of the interests at stake, including, where relevant, of researchers as data holders, users and third parties to IoT data sharing schemes. This could be in the direction of an expansive reading of Art. 43 as to include other forms of rights related to copyright.

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1160 See section 6.1.7.

1161 See section 6.1.4.

### Recommendations to the private sector

**a) Key finding**: The DA mechanism for business-to-government (B2G) data sharing regulates the provision of relevant data to researchers and research organisations. This provides, among other things, that such data can be kept for up to 6 months after erasure of this data by the requesting governmental body. Where such data contributes to research outputs such as an academic publication in a peer-reviewed scientific journal, such data may therefore not be available long term[1162].

**a1) Recommendation**: Publishers of scientific publications including journals should be aware of this legal requirement and support researchers at the various stages of the publication process, for instance exploring the possibility to offer an alternative secure storage facility for data in agreement with the original data holder.

*Artificial Intelligence Act (proposal)*

### Recommendations to Researchers and Research Organisations

**A) Key findings**: While a research organisation may also be considered a provider when it ''put [an AI system] into service … for its [own] use'', this does not cover AI systems ''specifically developed and *put into service* for the sole purpose of scientific research and development'' (see Section 2.7.1). Irrespective of the above, once an AI system is commercialised at a later stage of its life cycle, the provider will need the necessary information to comply with the AI Act (see Section 2.7.2).

**A1) Recommendation**: Research organisations should strive to develop best practice in terms of transparency and documentation of the developing phases of AI systems – for example, when making available a ''detailed summary'' of the training dataset. This will support future commercial applications of the AI systems.

**A2) Recommendation**: When operating in the context of private/public partnerships for the development of an AI system, research organisations should draw up agreements with the consortium partners to allocate responsibilities and ensure compliance with the obligations under the AI Act.

### Recommendations to law- and policymakers

**A) Key findings**: Neither the making available of an AI system in the context of non-commercial research (e.g. during testing) nor the making available of ''AI components'' on Open Source licences constitute a placing on the market of an AI system (See Section 2.7.2). Nonetheless, these very same acts appear to have been exempted by ad hoc provisions in the various versions of the AI Act – (research in AI) Art2(5) EP text, Art2(7) Council text, and (OS AI) Art 2(5e). (See Section 2.7.2).

**A1) Recommendation**: As the text of the AI Act is as yet not final, the legislators should unambiguously clarify that non-commercial research falls beyond the scope of the AI ACT.

**A2) Recommendation**: the legislators should unambiguously clarify that the mere making available of AI components is not within the scope of the AI Act, irrespective of whether they are made available on OS licences or not.

1162 See section 6.1.5.

**B) Key findings**: While research organisations acting for research purposes are allowed to freely train AI systems on copyright-protected data under Art 3 CDSMD, under certain limited conditions they may have to comply with Art. 28b(4)(c) EP text (requiring making available of a sufficiently detailed summary of the data used for training). Whereas this provision may generally enhance transparency, it was arguably originally developed in relation to the opt-out mechanisms of Art. 4 CDSMD. To the extent that it also applies to Art. 3 (research organisations), it will add a layer of compliance costs for research organisations that has not yet been tested. The function of Art. 28b(4)(c) is to allow rightsholders to monetise the use of their works, which is not applicable to research organisations precisely by virtue of the exception of Art. 3 CDSMD (See Section 2.7.2).

**B1) Recommendation**: It should be clarified that Art 28b(4)(c) AI Act EP text does not apply in cases of Art. 3 CDSMD.

*European Open Science Cloud*

### Recommendations to researchers and research organisations

**a) Key findings:** The DDL and EOSC were recognised by research organisations as a source of opportunities and challenges for the execution of their activities. Amongst the main challenges, the costs of compliance and legal uncertainty concerning the application of certain rules to specific organisations and practices were highlighted. These challenges pose potential deterrents for researchers and other stakeholders in the research community, as they may hesitate to share data due to concerns about legal compliance. In addition to the legal requirements, additional requirements imposed by research funding organisations, institutions (e.g. universities) and journals have a significant impact on data sharing by researchers.

**a1) Recommendation**: Consider the development of educational and training activities for researchers on how to operationalise existing obligations and mechanisms outlined in EU DDL, EOSC and Copyright Law, facilitating improved understanding and implementation of processes for data access, sharing, and (re)use.

**a2) Recommendation**: Research performing organisations, research funding organisations, and universities should take into consideration all the existing regulation (e.g. national and regional laws) on data (re)use and sharing before issuing new rules on the matter.

### Recommendations to law- and policymakers

**a) Key findings**: The amount of existing legal sources that regulate research activities and/or activities carried out by researchers and research organisations can overwhelm researchers, create legal uncertainty, and generate compliance costs that may potentially affect the achievement of EOSC and Open Science goals.

**a1) Recommendation**: Development of best practices delineating strategies to navigate synergies between the EOSC, EU Copyright Law, and the DDL concerning obligations and mechanisms for data access and (re)use.

**a2) Recommendation**: New regulatory interventions should provide (i) increased clarity on the impact of said regulation on research activities and (ii) detailed information on the entities falling under the purview of these regulations, recognising the varied sizes and natures of organisations encompassed within the research ecosystem (e.g. universities, repositories).

**Key findings**: Recent procurements related to the EOSC EU NODE and Simpl will be particularly relevant to fostering data sharing and interoperability. However, research carried out within this study showed that there is room for further research on some aspects concerning the role of EOSC as the Common European Data Space for Research.

**b1) Recommendation**: Consider the creation of additional funding opportunities to promote further investigation on

(i) the implications for researchers and research organisations resulting from the recognition of EOSC as a Common European Data Space;

(ii) the interactions with other Data Spaces and their potential positive impacts on research across various domains; and

(iii) the potential for EOSC to address complex cross-border issues inherent to the borderless nature of research itself.

Together with the existing expertise in technical interoperability, Open and FAIR data, these aspects can become potent tools to unlock the full potential of EOSC as a Data Space.

### 2.11.2. Overarching key findings and recommendations

*Recommendations to law- and policymakers*

**a) Key finding:** The landscape of EU DDL as relevant to research activities is becoming ever more complex. A lack of consistency can negatively affect compliance with the legal obligations and limit the ability of stakeholders to reap benefits.

**a1) Recommendation:** Key terminology and concepts related to scientific research and the actors within the research ecosystem should be consistent across the different legislative interventions. Considering that most instruments have been recently adopted, this could be done at the regularly scheduled revisions of the legislative tools, as well as at the policy and at the interpretative levels.

**a2) Recommendation:** EU policymakers may consider streamlining the consideration of scientific research in EU legislation and policy making, such as integrating scientific research in the Better Regulation Toolkit.

**a3) Recommendation:** Consider the introduction of a regular monitoring exercise to identify researchers' and RPOs' ability to reap benefits from the body of EU DDL, and challenges encountered with compliance; in light of the important contribution of scientific research to the attainment of EU objectives, strategies and values.

**b) Key finding:** The variety of specific and often divergent data access and reuse regimes creates a complex regulatory system that risks overburdening researchers and research organisations with compliance costs.

**b1) Recommendation:** Develop further the coordination across the surveyed DDL instruments with a view to consolidating some of the most outstanding inconsistencies at the terminological and functional level. This could be done in policy documents or in the scheduled revisions of the DDL instruments.

**b2) Recommendation:** Evaluate the feasibility of developing a coordinated, homogeneous and horizontal set of data access and reuse provisions for scientific research (e.g. Business-to-Research, B2R).

**b3) Recommendation:** As an EU core regulatory value, scientific research should be the clear policy and regulatory objective of provisions relating to scientific research, not simply a tool employed to achieve different goals. Examples may be found in Art. 40 DSA or in the B2G provisions of the DA. In both cases researchers are granted specific access frameworks, but the ultimate goal is not scientific research (it is respectively systemic risk identification and exceptional need) which lead to situation that may frustrate scientific research (e.g. obligations to limit the scope of the research to systemic risk or to erase the data after a certain period of time).

**c) Key finding:** Academic freedom as protected by Article 13 of the EU Charter is not consistently recognised as a relevant value to be safeguarded, as regards aspects of institutional autonomy and the autonomy of individual researchers.

**c1) Recommendation:** Have consistent consideration for safeguarding academic freedom, both at the level of institutional autonomy of RPOs and individual autonomy of researchers. Ensure that EU data and digital law aligns with values that underpin academic freedom, i.e. as regards recognised research methods and practices in the various research community and disciplines, and adherence to ethical research standards.

**c2) Recommendation:** EU policymakers may consider streamlining the consideration of scientific research in EU legislation and policymaking, such as integrating scientific research in the Better Regulation Toolkit.

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# ANNEX 1: LITERATURE REVIEW AND DESK RESEARCH ON COPYRIGHT LEGISLATION

## Aims and structure

The study included a literature review and data collection on the copyright legislation of the EU and Member States and its relationship with EU Open Science (OS) policies. It aimed to **(i)** shed light on the enablers and disablers of research activities in the EU copyright *acquis*, **(ii)** highlight the current interplay between copyright laws and research by looking at the national legal landscapes of the selected Member States, **(iii)** identify the gaps in the field which require an EU legislative intervention; **(iv)** provide the basis for the stakeholder consultations, surveys, and interviews that were conducted in the framework of this study; **(v)** lay the groundwork for Task 2, which has the goal of identifying legislative gaps in EU copyright law that needs improvement to operationalise EU OS goals.

Building upon and further reflecting on the descriptions provided within the Tender proposal and the Inception Report submitted in month 2 of the study; this Annex offers a detailed overview of the methodology. The Annex initiates with a comprehensive literature review of the contributions that have an up-to-date focus on the opportunities and challenges raised by the EU copyright framework to OS. Subsequently, it offers a summary of the Open Science Policies adopted by *selected* Member States (i.e. Austria, Belgium, France, Germany, Hungary, Ireland, Italy, Lithuania, Malta, Portugal, Romania and Spain). The selection of the Member States is aimed at achieving a sufficient representativeness of the central, northern, and southern European legal traditions and *milieu*. The Annex then analyses the "enablers" of OS goals within the EU and *all* the Member States' copyright framework, focusing on EU and national legislations and case law, offering comparative conclusions for each copyright flexibility.

### 1.1.1. Methodology

The literature review and desk research started by scrutinising the EU OS policies and strategies in order to identify the key elements in the EU's policy agenda that intertwine with EU copyright law and draw the boundaries of the literature review and the mapping of existing EU and national sources. This analysis was flanked by an overview of the academic and policy debate surrounding the interplay between copyright and OS and by a critical assessment of the state of the art of OS policies in selected Member States, with the aim of highlighting the challenges already noted by scholars and policymakers, understanding the degree of development and convergence/divergence of national approaches in the field, and by unveiling strengths and pitfalls of national copyright laws in accommodating and operationalising OS goals. In this context, the selection of Member States was informed by the aim of achieving a sufficient representativeness of the central, northern, and southern European legal traditions and *milieu*.

It is worth noting that this part of the Annex relies on and further elaborates on a robust, comprehensive, and updated set of OA legislative and soft law initiatives and policy strategies endorsed at the EU and national levels. From this, it is inferable that the scope of the analysis goes well beyond the EU Open Access policy framework dated to 2011, including and focusing on the law-making and policy documents issued from 2019 onward. After tackling the initiatives embraced in the EU from 2004 to 2022, the Annex continues with an overview of national OA policies, placing emphasis on the endeavours to align OA goals with EU copyright law and on their functional interSections. In this regard, the impact of the Horizon 2020 programme, the latest transpositions into national law, and the institutional mechanisms, action plans, and OA standards set up to favour the dissemination of research data and publications in OA are investigated.

To offer a proper account of the multi-faceted interactions between copyright law and research activities, and on the basis of a preliminary literature review, the study focused on three categories of legally protected content: **(i)** works of authorship; **(ii)** databases and **(iii)** computer programmes. On this basis, it mapped and analysed relevant EU and national provisions and case law from all Member States, also relying on the research already conducted within the framework of the H2020 project reCreating Europe[1163].

1163 reCreating Europe aimed at bringing a ground-breaking contribution to the understanding and management of copyright in the DSM, and at advancing the discussion on how IPRs can be best regulated to facilitate access to, consumption of and generation of cultural and creative products. The focus of such an exercise was on, inter alia, users' access to culture, barriers to accessibility, lending practices, content filtering performed by intermediaries, old and new business models in creative industries of different sizes, sectors and locations, experiences, perceptions and income developments of creators and performers, who are the beating heart of the EU cultural and copyright industries, and the emerging role of artificial intelligence (AI) in the creative process. These constituted the basis for reCreating Europe's policy recommendations and best practices. To fill the knowledge gap and grasp the complexity of the problems analysed, reCreating Europe coupled the mapping of regulatory solutions, stakeholders' perceptions and coping strategies with the collection of a wide range of data sets portraying the impact of digitization and copyright on patterns of consumption, creation and dissemination of cultural and creative content, their qualitative and quantitative evaluation, and the development of innovative analytical and measurement solutions. Its activities revolve around four main pillars. See reCreating Europe https://recreating.eu/the-project/ accessed 11th August 2023.

The mapping of the EU acts, and the Court of Justice of the European Union (CJEU) case law adopted a systemic-contextual analysis1164 and a functional method of assessment[1165] to identify key enablers and disablers for OS in the EU copyright acquis. The provisions selected for a more thorough evaluation, due to their potential impact on research activities and their direct or indirect use by national courts to this end, were E&Ls embedded in Articles 5 and 6 of Directive 2009/24/EC[1166] (Software Directive); Articles 6, 8, 9 of Directive 96/9/EC[1167] (Database Directive); Articles 5(2)(a), 5(2)(d), 5(3)(a), 6(4) of Directive 2001/29/EC[1168] (InfoSoc Directive); Article 6(1) of Directive 2006/115/EC[1169] (Rental Directive); and Articles 3 and 4 of Directive (EU) 2019/7901170 (CDSM Directive, CDSMD). The list was complemented by the analysis of provisions allowing the introduction of special licensing schemes and the transformation of exclusive rights into remuneration rights, which may be indirectly used to facilitate access and reuse of research materials and by norms defining the boundaries of the public domain and of protected works, in light of their impact on the free availability and sharing of content. Similarly, decisions of the CJEU were selected based on their direct reference to the provisions analyzed or for their indirect coverage of conducts that may be linked to research activities.

The mapping of the EU copyright *acquis* constituted the basis for the analysis of Member States' statutory and case law. The analysis focused on the degree of implementation of EU provisions and on the eventual presence of additional provisions outside of the EU model in order to the state of the harmonisation in the field and the degree of flexibility that each national system shows vis-à-vis the balance between copyright, research needs and OS goals. To complement this effort, Member States whose national copyright laws include a legal provision on secondary publication rights (SPR) have also been mapped and analyzed, despite the absence of an SPR in the EU copyright *acquis*. The comparative assessment carried out according to the methods of the functional comparative analysis[1171] allowed highlighting convergences and divergences among national solutions with regard to beneficiaries, works and uses covered and additional conditions of applicability, and shedding light on best practices and pitfalls on Member States' legal systems in setting the right balance between copyright protection and the implementation of OS policies. In this context, special attention was paid to cases where national courts failed to implement CJEU principles and doctrines that could help strike the right balance between these two conflicting goals.

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1164 See Calboli, I, 'The Role of Comparative Legal Analysis in Intellectual Property Law: From Good to Great?' [2013] Methods and Perspectives in Intellectual Property 3 and De Coninck, J, 'The Functional Method of Comparative Law: "Quo Vadis"?' (2010) 74 Rabels Zeitschrift für ausländisches und internationales Privatrecht / The Rabel Journal of Comparative and International Private Law 318

1164 See Michaels, R, 'The Functional Method of Comparative Law' in Mathias Reimann and Reinhard Zimmermann (eds), 'The Oxford Handbook of Comparative Law' (Oxford University Press 2019) https://doi.org/10.1093/oxfordhb/9780198810230.013.11, accessed 11th August 2023, Padjen, I L, 'Systematic Interpretation and the Re-Systematization of Law: The Problem, Co-Requisites, a Solution, Use' (2020) 33 International Journal for the Semiotics of Law - Revue internationale de Sémiotique juridique 189, and Selznick, P, '"Law in Context" Revisited' (2003) 30 Journal of Law and Society 177.

1165 See Michaels, R, 'The Functional Method of Comparative Law' in Mathias Reimann and Reinhard Zimmermann (eds), 'The Oxford Handbook of Comparative Law' (OxfordUniversity Press 2019) https://doi.org/10.1093/oxfordhb/9780198810230.013.11, accessed 11th August 2023, Padjen, I L, 'Systematic Interpretation and the Re- Systematization of Law: The Problem, Co-Requisites, a Solution, Use' (2020) 33 International Journal for the Semiotics of Law - Revue internationale de Sémiotique juridique

189, and Selznick, P, '"Law in Context" Revisited' (2003) 30 Journal of Law and Society 177.

1166 Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programmes OJ L 111/16.

1167 Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases [1996] OJ L 77/20.

1168 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L 167/10.

1169 Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the

field of intellectual property [2006] OJ L 376/28.

1170 Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC [2019] OJ L 130/92.

1171 Kischel, U, 'Comparative Law' (Oxford, 2019; online edn, Oxford Academic, 17 April 2019); R Michaels, 'The Functional Method of Comparative Law', in M Reimann, R Zimmermann (eds), 'The Oxford Handbook of Comparative Law', 2nd edn, Oxford Handbooks (2019; online edn, Oxford Academic, 9 May 2019), https://doi.org/10.1093/oxfordhb/9780198810230.013.11, accessed 11th August 2023.

This Annex summarises the result of the literature and desk research and provides conclusions that will constitute the backbone of the analysis that is to be carried out by Task 2 (Identify and elaborate on areas within the EU copyright framework that necessitate enhancement).

### 1.1.2. Copyright and Open Science: literature review

The interplay between open access (OA), OS and copyright protection has been extensively analysed by numerous studies, policy reports and academic works.

Starting with the two seminal background studies of **Senftleben** (**I**) and **Angelopoulos (II),** commissioned by the EC and issued in 2022, this Section will provide a summary of the **key points outlined by the most relevant literature** focusing on the wider **EU environment** (**III**) and on selected **Member States' experiences (IV)**, privileging those contributions that have shed light on the different facets of the copyright-OS interface and studied the current state of harmonisation of EU copyright flexibilities.

#### 1.1.2.1. Sentfleben (2022) — Study on EU copyright and related rights and access and reuse of data

The study conducted by Senftleben[1172] for the EU Commission in 2022 offered an analysis of some of the key EU copyright law provisions and their fitness to support the implementation of EU OS policies.

The first element underlined by the study is the lack of homogeneity in the language adopted by the EU legislator with regard to research exceptions and the fragmentation this creates in legislative and policy responses at a national level. In fact, Article 5(3)(a) InfoSoc limits reuses of protected materials to "illustration" for teaching and research purposes, thus introducing a significant restriction to the scope of the exception for research-related goals. The rationale of such a choice is far from clear and shall be repealed – according to Senftleben – to ensure the effectiveness of the provision in balancing copyright against the needs of researchers, particularly in the field of data sharing within cross-border research consortia.

Article 3 CDSM Directive (CDSMD) has the potential to have a remarkably positive impact on the reuse of datasets through computational analysis and other types of data analytics tools. Yet, the exclusion of commercially-oriented activities seriously weakens its reach and makes the provision less flexible than – for instance - the exceptions for temporary reproduction and de minimis uses enshrined in Article 5(1) InfoSoc Directive (InfoSoc)[1173]. As argued by Margoni and Kretschmer, cited in the study, these carve-outs are far more suitable than Article 3 CDSMD to allow research conducted by means of Text and Data Mining (TDM)-based reuse of protected datasets[1174].

1172 European Commission, Directorate-General for Research and Innovation, Senftleben, M., Study on EU copyright and related rights and access to and reuse of data, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/78973.

1173 Ibid, 27.

1174 Ibid, 28.

Along the same lines, the exceptions contained in articles 5(2)(3) and article 6 of the Software Directive, allowing lawful users to make back-up copies of software for its intended purpose, the study, testing and observation of the functioning thereof, as well as decompilation for interoperability, are not contractually overridable — in contrast with Articles 4 CDSMD and 5(3)(a) InfoSoc — and thus offer more room for reuse for research purposes than the TDM exception[1175]. As also noted by Strowel,[1176] EU copyright flexibilities after the CDSMD risks being more rigid than under the InfoSoc and Software Directive, leaving ample room for rightsholders' abuses, especially with the rise of artificial intelligence (AI) and machine learning (ML) technologies. To tackle this problem, Senftleben suggests streamlining the InfoSoc and CDSMD provisions, extending the scope of TDM exceptions so as to also include the sharing of TDM datasets for research purposes within research consortia.

The conditions under which a lawful use-right is granted to users of protected works, datasets, and software are not clear and are left to freedom of contract. This can create the risk of discriminating among different members of a research team, as only certain research organisations, mostly defined under national law, can have access to protected data and work on a privileged basis. This can lead to market failures and distortions, aggravating an already fragmented legal and policy scenario. Among the policy recommendations included in the report, Senftleben also indicated the need to extend the coverage of Article 3 CDSMD to subjects not affiliated with research organisations (ROs) and cultural heritage institutions (CHIs) involved in the project so as to prevent discrimination and obstacles to sharing data in the case of joint research projects. In these cases, the lack of clarity on whether the conditions for lawful access are met can have an impact on and sometimes underpin the goals of a research activity.

Senftleben proposed an evolutionary interpretation of the legitimate interests of third parties under the three-step test. In his view, freedom of science and academic freedom should be balanced against the economic interests of rightsholders and seen as a declination of freedom of expression under Articles 11(1) and 13 of the Charter of Fundamental Rights of the European Union (CFREU). In this view, the need to preserve freedom to conduct research activities must be classified as a "special case" gaining precedence over copyright exclusivity. In this way, the proportionality test introduced by the CJEU with regard to the scope of the sui generis rights should also take academic freedom and freedom to science into account in order to understand whether such interest must prevail over rightsholders' exclusionary prerogatives.

Some constraints over the misuse of technical protection measures (TPMs) when protected works (especially software) are reused for research purposes must be envisioned and further considered at the EU level. This is in line with the approach adopted by the CJEU in Nintendo v PC Box, where the Court underlined that TPMs must be applied in a proportionate way that does not unreasonably exclude legitimate use, although such rule does not apply to software TPM, causing a considerable degree of uncertainty.

1175 Ibid, 29

1176 Strowel, A., Ducato, R., 'Artificial Intelligence and Text Data Mining: A copyright carol', in Rosati, E. (ed.), Routledge Handbook of EU Copyright Law, Routledge, 313.

Senftleben also suggests declaring not overridable by contract any provision allowing reuse for scientific research and also ensuring, in these cases, the implementation of Article 6(4) InfoSoc, which requires Member States to grant the operativity of exceptions against TPMs. In addition, he underlines the need to broaden the scope of Article 5(3)(a) InfoSoc to also cover the right of communication/making it available to the public and to make it mandatory in order to reach a higher level of harmonisation across the EU. This would allow restrictions on further reuse of research data, copyrighted works, and scientific publications stemming from publicly funded research projects to be avoided in line with OS goals. By the same token, the scope of sui generis database exceptions should be aligned in scope in order to take into account the access, reuse and sharing needs of researchers.

#### 1.1.2.2. Angelopoulos (2022) — Study on EU copyright and related rights and access to and reuse of scientific publications, including open access[1177]

Building upon the Horizon Europe research and innovation programme, which sought to cultivate a digital society founded on open, reliable, and accessible knowledge, the European Commission commissioned a study to shed light on the implementation of EU research exceptions across its Member States. The study conducted by Angelopoulos sheds light on the current obstacles to the introduction of a fully open access regime for scientific publications and assesses various solutions that could be implemented to make it possible, distinguishing between legislative and non-legislative measures. Its findings offer valuable insights into the diverse landscape of copyright laws within the EU, with some countries exhibiting robust and comprehensive legislation while others still face challenges in implementing certain elements, resulting in fragmented practices.

A noteworthy revelation from the study is the existence of different rules and provisions for various categories of usage, such as “use for,” “illustration for,” quotation, and public performance. Despite this variation, common elements persist, including the requirement for non-profit usage, benchmarks of necessity, and the obligation to mention the original source. However, the presence of such fragmentation poses significant challenges when it comes to defining the beneficiaries and works covered under these exceptions.

The study delves into the intricacies surrounding beneficiaries, uncovering ample definitions based on functional or role-based criteria in certain countries, while others impose highly restrictive and geo-localised definitions. Moreover, divergent interpretations of specific categories of works further complicate the matter, and some countries even exclude works exclusively published for the educational market. Another dimension to this complexity emerges in the form of the quantity of works allowed for reproduction, with some countries limiting it to specific parts or percentages, while others permit only brief works.

In light of the study’s findings, it becomes apparent that introducing a general mandatory research exception and aligning EU copyright law with OA and OS policies are essential steps towards fostering a more coherent and unified approach to intellectual property rights (IPRs). The proposal recommends implementing mandatory provisions for scientific publishing, granting reversion rights, and establishing an EU-wide SPR specifically aimed at open access through self-archiving.

To address the legal uncertainties surrounding data sharing, it is crucial to clarify the scope of application of the ODD, particularly with regard to research-performing organisations and universities. Additionally, it is imperative to take into account the significance of academic freedom when prescribing open licensing, ensuring that researchers can continue to exercise

1177 European Commission, Directorate-General for Research and Innovation, C Angelopoulos, ‘Study on EU copyright and related rights and access to and reuse of scientific publications, including Open Access: exceptions and limitations, rights retention strategies and the secondary publication right’, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2777/891665, accessed 11th August 2023.

their freedom of expression and creativity while adhering to OA principles. The text of the Directive also calls for the development and standardisation of comprehensive open licenses, emphasising the need for compatibility and interoperability to optimise data sharing and collaboration across the EU.

With regard to legislative measures, Angelopoulos maintains that research team members and employers should be given the prerogative of claiming copyright over scientific works and the output of research projects in order to strike a balance between copyright and academic freedom. A greater harmonisation in assignment and copyright contract law rules should be reached through an EU legislative intervention by means of – for instance – the introduction of mandatory provisions in the field of publishing contracts and licensing of academic works, also regulating the assignment and commercial exploitation of research products at the EU level, especially when they stem from publicly funded research.

In this respect, the study advocates for greater harmonisation of research-oriented exceptions such as those enshrined in Articles 5(3)(a) and 5(3)(d) InfoSoc, with the aim of aligning the approach of national courts to the CJEU "fair balance" doctrine[1178]. Such provisions should be made mandatory, cleared from fragmented conditions of applicability, and interpreted through a fundamental right lens.

Angelopoulos also argues for the need to introduce an EU-wide SPR, which can be operationalised either through a new provision or by leveraging on existing exceptions, and to harmonise authors' prerogatives with specific regard to academic and scientific publications. A first ownership rule for employers could be imposed at the EU level, with the effect of facilitating re-publishing.

This last option was also explored by **Guibault**,[1179] who already studied in 2011 the interplay between national first ownership rules and the potential development of OA policies and principles in the field of academic publishing. The article concludes that a number of Member States' first ownership rules create a favourable scenario for authors of scientific works to publish in OA[1180]. Contrary examples, however, remain, such as France, which adopts a much stricter approach to the limits and scope of rights transfer under copyright contract law[1181]. Guibault evidenced that, despite the favourable legal framework, obstacles to republishing in open access remain due to the reluctance of many scholars and authors of scientific works, who face difficulties with re-negotiating conditions without model contracts and the possibility of choosing Creative Commons (CC) Licenses[1182].

#### 1.1.2.3. Other contributions – focus on the EU

In an article published in 2021, **Dore-Caso[1183]** discussed the feasibility of the introduction of an EU-wide harmonised SPR, shaped as a moral right and capable of shielding authors from abuses of bargaining power by publishers on the grounds of academic freedom. By examining national laws where such rights have already been introduced, the article

1178 Geiger, C, Jütte, BJ, 'Conceptualizing a 'Right to Research' and Its Implications for Copyright Law: An International and European Perspective' (2022), Sganga, C, 'A Decade of Fair Balance Doctrine, and How to Fix It: Copyright Versus Fundamental Rights Before the CJEU from Promusicae to Funke Medien, Pelham and Spiegel Online' (August 1, 2019). European Intellectual Property Review (n.11/2019).

1179 Guibault, L, 'Owning the Right to Open Up Access to Scientific Publications', in Guibault, L, and Angelopoulos, C, (eds), 'Open Content Licensing: From Theory To Practice' (Amsterdam University Press 2011).

1180 Ibid, 140 et seq.

1181 Ibid, 148 et seq. In the case law see, e.g., Plurimédia, Regional Court Strasbourg, 3 February 1998, Légipresse 149-I, p. 19 and 149-III, p. 22; Le Progrès, Tribunal de grand instance Lyon, 21 July 1999, Légipresse 166-I, p. 132 and 166-III, p. 156; and Court of Appeal of Lyon, 9 December 1999, Légipresse 168-I, p. 9 and 168- III, p. 7.

1182 Ibid, 158 et seq.

1183 Caso, R, and Giulia, G, 'Academic Copyright, Open Access and the "Moral" Second Publication Right' (December 7, 2021). Available at SSRN: https://ssrn.com/abstract=3981756, accessed 11th August 2023, or http://dx.doi.org/10.2139/ssrn.3981756, accessed 11th August 2023.

compares them with an Italian draft proposal for SPR legislation, which conceptualises the SPR as an additional moral right for authors of scientific works.

In one of the deliverables of the H2020 project reCreating Europe - "Copyright flexibilities: mapping and comparative assessment of EU and national sources[1184]" - **Sganga et al.** mapped, among other exceptions, national implementations of Articles 5(3)(a)-(d) InfoSoc and Articles 3-4 CDSMD. This allowed the authors to highlight the extreme fragmentation of national solutions in the field of general research exceptions, which greatly differ as to beneficiaries, permitted uses, works covered and conditions of applicability. On the contrary, Articles 3-4 CDSMD have been implemented quite often *verbatim*[1185]. A similar comparative analysis of E&Ls for research purposes, with a worldwide focus, is provided by **Flynn et al.**[1186], who classify them according to their degree of "openness", ranging from those that permit quotation of some works only by single categories of users (the closest) or a list of selected "institutional beneficiaries" to far more "open" approaches, including a broad array of users and permitted uses, without distinguishing in relation to the kind of subject matter. The study concluded that no exception enacted at the national level for research purposes includes cross-border use and communication with the public, therefore substantially hampering, inter alia, TDM output-sharing among businesses and researchers in international research projects.

**Ducato-Strowel[1187]** and **Margoni-Kretschmer[1188]** focused on the drawbacks of Articles 3-4 CDSMD.

**Ducato-Strowel** pointed to the fact that the TDM exceptions do not ensure wider access to data and, therefore, are ineffective in facilitating the flourishment of new ML and AI applications, especially because the operativity of Article 4 CDSMD is mostly frustrated by contractual limitations and TPMs. **Margoni-Kretschmer** shed light on other pitfalls, such as the fact that the overly broad definition of TDM offered by the CDSMD may trigger restrictive contractual practices, surreptitiously expanding the scope of the right of reproduction and thus stretching the boundaries of copyright to the point of creating *de facto* data ownership. In this way, the possibility for AI developers to work on research data or protected works for research purposes becomes fully dependent on the applicability of the TDM exception, with the risk of preventing the emergence of a plethora of AI applications in downstream markets. Moreover, other elements, such as the ambiguity revolving around the lawfulness requirement, as well as the overly restrictive subjective scope of Article 3 CDSMD, limited to a closed list of entities, may create further problems. The authors suggest treating the reuse of protected data through TDM as an act that should be placed outside the scope of copyright, as it hinges on unprotected data, facts, principles, and ideas, which are, by definition, excluded from protection. The same argument had already been advanced by **Frosio, Geiger** and **Bulayenko** before the enactment of the CDSMD in 2018[1189]. Rather, they suggest using Article 5(1) InfoSoc to allow the emergence of AI training models through computational analysis and TDM-based reuse of existing datasets.

1184 Sganga, C, Contardi, M, Turan, P, Signoretta, C, Bucaria, G, Mezei, P, Harkai, I, 'Copyright Flexibilities: Mapping and Comparative Assessment of Eu and National Sources' (January 16, 2023) SSRN: https://ssrn.com/abstract=4325376 or http://dx.doi.org/10.2139/ssrn.4325376, accessed 11th August 2023.

1185 Ibid, 504 et seq.

1186 Flynn, S, Schirru, L, Palmedo, M, Izquierdo, A, 'Research Exceptions in Comparative Copyright' (2022) PIJIP/TLS Research Paper Series no. 75.

1187 See ut supra, (n 12).

1188 Ducato, R, Strowel, A, (n 12).

1189 Geiger, C, Jütte, BJ, Sganga, C, (n 15).

The insufficiency of TDM exceptions and data access rules in countervailing the increasing deployment of TPMs and contractual means to ensure factual control over data has also last portrayed by **Moscon**, who highlights how Articles 3-4 CDSMD exceptions have the paradoxical effect of extending copyright protection, also in light of the lack of clarity affecting EU anti-circumvention law[1190].

**Kuschell-Dolling[1191]** underlines that no EU provision determines the status of research data vis-à-vis copyright law, thus leaving the matter to private ordering. This circumstance, coupled with the potential applicability of a wide range of copyright rules on aggregated data, is prone to trigger the risk of creating a "thicket of rights"[1192], which may jeopardise the outcome of research projects and discriminate among research teams. As a possible solution to the problem, they bring the example of Latvia[1193], which explicitly excluded research data from copyright protection.

The interplay between open data and sui generis rights has been analysed by several academic articles and studies regarding the Database Directive. **Maurel-De Filippi[1194]** has thoroughly portrayed the conflicts between open data and database protection and the challenges the latter creates for the reuse of public sector information. In this respect, the authors highlight how the need to license public sector information is an indication that the system is highly restrictive due to the subsistence of sui generis rights. The analysis was further extended and coupled with the latest development of CJEU case law by **Sganga[1195],** while **van Eechoud[1196]** specifically focused on the inner contradictions between the Open Data Directive (ODD) and the Database Directive.

1190 Moscon, V 'Data Access Rules, Copyright and Protection of Technological Protection Measures in the EU. A Wave of Propertisation of Information' (July 20, 2023). Max Planck Institute for Innovation & Competition Research Paper No. 23-14, Available at SSRN: https://ssrn.com/abstract=4515815 or http://dx.doi.org/10.2139/ssrn.4515815, accessed 11th August 2023.

1191 Kuschel, L, Dolling, J, 'Access to Research Data and EU Copyright' (2022) 13 J Intell Prop Info Tech & Elec Com L 247.

1192 Ibid, 266.

1193 Ibid, 257.

1194 De Filippi, P, Maurel, L, 'The paradoxes of open data and how to get rid of it? Analysing the interplay between open data and sui-generis rights on databases', (2015), Columbia Science & Technology Law Review, 1-22, DOI: 10.1093/ijlit/eau008.hal-01265200.

1195 Sganga, C 'Ventisei anni di direttiva database alla prova della nuova strategia europea per i dati: evoluzioni giurisprudenziali e percorsi di riforma', in "Diritto dell'informazione e dell'informatica", 2022, pp. 651-704.

1196 van Eechoud, M, 'A Serpent Eating Its Tail: The Database Directive Meets the Open Data Directive', (2021), International Review of Intellectual Property and Competition Law 2021, No. 52.

The quandaries arising from sui generis rights enforcement and its interplay with EU data law have been extensively portrayed in two studies supporting the **evaluation (2018) and review (2022) of the Database Directive**[1197]**.** The former outlines that the Database Directive does not apply to ML and AI applications, as in such tools, the boundary between data creation and collection is difficult to draw. While the CJEU excludes sui generis protection in the case of investments for the generation of data, the study evaluates the possibility of an overruling and the impact this might have on the competitiveness of EU AI industries. In addition, the 2018 Study argues that the Database Directive is equipped with tools that may offer limited possibilities for research access, but contractual restrictions may constrain exceptions and lead to a greater exclusivity than the one granted by the Directive. The study reports that several stakeholders advocate for a higher level of harmonisation of the sui generis right and for a clarification of its interplay with national unfair competition rules and other EU Directives introducing balancing mechanisms (e.g. the InfoSoc and ODD) in order to avoid clashes and overlaps between different regimes. This brings the study to underline the obsolescence of the Directive against new technological developments since its rules fail to distinguish among different activities concerning data (collection, aggregation, arrangement, alteration, computational analysis, etc.) and do not consider the specificities of "sole-source databases" and publicly funded databases[1198]. As a solution, it suggests two possible reforms, i.e. "a wider definition with tighter provisions, or a narrower definition with restricted contractual freedoms"[1199], also intervening on the unclear notion of "substantial investment". Commenting on stakeholders' feedback and evidence from case law, the authors conclude that protection should be granted only to those databases that would not be developed without the incentive offered by the Database Directive, and the InfoSoc and Database Directives exceptions should be harmonised to achieve greater legal certainty. In addition, they propose to limit the protection to 5 years and allow its renewal or waiver in order to facilitate private ordering solutions, prevent issues as to interoperability or data-sharing licenses and introduce a registration requirement for this purpose. The same considerations underlie the **Study for the Review of the Database Directive (2022),** which advances the need to assess whether to exclude or include from the scope of the sui generis right machine-generated data and public sector databases and concludes that the first option is the most feasible to implement, coupled with a more flexible and economic-oriented reading of the infringement test pursuant to *CV Online v Melons*.

**The need to prevent** alternative forms of protection on top of the Database Directive has also been strongly highlighted by the articulated long study tackling the interplay between open data, data-sharing and IP by **Leistner-Antoine**[1200]**.**

1197 2018 'Study supporting the evaluation of the Database Directive': https://digitalstrategy.ec.europa.eu/en/library/study-support-evaluation-database-directive, accessed 11th August 2023; N Maier, F de Michiel, et al. (2022), 'Study To Support an Impact Assessment For The Review of the Database Directive'.

1198 Borghi, M, Karapapa, S, 'Contractual Restrictions on Lawful Use of Information: Sole-Source Databases Protected by the Back Door?' (2015). E.I.P.R. 2015, 37(8), 505 514; H Richter, 'Open Science and Public Sector Information – Reconsidering the exemption for educational and research establishments under the Directive on reuse of public sector information', (2018), Journal of Intellectual Property, Information Technology and Electronic Commerce Law 9, 51, para 1; C Godt et al.

1199 2018 Study, Executive Summary, vii.

1200 Leistner, M, Antoine, L, 'IPR and the use of open data sharing initiatives by public and private actors', Study requested by the JURI committee, Policy Department for Citizens' Rights and Constitutional Affairs Directorate-General for Internal Policies, PE 732.266, 2022, 1-130.

### 1.1.3.A glance at the Open Science agenda and policies of the EU and selected Member States

The European Union (EU) has taken a leading role in championing OS and Research Data Management (RDM) initiatives, driven by its commitment to fostering innovation and research excellence.

OS initiatives are profoundly influencing science policies in Europe and globally. Within the EU, the development of the new framework for the European Research and Innovation Area (ERA) focuses on the creation of a unified environment that fosters research, innovation, and technology across Europe, transcending knowledge boundaries. This collaborative effort aims to build a robust research space by prioritising investments and reforms that ensure the quality of science, universal access, and effective communication of outcomes, impacting society, the economy, and the global landscape[1201].

The path towards OS has evolved over time, influenced by various mandates and guidelines, with its roots traceable to the emergence of the OA movement, which is epitomised in international declarations such as the 2002 Budapest Declaration, which aimed at making scientific articles freely accessible through the Internet. In recent years, this movement has gained momentum through initiatives such as Plan S[1202], which emphasises open access to research outputs, and the UNESCO Recommendation on Open Science, which recognises the importance of OS to further the human right of everyone to share in scientific advancement and its benefits as stated in Article 27.1 of the Universal Declaration of Human Rights[1203].

Since 2004, the OECD has engaged in the realisation of OS, providing recommendations and promoting policies to eliminate barriers to the free flow of data and knowledge in order to expand scientific research. Notably, the OECD's Recommendations for enhancing data exchange and access[1204] and its Guidelines for research data financed with public funds[1205] have played a significant role in advancing OS. In November 2021, UNESCO adopted the Recommendation for Open Science[1206], underscoring the latter as an inclusive concept that integrates various movements and practices that aim to make scientific knowledge openly accessible, available, and reusable for all citizens.

1201 Opinion 2021/C 106/07/EC of the European Committee of the Regions – A new European Research (ERA) for research and innovation [2021], Vol. 64, 26 March 2021.

1202 Plan S is an iniative for Open Access publishing launched in September 2018 and supported by cOAlition S, an international consortium of research funding and performing organization. Plan S, 'Coalition S' https://www.coalition-s.org, accessed 11th August 2023.

1203 'UNESCO Recommendation on Open Science', https://en.unesco.org/science-sustainable-future/open-science/recommendation, accessed 11th August 2023.

1204 Recommendation of the Council on Enhancing Access to and Sharing of Data' https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0463, accessed 11th August 2023.

1205 'OECD Principles and Guidelines for Access to Research Data from Public Funding' https://www.oecd.org/sti/inno/38500813.pdf, accessed 11th August 2023.

1206 'UNESCO Recommendation on Open Science' (n 42).

In 2016, the EC set forth its strategy on innovation and Open Science through the document "Open Innovation, Open Science, Open to the World"[1207]. This visionary approach aimed to drive significant changes in technological and scientific infrastructures and seek structural reforms in research evaluation and incentive systems, interoperability, ultimately, elevating the societal impact of research. Subsequently, in 2018, there were two Recommendations to advance OS. The Recommendation from the Open Science Policy Platform (OSPP)[1208], a distinguished group of experts providing advice to the EC on OS policies, recommended, *inter alia*, that each stakeholder should appoint national coordinators and task forces to implement OS and align their OS agendas across them, ensuring at the same time a high level of interoperability of the European scholarly infrastructure by enabling open sharing of metadata between systems disciplines and countries. The Recommendation on access to and preservation of Scientific Information[1209] addresses Member States and offers guidance for the development and implementation of Open Science policies, covering six dimensions (open access to publications, research data management, preservation and reuse of scientific information, infrastructures for Open Science, skills and competences, and rewards and incentives.

The European Union's Framework Programme for Research and Innovation, Horizon Europe (2021-2027), represents the culmination of these efforts, embracing OS as a key research objective and acknowledging its contribution to scientific excellence. The Programme mandates open access for publications, ensuring that beneficiaries safeguard the necessary IPRs to meet open access requirements. Research data should be made available according to the principle of "as open as possible and as closed as necessary". A Data Management Plan needs to be prepared, outlining how data will be managed in line with the FAIR principles (findable, accessible, interoperable, and reusable). The construction of the European Open Science Cloud (EOSC) is another vital endeavour. This initiative seeks to federate existing research data infrastructures in Europe, creating a network of data and services related to science with a focus on interoperability, reusability, accessibility, and openness[1210].

Furthermore, the Council Conclusions on Research Assessment and Implementation of Open Science, approved on June 10, 2022, advocated for the modification of research assessment methods and principles for the establishment of a common approach in terms of shared principles for academic publishing and scholarly communication, and for developing capacities for academic publishing. The ongoing initiatives to improve research evaluation also emphasise the need to recognise OS practices in the assessment of research, researchers and research organisations.

1207 European Commission, Directorate-General for Research and Innovation, 'Open innovation, open science, open to the world: a vision for Europe, Publications Office', 2016, https://data.europa.eu/doi/10.2777/061652, accessed 11th August 2023.

1208 European Commission, Directorate-General for Research and Innovation, 'OSPP-REC: Open Science Policy Platform Recommendations, Publications Office', 2018, https://data.europa.eu/doi/10.2777/958647, accessed 11th August 2023.

1209 Recommendation (EU) 2018/790 of the Commission of April 25, 2018, on access to scientific information and its preservation.

1210 'European Open Science Cloud (EOSC)'

https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/european-opensciencecloud-eosc_en, accessed 11th August 2023.

According to the EC report on Open Science and Intellectual Property Rights[1211], which sheds light on the interaction between OS policies and the EU *acquis* in the field of IP, EUR-lex hosts 170 documents related to "Open Science," but only 10 of them are dated between 2010 and 2015, showing how the timeframe 2015-2023 was pivotal for the definition of OS in Europe. In the same period, IPRs have been largely harmonised across the EU, though not always in alignment with OS principles. Following that report, the EC concluded that more studies are still needed in order to understand how better IPR management promotes innovation and to tackle the lack of awareness of the existence and value of free IP works, which could contribute significantly to knowledge production. At the same time, the links between law and economics must be furthered, given that government funding, prize systems and the IPR system play an important role in incentivising innovation. The report also underlines that since international treaties and legislation do not allow scientific authors to opt for different IP conditions from the default ones, maximising exceptions related to scientific IPR may minimise the risk of legal proceedings.

On the basis of the inputs provided by the EU and international documents and initiatives, a number of Member States have developed national OS policies. The following pages will offer a concise overview of some of these efforts[1212].

### 1.1.3.1. Austria

Since 2020, the Open Science Network Austria (OANA) and the national OS authorities have been working together to develop a National Open Science Strategy for Austria. Within these activities, the OSNA Working Group delivered a complete set of Recommendations for a National Open Science Strategy in 2020[1213]. This document formed the basis for Austria's contribution to OS and the EOSC[1214].

As a result of this collaboration, Austria adopted its Open Science Policy in February 2022[1215]. The purported aim is to improve the transparency and efficacy of scientific methods while also utilising open innovation and applied research. The primary principles, areas of intervention and commitments of the Austrian Open Science Policy, which are grounded on the EU OS principles, are as follows[1216].

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1211 Directorate-General for Research and Innovation, 'Open Science and Intellectual Property Rights' https://research-and-innovation.ec.europa.eu/knowledge-publicationstools-and-data/publications/all-publications/open-science-and-intellectual-property-rights_en, accessed 11th August 2023.

1212 As mentioned in the Methodology section, the analysis was limited to Member States where official documents were available online and provided in English or in languages spoken by members of the consortium.

**1213 Open Science Network Austria, 'Empfehlungen für eine nationale Open Science Strategie in Österreich' https://oana.at/fileadmin/user_upload/k_oana/dokumente/Entwurfv1.1-EmpfehlungenOS-OANA.pdf, accessed 11th August 2023.**

**1214 Ibid. p.3.**

**1215 The Bundesministerium für Bildung, Wissenschaft und Forschum (BMBWF), the Bundesministerium für Digitalisierung und Wirtschaftsstandort (BMDW), and the Bundesministerium für Klimaschutz, Umwelt, Energie, Möbilität, Innovation und Technologie (BMK) jointly presented the OS policy to the council of ministers for its approval. See Bundesministerium für Bildung, Wissenschaft und Forschum (BMBWF), Bundesministerium für Digitalisierung und Wirtschaftsstandort (BMDW), Bundesministerium für Klimaschutz, Umwelt, Energie, Möbilität, Innovation und Technologie (BMK), 'Österreichische Policy zu Open Science und der European Open Science Cloud' https://www.bmbwf.gv.at/Themen/HS-Uni/Hochschulgovernance/Leitthemen/Digitalisierung/Open-Science/Open-Science-Policy-Austria.html accessed 11th August 2023. Moreover, Austria's Open Science was incorporated within the Federal Government's Strategy for Research, Technology, and Innovation (FTI Strategy 2030). See Bundesregierung der Republik Österreich, 'FTI-Strategie 2030 – Strategie der Bundesregierung für Forschung, Technologie und Innovation' https://www.bmbwf.gv.at/Themen/Forschung/Forschung-in-%C3%96sterreich/Strategische-Ausrichtung-und-beratende-Gremien/Strategien/FTI-Strategie-der-Bundesregierung-.html, accessed 11th August 2023. In addition, it shall be mentioned that before to the adoption of the OS National Policy, the Austrian Science Fund (FWF), the largest national funder of fundamental science, was already dedicated to promoting open and FAIR science through its Open Access policy for research papers and data. See Austrian Science Fund (FWF), 'Open Access Policy' (FWF) https://www.fwf.ac.at/en/research-funding/open-access-policy/, accessed 11th August 2023.**

**1216 Adapted from Bundesministerium für Bildung, Wissenschaft und Forschum (BMBWF), Bundesministerium für Digitalisierung und Wirtschaftsstandort (BMDW), Bundesministerium für Klimaschutz, Umwelt, Energie, Möbilität, Innovation und Technologie (BMK) (n 55), p 7.**

**Table 31. The primary principles, areas of intervention and commitments of the Austrian OS policy**

| Principles and areas of intervention | Commitments made in the OA Policy |
|---|---|
| • **Research indicators and next-generation metrics (research evaluation, evaluation metrics)**<br>• **Future of scholarly communication**<br>• **European Open Science Cloud (EOSC)**<br>• **FAIR data (Findable, Accessible, Interoperable, Reusable)**<br>• **Research Integrity**<br>• **Skills and Education**<br>• **Citizen Science** | Publication of scientific and research data based on the FAIR principles<br><br>Participation in European (EOSC) and international Open Science<br><br>Open access – access to publicly funded publications<br><br>Open Educational Resources (OER) |

*Source: Compiled by the study team.*

The OS Policy Austria states that open academic publication must become the standard approach as swiftly as possible. Accordingly, publicly funded projects must result in research articles, preprints, data and short-format articles disseminated through open access platforms, whether in journals, books or open public repositories. To make it easier for scholars and institutions to publish in OA, the country's Policy aims to improve the working conditions and features of archives[1217]. Austria will also recommend the implementation of an open licence for publications and data that comply with domestic legislation and global scientific standards. The Policy document urges universities in Austria to ensure that their researcher's publication outcomes follow this OA commitment[1218].

Additionally, the OS Policy Austria embraces the goal that data generated from publicly funded research in Austria follows the FAIR principles (Findable, Accessible, Interoperable, and Reusable), are kept safe, and, whenever possible, are made publicly accessible. In this vein, for any data that has previously been made accessible through publicly sponsored programmes, the Policy also seeks to impose an open access dissemination mandate. Still, the Policy outlines the necessity of providing exceptions to this rule, such as professional, statistical, trade and labour secrets or personal data. According to the policy, content protected by copyright should also be exempted, amongst other things[1219]. The ultimate goal of this action is achieving both commercial and non-commercial reuse of research data where such data has been publicly financed and made publicly available by researchers, research institutions, or research funding organisations via an institutional archive.

1217 Other measures include continued support through the Cooperation E-Media Austria. See Kooperation E-Medien Österreich, 'KEMÖ: Aufgaben' https://www.kemoe.at/ueber-uns/aufgaben, accessed 11th August 2023.

1218 Several universities have already adopted their own OS policies and practices, which embrace FAIR principles. See, for instance: Technische Universität Graz, 'Framework Policy Für Forschungsdatenmanagement an Der TU Graz' https://www.tugraz.at/fileadmin/user_upload/tugrazExternal/0c4b9c02-50a6-4a31-b5fd-24a0f93b69c5/Framework_Policy_fuer_Forschungsdatenmanagement.pdf, accessed 11th August 2023; Universität Wien, 'RDM Policy and FAQ' https://rdm.univie.ac.at/rdm-policy-and-faq/, accessed 11th August 2023. For an outline regarding the development and use of institutional publication servers, See Bruno Bauer and Andreas Ferus, 'Österreichische Repositorien in OpenDOAR und re3data.org: Entwicklung und Status von Infrastrukturen für Green Open Access und Forschungsdaten' (2018) 71 Mitteilungen der Vereinigung Österreichischer Bibliothekarinnen und Bibliothekare 70.

1219 For instance, data related to national security, defense, or public safety and health will be considered sensitive and may be excluded from the Open Access mandate.

The OS Policy Austria also reveals a commitment to amending research evaluation systems to reflect the values and methods of OS. The Policy embraces the San Francisco Declaration on Research Assessment (DORA), according to which research evaluation methods should privilege quality over quantity. Moreover, open peer review procedures will be put in place. This latter measure aims to increase transparency in the assessment of scientific output.

The Policy paper further covers open learning[1220]. The OS Policy Austria emphasises that an inseparable connection exists between an open society and OS, with open data playing a crucial role in facilitating the dissemination of knowledge. In this context, the Policy's aim is to make educational materials created in Austria freely available in open forms in any format, such as by building on the foundation of open data standards already in place. These resources will be linked to appropriate repositories in the initial phase to enable public accessibility. The Policy, thus, encourages faculty members at universities and universities to upload and distribute their content in open formats.

A further aspect the Austria OS Policy addresses is the commitment to the OS movement and the EOSC. Measures to be adopted in this area include increasing involvement in European and international OS initiatives (such as the EOSC, GO FAIR, Research Data Alliance (RDA), OpenAIRE, and Directory of open access Journals)[1221]. Finally, the policy encourages the adoption of new practices, skills, and participation in training programmes. The aim is to advance OS competencies among young scientists. Future interventions in this area should include institutional-level curriculum design, which addresses data management skills as well as the understanding of the ethical and legal aspects of research.

Compared to the meticulously formulated OS policies and agenda of the State, Austrian scholarship on the interplay of OS and copyright is at its earlier stages. Still, it is essential to emphasise that despite the limited number of scholarly works elaborating on the topic, the Austrian scholarship is in line with the Austrian OS agenda's emphasis on OA publishing and the employment of policy and legal tools to operationalise the accessibility and reusability of research data and research outputs. In this regard, Scholger's seminal work constitutes the cornerstone of the literature on the matter because it engages in a comparative analysis of the Austrian and German copyright regimes' impact on research activities.

In this context, Scholger[1222] praises the introduction of secondary publishing rights (SPR) into the Austrian copyright landscape as an essential tool to enhance Open Science vis-à-vis restrictive publishing contracts while also addressing the restrictions to the enjoyment of SPR in the Austrian context. Introduced as part of the 2015 copyright amendment and in force since 1 November 2015, Section 37a of the Austrian Copyright Act (UhG-A) establishes that authors of scientific contributions produced by the academic staff of a research institution at least half funded with public resources and published in a collection released at least biannually retain the right to make the contribution publicly accessible in its accepted manuscript version after a 12-month period from the initial publication. This SPR persists even if the author has granted a publisher or editor the right to use the work, but the entitlement is subject to the condition that the access is non-commercial and that the author acknowledges the original publication source. Importantly, any contractual agreement to override or waive the SPR is deemed null and void.

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**1220 As per the Austria Open Science Policy, the openness of learning resources is addressed in relation to the commitments pledged in the area of "Skills and Education". See Bundesministerium für Bildung, Wissenschaft und Forschum (BMBWF), Bundesministerium für Digitalisierung und Wirtschaftsstandort (BMDW), Bundesministerium für Klimaschutz, Umwelt, Energie, Möbilität, Innovation und Technologie (BMK) (n 55).**

**1221 Austria has already established the AUSSDA46 (The Austrian Social Science Data Archive), which offers several research-supporting services, particularly data preservation and help with data reuse. See: ibid.**

1222 Scholger, Urheberrecht, and Walter Scholger. "Urheberrecht und offene Lizenzen im wissenschaftlichen Publikationsprozess." Karin Lackner/Lisa Schilhan/Christian Kaier (Hg.), Publikationsberatung an Universitäten. Ein Praxisleitfaden zum Aufbau publikationsunterstützender Services, Bielefeld (2020): 123-147.

Pinpointing the narrowly articulated objective scope of SPR, Scholger flags that individual publications (e.g. thematic anthologies) or contributions might be excluded from rarely appearing journals or annual reports, whereas the requirements of SPR, specifically the possibility of publishing only the "accepted manuscript version", might hamper citation of such works by researchers. Yet, according to Scholger, the major drawback of the Austrian solution lies in its subjective scope, given that SPR only applies to researchers' part of the scientific personnel of a research institution financed at least half with public funds – a condition that is readily attainable for scholars affiliated with publicly funded educational and research organisations but primarily excludes privately funded research and personnel in general service relationships. According to Scholger, this renders SPR significantly narrower than its German counterpart, which refers only to the author, regardless of a scientific appointment[1223].

In addition to the SPR regime, Scholger emphasises the role of E&Ls in striking a balance between the social interest of users in accessing scientific knowledge and the interest of authors in their work while also highlighting that researchers have a dual role as the author of their own work and the user of others' works in their publishing activities. Regarding the E&Ls framework set up in the Austrian Copyright Act, he notes that the "lawfully access" requirement could hinder access and reuse of protected materials even where there is an E/L that applies to such use. In this sense, if the source of the work reproduced or publicly made available is unlawful, such use becomes unlawful, even if the reproduction of copyrighted material is done for personal use for the purpose of research. He notes that this would also apply to reproductions made by circumventing copyright protection. Lastly, Scholger outlines that, while E&Ls in Austria are largely defined and applied in the same way as in Germany, there are some few yet noteworthy differences in the field of research. For instance, the percentages imposed by the German legislator to limit the extent of reproductions, whereas, in Austria, the Copyright Act potentially formulates this more generously by allowing uses insofar as it is necessary and justified for educational and research purposes.

#### 1.1.3.2. Belgium

OA policies have been successfully developed in Belgium for over a decade. Unlike most of the other EU Member States, the country has devolved the majority of R&I policies, instruments, and budgets to four regions (i.e. Flemish Government, Walloon Government, and Government of the Brussels Capital Region) and the Government of the Wallonia-Brussels Federation) and community governments (the Flemish -Dutch-speaking-, the French -French-speaking- and the German-speaking Community[1224]. Each of these entities has full decision-making autonomy on the matters, with the Federal Government retaining some limited competencies. However, the German-speaking community currently possesses its own R&I policy.

The Federal Government oversees federal research institutes, space research, and research programmes that support federal competencies; it is responsible for all research related to its specific competencies and produces validated data on research and innovation in collaboration with regional authorities. Regional governments deploy research policies for economic development, covering areas such as technological development and applied research. They oversee research and knowledge institutions within their territories and are responsible for research related to their specific competencies, such as environmental or mobility issues. On the other hand, communities handle education and research at universities and higher education institutions, along with research related to their own competencies, such as educational themes. The Federal Science Policy Office (Belspo)

1223 Ibid.

1224 ERA-LEARN, Enabling Systematic Interaction with the P2P Community (June 2020) https://www.era-learn.eu/documents/country-report-belgium.pdf, accessed 11th August 2023.

serves as the main office for these matters, while the Federal Government is also responsible for intellectual property law, standardisation, nuclear research, framework conditions, employment policies, social security issues, and international cooperation, where other federal departments may be involved.

Belgium has been an early advocate of OA, demonstrating its commitment to the cause through various declarations and legislative measures. In 2007, many Belgian research organisations endorsed the Berlin Declaration on open access [1225]. This dedication was further reinforced in 2012 when the Brussels Declaration on open access was signed by the Ministers of research from the German, Flemish, and French communities. The Brussels Declaration firmly establishes OA as the default mode of disseminating academic and scientific research outcomes in Belgium.

To solidify this commitment, a specific OA provision was incorporated into Belgian law in September 2018[1226]. This legislation grants authors the right to make their scholarly publications openly accessible if the research was funded by public resources for at least 50%. Additionally, the "Open Access Decree" of the Wallonia-Brussels Federation reinforces the universities' deposit policy, mandating that all scientific articles funded by public resources must be deposited in an institutional directory. In response to the Brussels Declaration on open access, most universities, research institutions, and funding bodies in Belgium have implemented policies requiring or requesting their researchers to deposit their peer-reviewed research articles in OA repositories.

The efforts to promote open access have yielded positive results, with a steady increase in the number of open access publications in university repositories. Furthermore, a recent change in Belgian copyright law empowers authors of scientific articles financed by the public sector with an SPR. Article XI.196 § 2/1 Code de droit économique (CDE) grants authors of scientific articles funded by public sources the right to freely share their manuscripts with the public, despite prior assignments to publishers, with varying timeframes for availability depending on the field, while ensuring non-waivable character and retroactive application. This legal amendment offers researchers the opportunity to maximize scholarly exchange, collaboration, and innovation while also facilitating compliance with potential OA obligations from funders.

Against this background, which demonstrates the relatively advanced stage of the implementation of OA and the existence of an SPR regime, the Belgian IP scholarship does not offer a comprehensive analysis of the interaction of copyright and OS. Authored by Rentier, the book “Open Science: The Challenge of Transparency”[1227], explores the emergence of OS as a transformative approach to scientific research, which originated during the computer revolution with an emphasis on the Belgian case; however, the book does not necessarily touch upon the intricacies of copyright and OS. In alignment with the concept of OA, the author advocates for free public access to research outcomes funded by the public. The book delves into the profound ideals of transparency that are increasingly permeating all aspects of society. It provides an in-depth account of OS's origins, future prospects, and overarching goals. Moreover, the book sheds light on the challenges and hindrances that OS faces, particularly concerning conflicts arising from private profit motives and entrenched academic conservatism. By examining these obstacles, the book offers a comprehensive

1225 ‘Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities’ (Open Access, Max Planck Digital Library) https://openaccess.mpg.de/Berlin-Declaration, accessed 11th August 2023.

1226 Federalie Overheidsdients Economie, K.M.O., Middenstand en Energie, Wet houdende diverse bepalingen inzake Economie, 30 July 2018, available at https://www.ejustice.just.fgov.be/eli/wet/2018/07/30/2018031589/staatsblad.

1227 Rentier, Bernard. Open Science, the challenge of transparency. 2018. Académie Royale de Belgique.

analysis of the evolving landscape of scientific research and the potential impact of OS on society.

## I. France

The Law for a Digital Republic ("Loi pour une République numérique", 7 October 2016[1228]) aims to prepare France for the challenges of digital transition and the future economy by promoting innovation and the development of an open, reliable, and citizen-rights protective digital society. The law also seeks to ensure universal access to digital opportunities across all territories. One of its significant impacts is expected to be the acceleration and amplification of knowledge sharing, driving the OS movement for data and publications. The Law promotes free access to scientific publications stemming from research projects that received at least 50% of public funding. Article L. 533-4 of the French *Code la Recherche* outlines authors' rights to disseminate their works via secondary channels post-initial publication, subject to specified conditions and limitations. Researchers are granted an SPR, allowing them to disseminate their articles after a short embargo period of 6 to 12 months, irrespective of their contractual agreement with the publishing journal. Article 30 applies this rule to scientific publications such as articles, reviews, communications, reports, interventions, comments, and reports when they are published in a scientific journal or a journal with a minimum annual publication frequency. In the case of articles published by a foreign publisher, the law declares that its provisions are of public order, and any contractual clause contradicting them is considered null and void. Articles published in general press outlets (national daily or weekly newspapers, online media) or professional journals are not covered.

The overall objective is to provide open access to the results of public research and allow text and data mining, the latter being of utmost importance in humanities and social sciences research.

On 4 July 2018, the Minister of Higher Education, Research, and Innovation announced the National Plan for Open Science[1229], encompassing three pillars (publications, data, cross-cutting actions) implemented through nine measures. Simultaneously, the Committee for Open Science (CoSO) was established and presided over by the Director-General of Research and Innovation. The Committee consists of four "colleges" focusing on internationalisation, publications, research data, and skills and training. Notably, researchers from CNRS and members of DDOR (Open Research Data Department) are present in all four colleges.

The "National Plan for Open Science 2021-2024: Towards Widespread Open Science in France" was presented by Frédérique Vidal, the Minister of Higher Education, Research, and Innovation, in the 2nd National Plan for Open Science[1230], set to be implemented until the end of 2024. Aligned with European ambitions, this new plan aims to generalise OS practices, share and open research data, and promote source codes produced by research. In support of these goals, the budget for OS was tripled, increasing from EUR 5 million to EUR 15 million per year, and a new national research data platform was launched named "Recherche Data Gouv".

1228 LOI n° 2016-1321 du 7 octobre 2016 pour une République numérique, Journal officiel de la République française (JORF) (7th October 2016) https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000031589829/, accessed 11th August 2023.

1229 National Plan for Open Science (4 July 2018) https://cache.media.enseignementsup-recherche.gouv.fr/file/Recherche/50/1/SO_A4_2018_EN_01_leger_982501.pdf, accessed 11th August 2023.

1230 National Plan for Open Science 2021-2024 (Open Science) https://www.ouvrirlascience.fr/second-national-plan-for-open-science/, accessed 11th August 2023.

The National Plan particularly focuses on research in health, humanities, social sciences, climate, and AI. After 3 years of implementation, significant progress has been made. The rate of French scientific publications in open access increased from 41% in 2017 to 56% in 2019). The National Fund for Open Science was established, and two calls for projects to support open scientific publishing and international initiatives have been already launched. The National Research Agency and other funding agencies now require open access to publications and the drafting of data management plans for their funded projects. The Plan introduced the new role of "ministerial data administrators", with networks deployed in all public institutions. About twenty universities and research organisations have adopted OS policies and several guides and recommendations for implementing OS.

In order to generalise Open Science in France, the French authorities built on the achievements of the first National Plan for Open Science 2018-2021. The Ministry of Higher Education, Research, and Innovation took further strides by launching the second National Plan for Open Science.

The 2nd Plan continues along the trajectory initiated by the Law for a Digital Republic Law and reinforced by the Research Programmeming Law of 2020. It sets the objective of achieving 100% of open access publications by 2030 and reaching other seven target goals by 2024, which are: (1) further disseminating OS practices in France; (2) making open all source codes produced by research; (3) making OS a common and daily practice; (4) accelerating information exchange among researchers to increase scientific efficiency and multiply discoveries; (5) contributing to the democratisation of access to knowledge and bringing science closer to society, in line with the spirit of the Research Programming Law (LPR); (6) spreading the data sharing movement, already common in astronomy, seismology, and genetics, to other disciplines. Among the measures explicitly mentioned by the Plan, it is worth mentioning (a) the expansion of its scope to include source codes from research; (b) structuring actions to support data openness and sharing through the creation of the "Recherche Data Gouv" platform; (c) using various levers to generalize OS practices and presenting disciplinary and thematic variations; (d) aligning France with the EU ambition to have each country develop a national plan for OS, contributing significantly to France's commitments to public action transparency within the Open Government Partnership (OGP), involving more than 70 countries worldwide.

Despite the advancements in achieving the OS goals set in the French context, the scholarly literature on the interplay of OS with copyright is quite limited, and very few works identified in this context fall out of the scope of the study[1231].

1231 See: Zghidi, Sihem and Henda, Mokhtar Ben. Les ressources éducatives libres et les archives ouvertes dans le mouvement du libre accès ('Open Educational Resources and Open Archives in the Open Access Movement: An Educational Engineering and Scientific Research crossed analysis'). 2020. https://doi.org/10.400/dms.5347.

### 1.1.3.3. Germany

Germany is among the countries that have taken early steps towards recognising OA principles by approving specific Acts[1232]. In addition to being among the first to implement OA practices, German research institutions and organisations have influenced the development of European and international OA legislation[1233]. The OA 2020 Initiative, which promotes the conversion of subscription-based journal publications to open access, and the Berlin Declaration on open access from 2003 are notable examples[1234].

The Federal Ministry of Education and Research (BMBF) has published two national OS public policies: the Open Access in Germany[1235] and the Research Data Action Plan[1236] published in 2016 and 2020, respectively. However, it should be mentioned that the implementation of OS policies in Germany mostly takes place at the federal states ("Länder") level due to their competence in the areas of education and higher education policy[1237]. Thus, since there is no unified national policy on open access, the BMBF's stated plans offer recommendations for the Federal States that will oversee turning them into actual policies. In 2023, the BMBF published a set of guidelines jointly adopted by the Federal Minister and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder for supporting and coordinating the transformation to OA at the national and Federal state levels[1238].

**1232 In 2013 Germany amended Article 38 §4 UrhG to introduce a mandatory and non-overridable provision to allow authors of scientific work published in a periodical collection (at least bi-annually) and created in the context of a research activity that "was at least 50% publicly funded" to make their work publicly available for non-commercial purposes 12 months after the publication. See, Gesetz zur Nutzung verwaister und vergriffener Werke und einer weiteren Änderung des Urheberrechtsgesetzes, G. v. 01.10.2013 (BGBl. I S. 3714). For details of the provision, See Thomas Pflüger, 'Open Access-Regulierung im internationalen Vergleich : Regulierungsansätze im digitalen Zeitalter für den Bereich von Wissenschaftspublikationen in Zeitschriften' https://kops.uni-konstanz.de/handle/123456789/37572, accessed 11th August 2023.**

1233 For instance, the "German OA model" has inspired the Dutch OA approach. In this sense also: Dirk Visser, 'The Open Access Provision in Dutch Copyright Contract Law' (2015) 10 Journal of Intellectual Property Law & Practice 872; Thomas Margoni and others, 'Open Access, Open Science, Open Society' (2016) 27 Trento Law and Technology Research https://iris.unitn.it/retrieve/e3835192-d5da-72ef-e053-3705fe0ad821/Caso_LawTechRP_28.pdf, accessed 11th August 2023.

**1234 See (n 62). Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003), https://openaccess.mpg.de/Berlin-Declaration, accessed 11th August 2023 and The Open Access 2020 Initiative, https://oa2020.org, accessed 11th August 2023. Shortly after the Berlin Declaration in 2003, the largest research funding organisation in Germany, the Deutsche Forschungsgemeinschaft (DFG), made Open Access (OA) a key component of its financing programmemes. Numerous universities and research organisations embraced OA concepts in addition to the DFG's initiatives. Amongst them, the Alliance of Science Organisations in Germany launched the priority programmeme "Digitale Information" in 2008 to efficiently coordinate OA policies and efforts. See Shima Moradi and S Abdi, 'Open Science–Related Policies in Europe' (2023) 50 Science and Public Policy 521.Berlin was one of the first federal states to introduce its "Open Access Initiative" in 2015. This programmeme comprises yearly OA monitoring and structural assistance to facilitate the implementation of OA legislation. See Anne Hobert and others, 'Open Access Uptake in Germany 2010–2018: Adoption in a Diverse Research Landscape' (2021) 126 Scientometrics 9751.**

**1235 Federal Ministry of Education and Research (BMBF), 'Open Access in Deutschland. Die Strategie des Bundesministeriums für Bildung und Forschung' https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/1/24102_Open_Access_in_Deutschland.pdf?__blob=publicationFile&v=5, accessed 11th August 2023.**

**1236 Bundesministerium für Bildiung und Forschung, 'Aktionsplan Forschungsdaten - Impulse für eine Kultur der Datenbereitstellung und weiterverwendung in Bildung, Wissenschaft und Forschung' https://www.bmbf.de/bmbf/shareddocs/downloads/files/163_20_faktenblatt_aktionsplan_4.pdf?__blob=publicationFile&v=1, accessed 11th August 2023.**

**1237 For an overview of the OS adopted in the federal states ("Länder"), See Maxi Kindling et al, 'Open Access Atlas Deutschland: Status Quo in Bund und Ländern' (Zenodo 2022) https://zenodo.org/record/6472672, accessed 11th August 2023.**

**1238 Bundesministerium für Bildiung und Forschung, 'Open Access in Germany - Joint Guidelines of the Federal Government and the Länder' https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/FS/772970_Open_Access_in_Deutschland_en.pdf?__blob=publicationFile&v=4, accessed 11th August 2023.**

The 2016 open access in Germany,[1239] issued by the BMBF, unveils a solid commitment to OA and OS principles. It is also a component of a comprehensive plan for the digital transformation of science that aims to foster creative research and boost Germany's potential for innovation[1240]. The Strategy targets five important action areas to be addressed at both the national and federal levels. These include establishing OA as a fundamental funding principle, increasing visibility and acceptance, promoting competence and disseminating successful practices, providing financial support for OA by allowing deduction costs for OA publications in BMBFs and other publicly funded projects and ensuring transparency and monitoring through the establishment of an open access Monitor.

The Strategy also outlines some guiding principles for actions, such as adopting OA as the standard for disseminating research outcomes. While acknowledging the complementary and equal role of the Green Road and the Golden Road of OA, the Strategy states that other routes of providing OA should also be allowed. Other principles entail promoting the Open Accessibility of publications resulting from publicly funded research, including promoting Open-Peer-Review processes[1241]. The Strategy expressly recognises the need to protect academic freedom. This means that OA shall not impose an obligation to publish or disclose their research results on researchers. OA only applies when a publication is already intended to be disseminated. The strategy further states that universities and research institutes should be encouraged to create OA policies.

The 2020 Research Data Action Plan[1242] intends to enhance data infrastructures and data sovereignty by implementing steps such as establishing a National Research Data Infrastructure (NFDI), developing the GAIA-X cloud and data infrastructure, and assisting the EOSC. To make data reusable across disciplines and sectors, the Plan also promotes adopting FAIR principles throughout data collection, storage, use, and preservation using standard-based methods as part of funded projects. According to the Plan, these measures should be enhanced by launching information campaigns to promote data sharing among students and doctoral candidates and training in data skills to support integrating data science methods into academic education and research. Additionally, the Plan states that data publications adhering to FAIR principles should be considered a scientific achievement when evaluating funding applications.

Finally, the open access Germany Joint Guidelines[1243] are the outcome of bilateral exchanges between the Federal Government and the Länder Government since 2019. As the document states, they represent the political commitment of the Federal Government and the *Länder* to establish OA to the German science system while promoting the diversity and durability of OA. The document states the commitment of the federal government and the Länder to OA as the standard practice for publicly financed research. The Guidelines also highlight areas for intervention to support the OA principles, such as revising legislative frameworks to reduce legal obstacles and funding initiatives to assist the shift in the science system towards a fully OA publishing approach in the long term.

1239 Federal Ministry of Education and Research (BMBF) (n 74).

**1240 See Federal Ministry for Economic Affairs and Energy Federal Ministry of the Interior, Federal Ministry of Transport and Digital Infrastructure, Digital Agenda 2014-2017, (2014), Munich, https://www.bmwk.de/Redaktion/EN/Publikationen/digital-aganeda-2014-2017.pdf?__blob=publicationFile&v=1, accessed 11th August 2023. This agenda aimed at improving the conditions for unrestricted information flow, making Open Access to scientific publications a crucial instrument.**

**1241 The BMBF's own research funding rules have added an OA clause making OA a precondition of funding. See: Federal Ministry of Education and Research (BMBF) (n 74).**

**1242 Bundesministerium für Bildiung und Forschung (n 75).**

**1243 Bundesministerium für Bildiung und Forschung (n 77).**

Other measures include encouraging academic institutions to adhere to the DORA Declaration[1244] and develop or expand their own science-based infrastructures and services. In doing so, the Guidelines acknowledge that diamond OA, in which authors are not charged publication fees, contributes to diversity within the scientific publication system. Still, recognising the variety in the publishing system, which small and medium-sized scientific publishers significantly contribute to, is another objective outlined in the Guidelines.

Targeted actions should also include measures to prevent the monopolization of publicly financed scientific publications. To set a positive example, the Federal Government and the Länder committed to publishing their own works in OA and guaranteeing their ongoing accessibility. Finally, the Guidelines further call for the creation of central publication cost centres and increased cost transparency by accounting for all existing funds used by scientific institutions.

Mirroring the robust OS policies and agenda of Germany, German scholarship features a wide array of seminal works by prominent IP scholars analysing the intricacies of the interplay between copyright and OS. In their quest to analyse this interaction, these scholarly works focalise various aspects of this interplay, such as the impact of the copyright reform on the realization of OS, the implementation of the CDSMD in the German laws and its implications on research activities, other legal tools – such as licensing schemes – that facilitate research, and the SPR regime inherent in the German legal system.

As a general claim regarding the relationship between OS and copyright law from an economics perspective, Peukert[1245] argues that copyright law does not impede the transition to OS; per contra, copyright law allows publishers and OA models to coexist while ensuring that scientist-authors have primary decision-making authority regarding their choice of scientific publication method. Thus, Peukert concludes that for achieving a “cultural” transition for scientific communication toward OA, there is no need to amend copyright law, but it is necessary to adopt regulatory measures to promote OA so that reputable scientists choose to adopt an OA approach. He further adds that if OA were promoted or even universally adopted on the basis of science law, the copyright standard in the scientific publishing industry would shift from "all rights reserved" to "some rights reserved." However, in another study, Peukert[1246] also admits that even in a pure OA publication system, direct commercialization of scientific works for commercial purposes as such would only be permissible with the individual consent of the respective scientific authors, as this type of use would not be covered by the OA permission. To overcome this hurdle in favour of knowledge dissemination from public to private entities, he suggests adopting statutory licensing for commercial uses of OA knowledge. This statutory license would allow them to reproduce OA works without seeking individual author consent, provided they pay a lump-sum fee and create a digital database significantly improving upon searchable open access repositories, whereas the collected fees should be distributed to authors through a collecting society based on detailed and customisable reports.

**1244 ‘San Francisco Declaration on Research Assessment’ (DORA, 2013), https://sfdora.org/read/, accessed 11th August 2023.**

1245 Alexander Peukert, Das Verhältnis zwischen Urheberrecht und Wissenschaft: Auf die Perspektive kommt es an!, 4 JIPITEC, 1, para 142.

1246 Peukert, Alexander, Ein wissenschaftliches Kommunikationssystem ohne Verlage - zur rechtlichen Implementierung von Open Access als Goldstandard wissenschaftlichen Publizierens (A Scholarly Communication System Without Publishers - On the Legal Implementation of Open Access as the Gold Standard of Scientific Publications) (May 23, 2013). Michael Grünberger/Stefan Leible, Die Kollision von Urheberrecht und Nutzerverhalten im Informationszeitalter, 2014, 145-172, Available at SSRN: https://ssrn.com/abstract=2268901 or http://dx.doi.org/10.2139/ssrn.2268901.

Marquardt[1247] offers a critique of the German system by claiming the German copyright framework is inadequate to accommodate the needs of the scientific community concerning the availability of digital material. He notes that copyright law remained in the pre-digital era, and it concerned the interests of science. Additionally, he points out the complexity of the law and the fact that lower courts often interpret norms against the interest of OS. Yet, it has been pointed out by de la Durantaye[1248] that the German transposition of the CDSMD has significantly enhanced legal certainty for all stakeholders involved – researchers, educators, learners, authors, publishers, and educational infrastructure facilities. Still, de la Durantaye notes that contentious points of the reform relate to the extent of legally permissible usage, particularly for educational and teaching purposes. Similarly, Euler[1249] emphasises the importance of copyright in enabling and restricting access to academic works within the context of OA. In line with de la Durantaye, he remarks on the positive role of the use of works for digital and cross-border teaching and educational purposes of the introduction of TDM for scientific research (Article 3, 4 and 5 CDSMD), as well as of the provisions on the preservation of cultural heritage in Article 6 and the use of out-of-commerce works in Article 8, especially for works of fine arts in Article 14, which could also benefit education and research. Nevertheless, he points out that German legislators are largely restricted in their design options by international treaties, particularly European directives. On this account, Euler concludes that OA can ultimately be realised primarily through expanding science-relevant limitations or freedoms of copyright while further arguing that such legislative measures should be accompanied by "soft law" measures, which range from OA policies and transformation strategies to institutional voluntary commitments, in which researchers commit to granting non-exclusive rights to the institution for OA publication of their contributions on their repositories.

The scholarship focalizing the CDSMD has been complemented by many others concentrating on the role of E&Ls on OS and OA. In this sense, Lahmann et al.[1250] highlight the role of E&Ls within Sections § 44a-63a of the German Copyright Act (UrhG-G) and those provisions for ensuring access and reuse of computer programmes and databases in promoting OS, particularly in education and research. Nevertheless, they note that most of these exceptions contain more or less extensive restrictions regarding the purpose and scope of reuse. For instance, educational and scientific exceptions only permit use within limited audiences, such as participants in specific educational courses or within research circles, which may be particularly problematic for OA initiatives in education, as open access repositories and university learning management systems, which are accessible to a large, fundamentally unrestricted audience, are generally considered public, while individual learning spaces with limited access are not. Expanding on this, in their guide on *Rechtsfragen zur Digitalisierung in der Lehre Praxisleitfaden zum Recht bei E-Learning, OER und Open Conten*t, Kreutzer and Hirche[1251] advocate for a comprehensive "fair use" rule instead of the closed-list approach of E&L, as the application of the latter is often hindered by the case-by-case verification of the proposed use's compatibility with the specific regulation before implementing it.

1247 Marquardt, Wolfgang. "Urheberrecht und Open Access: Angemessene Rahmenbedingungen für die Wissenschaft" Bibliothek, Forschung und Praxis, vol. 37, no. 1, 2013, pp. 9-15. https://doi.org/10.1515/bfp-2013-0009.

1248 de la Durantaye, Katharina. "Neues Urheberrecht für Bildung und Wissenschaft–eine kritische Würdigung des Gesetzentwurfs." GRUR (558–567) (2017).

1249 Euler, Ellen. "Open Access in der Wissenschaft und die Realitäten des Rechts." RuZ-Recht und Zugang 1.1 (2020): 56-82.

1250 Söllner, Konstanze. Till Kreutzer, Henning Lahmann: Rechtsfragen bei Open Science: ein Leitfaden. Hamburg: Hamburg University Press, 2019.–156 S., 1 Abb.–ISBN 978-3-943423-66-2, EPUB 978-3-943423-67-9. Printausgabe€ 19, 80." (2020): 102-103.

1251 Kreutzer, Till, and Tom Hirche. "Rechtsfragen zur Digitalisierung in der Lehre: Praxisleitfaden zum Recht bei E-Learning, OER und Open Content." (2017).

Likewise, Dreier[1252] looks at the German E&Ls framework following the introduction of the CDSMD and its adequacy for knowledge access compared to the existing European and German provisions and discusses legal and methodological issues resulting from this reform. In this sense, he concludes that the CDSMD's mandatory E&Ls go beyond the previous optional provisions of the ISD and, consequently, also enhance the German catalogue of E&Ls in certain areas. Nevertheless, he notes that the reform narrowed at traits the scope of digital uses, as Article 5 CDSMD does not extend to offline use outside the "premises of an educational establishment". Lastly, Dreier also raises the question of the relationship between the limitation's provisions and fundamental rights as a possible limiting factor for the application of the E&Ls, including the issue of whether German fundamental rights might exceptionally apply alongside European fundamental rights has so far only been mentioned by the Federal Constitutional Court in the "Metal-auf-Metall" case (BVerfG ZUM 2016, 626 Rn. 115, 117 – Metall auf Metall).

Also, in the context of the CDSMD, Beurkens and Scherzinger[1253] explore database maker's rights and their significance for database research by highlighting that while the CDSMD introduced the TDM exception, allowing the reproduction of a substantial part of a database in quantity or quality for non-commercial scientific research purposes, neither the full reproduction, distribution nor public accessibility of this copy is allowed. In the authors' view, this gap significantly reduces database research, which frequently requires carrying out those acts. As a further drawback, the authors pointed out that there is no comparable exception for computer programmes, so this exception – in practice – does not encompass the entire database. Moreover, they note that the definitions of "scientific research" and "non-commercial" nature of the activity are challenging to delineate. Database research is also hampered by the general prohibition of third-party research conducted for private companies at public universities. Overall, they conclude that the current exception does not provide a favourable and secure landscape for researchers in this area.

1252 Dreier, Thomas. "Der Schrankenkatalog: Adäquate Zugangsregeln für die Wissensgesellschaft." Vortrag auf dem III. ZUM-Symposion» EU-Urheberrechtsreform–Ergebnisse und Analysen «des Instituts für Urheber-und Medienrecht am 1 (2019): 384-393.

1253 Beurskens, Michael, and Stefanie Scherzinger. "Datenbankherstellerrecht und Datenbankforschung." Datenbank-Spektrum 23.2 (2023): 143-152.

In evidencing how Open Science emphasises the importance of knowledge as a cultural common good, Eisentraut[1254] argues that copyright law responds to this goal through various provisions to balance copyright ownership and the public's interest in using scientific achievements. Nevertheless, he notes that while OA has made its way into legal science debates and is often reflected in the OA strategies of German universities and as part of the commitment of major research organisations, there is still a notable lack of adoption of this publication form. Eisentraut suggests two reasons for the delayed emergence of this cultural shift towards OA. First, a lack of an existing academic culture. While the scholarly quality of a publication is the most crucial factor, the publication venue also plays a pivotal role in reputation. In this sense, commercial publication in established publishers and journals remains a significant factor in the reputation of legal scholars. The second reason pertains to the economic rationality of scholars. In this sense, there is often compensation for article publications, whereas publication in OA journals is either free or requires authors to secure additional funds for publication. Against this, Eisentraut suggests compelling universities to require scholars to make their research publicly accessible after a certain time from the initial publication ("OA secondary publication"). Yet, he cautions that removing the researcher's autonomy in deciding how to deal with secondary publication and even mandating a specific form of exploitation might collide with fundamental constitutional guarantees[1255]. In this sense, Eisentraut highlights that the first issue arises from the constitutional distribution of competencies. This is because while in Germany, copyright law falls under federal competencies, obligations of university members are established, for which only the regional higher education law is competent. Furthermore, she noted that OA secondary use obligations could clash with Article 5(3) para. 1 of the Basic Law (*Grundgesetz*), which protects the "freedom of publication," which involves the freedom to decide "how," "when," "where," and "whether" to publish.

Götting and Rönsberg[1256] additionally note that acceptance of publishing OA differs across disciplines. While OA is quite prevalent in computer science, OA publications are viewed as the exception in law, which is more affected by a book culture. In line with Eisentraut[1257], Götting and Rönsberg see the (relatively) low stature of many OA journals and the absence of quality control resulting from inadequate or non-existent peer review as two drawbacks for a cultural shift towards publishing in OA. Against this, the authors suggest various means for promoting OA publication models, amongst them, the university's requirement for their academic staff to exercise the right to non-commercial secondary publication of scientific contributions resulting from their academic duties after an embargo period of 1 year. Other measures suggested including granting universities non-exclusive publication rights for scientific contributions on OA repositories – whereby researchers must apply for an exception ("waiver") if they plan to publish traditionally in a journal – or imposing mandatory licenses for these works, or even completely removing publicly funded scientific works from copyright protection *de lege ferenda*. The authors further contemplate introducing a rule akin to the one for employee inventions. Accordingly, universities could publish these contributions through university presses or on their own open access repositories.

1254 Eisentraut, Nikolas. "Die Digitalisierung von Forschung und Lehre–auf dem Weg in eine „öffentliche "Rechtswissenschaft?." Der digitalisierte Staat-Chancen und Herausforderungen für den modernen Staat. Nomos Verlagsgesellschaft mbH & Co. KG, 2020.

1255 For instance, while copyright falls under federal competences, obligations of university members are established, for which only the state's higher education law is competent.

1256 Götting, Horst-Peter, and Anne Lauber-Rönsberg. "Open Access und Urheberrecht." Ordnung der Wissenschaft 3 (2015): 137-146.

1257 Eisentraut, Nikolas. "Die Digitalisierung von Forschung und Lehre–auf dem Weg in eine „öffentliche "Rechtswissenschaft?." Der digitalisierte Staat-Chancen und Herausforderungen für den modernen Staat. Nomos Verlagsgesellschaft mbH & Co. KG, 2020.

Yet, Götting and Rönsberg cautioned that the compatibility of these options needs to be carefully considered in light of fundamental rights, in particular, to assess to what extent an encroachment on Article 5(3) Sentence 1 of the Basic Law (*Grundgesetz*) constitutionally justified for the promotion of participation in and access to scientific knowledge. In this vein, they pointed out that while Section §38(4) UrhG-G ("Zweitveröffentlichchungsrecht", or SPR) does open the door for introducing additional university regulations or obligations to publish in OA[1258], the constitutional compatibility of this kind of regulations remains yet dubious. Thus, they argue that while integrating OA principles into academic publishing is desirable from a science policy perspective, upholding the principles of autonomy and academic freedom is crucial. Furthermore, from a purely legislative technique standpoint, they emphasise the necessity of aligning the conditions of any "secondary OA exploitation" obligation to the benchmark given by Section §38(4) UrhG-G so that the former applies where SPRs are available.

Building upon this analysis, Haug[1259] devotes attention to the obligation for OA secondary publication introduced in Section 44(6) of the Baden-Württemberg State Higher Education Act (BWLHG). He casts doubt about the compatibility of the content of the BWLHG with the same § 38(4) UrhG-G, where the former converts the optional SPR into an obligation, thereby abolishing the federally granted authorisation and decision freedom not to exercise the SPR. Additionally, this author notes that the BWLHG imposes a requirement for secondary OA publication on all research outcomes supported by state-provided personnel funding, whereas the SPR specified in § 38(4) UrhG-G is characterised by a narrower scope. As a result, the author concluded that the rationale of federal regulation has changed, and there is a noticeable distinction between federal and state legislation. Further expanding on this point, Löwisch[1260] examined the complaint review of the BWLHG VGH Baden-Württemberg (BVerfG with a decision dated September 26, 2017 (9 S 2056/16)) filed by full professors from the Departments of Law and Literature of the University of Konstanz before the Administrative Court of that State (*Verwaltungsgerichtshof* - VGH). Löwisch agreed with the VGH findings[1261] that the secondary OA publication obligation imposed by BWLHG does not belong to the field of higher education, service, and science distribution, which is under the competence of the Länder, but to copyright, which falls under the exclusive legislative authority of the federal government. It shall be noted that whether university members can be legally obligated to make second publications OA by exercising the second publication right under §38(4) UrhG-G is a legal question that is currently before the Federal Constitutional Court[1262].

1258 As with the case of Section 44(6) of the Baden-Württemberg State Higher Education Act, which came into effect on April 9, 2014. This rule academic staff are required to exercise their right to non-commercial secondary publication one year after the initial publication for scientific contributions that have been created as part of their official duties and published in collections appearing at least bi-annually.

1259 Haug, Volker. "Open Access in Baden-Württemberg: Rechtswidriger Zweitveröffentlichungszwang zwischen Urheber-und Hochschulrecht." Ordnung der Wissenschaft 2 (2019): 89-96.

1260 Löwisch, Manffred. "Streit um die Zweitveröffentlichungspflicht geht zum Bundesverfassungsgericht. "Ordnung der Wissenschaft 1 (2018): 43-44.

1261 Beschluss vom 26.9.2017, 9 S 2056/16.

1262 The VGH Baåden-Württemberg suspended the proceedings and referred the decision to the Bundesverfassungsgerichthof (BVerfG) with a decision dated September 26, 2017 (9 S 2056/16). The decision is expected in 2023. See: Georg Fischer, Zweitveröffentlichungsrecht und Causa Konstanz: Bundesverfassungsgericht vor Entscheidung, IRightsinfo, (17 April 2023), <https://irights.info/artikel/zweitveroeffentlichungsrecht-bundesverfassungsgericht-konstanz/31878>.

Last but not least, Lahmann et al.[1263] offer an insight into the complexities of accessing research materials vis-à-vis OS by taking into consideration the opacity and drawbacks of contractual agreements as a drawback to achieving these goals. In so doing, they also reflect on the SPR regime inherent in the German copyright law. In this context, the authors explain that use and exploitation rights are often broadly transferred to publishers, leading to situations where authors, such as university professors, may not have control over their works once they have granted exclusive publication rights to a publisher. Therefore, they praise certain copyright provisions enshrined in the German copyright law, which could shield authors from unfavourable contractual agreements, ultimately contributing to OS. Specifically, Section §32 UrhG-G ("*Anspruch auf eine Angemessene Vergütung*"), Section §40a ("*Recht zur anderweitigen Verwertung*"), enabling authors to repurpose their work after 10 years, even with unlimited exclusive contracts and the SPR ("*Zweitveröffentlichchungsrecht*") under Section §38(4) UrhG-G. Nevertheless, regarding the SPR, they note that the interpretation of §38(4) UrhG-G is quite ambiguous due to the definition of "publicly funded" therein, which has sparked debates in the academic community on whether it refers only to public *third-party funding* or also to *publicly funded projects*[1264]. Beyond the academic debate, the authors highlight that the practical importance of this interpretation lies in determining which researchers can exercise the SPR without the publisher's consent, calling for legal guidance to ensure researchers' ability to share their work openly. Kreutzer and Hirche[1265] furthermore underlined other significant limitations of the norm, such as the narrow objective scope (articles published in periodicals appearing at least bi-annually) and the 1-year embargo period. They also stressed that allowing the secondary publication of "accepted manuscript versions" poses significant challenges for citations. Similar arguments were put forward by Götting and Rönsberg, who in turn also challenged the suitability of adopting a 12-month uniform embargo period for all disciplines. They point out that although this could be reasonable in certain fields, such as humanities, it would be excessive in science, technology, engineering, and mathematics (STEM) fields because the value of the finding usually diminishes after a year has elapsed. Moreover, Götting and Rönsberg[1266] express concerns about the applicability of Section §38(4) UrhG-G in cases where the publishing contract is subject to foreign law. They noted that the application of SPR in such instances remains ambiguous.

#### 1.1.3.4. Hungary

In retrospect, Hungary's commitment to OS goes back to the Budapest open access Initiative in 2001[1267]. Relevant progress was then made between 2018 and 2020 thanks to the Hungarian Electronic Information Service National Programme's (EISZ) efforts in reaching out to the major publishers and concluding transformative OA agreements with them. This output paved the way for the promotion of gold OA publishing.

1263 Söllner, Konstanze. Till Kreutzer, Henning Lahmann: Rechtsfragen bei Open Science: ein Leitfaden. Hamburg: Hamburg University Press, 2019.–156 S., 1 Abb.–ISBN 978-3-943423-66-2, EPUB 978-3-943423-67-9. Printausgabe€ 19, 80." (2020): 102-103.

1264 For instance, in an earlier publication, Kreutzer and Hirche suggested that secondary publishing rights apply exclusively to contributions stemming from research funded at least fifty percent by public funds, excluding works generated in the context of university activities or primarily privately funded projects. Kreutzer, Till, and Tom Hirche. "Rechtsfragen zur Digitalisierung in der Lehre: Praxisleitfaden zum Recht bei E-Learning, OER und Open Content." (2017).

1265 Kreutzer, Till, and Tom Hirche. "Rechtsfragen zur Digitalisierung in der Lehre: Praxisleitfaden zum Recht bei E-Learning, OER und Open Content." (2017).

1266 Götting, Horst-Peter, and Anne Lauber-Rönsberg. "Open Access und Urheberrecht." Ordnung der Wissenschaft 3 (2015): 137-146.

1267 Lencsés, Á.; Süt˝o, P. 'Challenges of Promoting Open Science within the NI4OS-Europe Project in Hungary'. Publications 2022, 10, 51. https://doi.org/10.3390/publications10040051, accessed 1th August 2023. Also see Süt˝o, P. Az EISZ Open Access szerz˝odéseinek gyakorlati tapasztalatai. In Networkshop 2020. Országos Online Konferencia. 2020. Szeptember 2–4.; Tick, J., Kokas, K., Holl, A., Eds.; Hungarnet Egyesület: Budapest, Hungary, 2020; pp. 64–72. Ignat, T. What Motivates Us to Develop the Focus on Open Science Series? In Open Science: Nyílt Tudomány Magyar Szemmel; Gaálné Kalydy, D., Ed.; Magyar Tudományos Akadémia Könyvtár és Információs Központ: Budapest, Hungary, 2021; pp. 127–144

In line with the EU's objective of bringing innovation and R&D efforts in the Member States closer together by 2030, the NRDIO is implementing a three-pillar strategy for the period 2021-2027, including digitalisation, R&D and innovation, and strengthening the national role of SMEs. The NRDI Office has supported and promoted national OS practices through the establishment of the National Open Science Advisory Board, the creation of a formal position paper on OS, membership of the EOSC Association and efforts to deepen the practical application of OS in research.

OS-related activities are also part of the national RDI (Research, Development & Innovation) funding system. The Science Patronage Programme provides a specific funding line aiming to promote the internationalisation of the Hungarian scientific research community and to support the development of Open Science practices in Hungary with a dedicated budget for OA publication.

In October 2021, Hungary joined the international OS initiative by releasing the first national-level Position Paper on Open Science[1268]. This position paper was signed and developed by the National Research, Development and Innovation Office (NKFIH); this position envisages the general framework on OS based on professional and stakeholders' consensus, in line with the recommendations of international science organisations and the relevant policy objectives of the EU. It encompasses the principles and the fields of activity of Open Science that best serve the interests and development of Hungarian science while aiming at making the results of research, development and innovation accessible to all.

Drafted by the Open Science Advisory Board according to recommendations made by the EC, the European Open Science Cloud (EOSC), Science Europe and the European University Association (EUA), UNESCO and the International Science Council (ISC), the Paper is also in line with the initiatives set out in the Commission's Communication on the ERA and the relevant principles of the Horizon Europe Framework Programme[1269]. In October 2021, the National Position Paper on Open Science was joined by the government and science-related umbrella organisations represented in the Advisory Board[1270]. The OS Paper continues to stand as an open invitation and open call to all stakeholders in the Hungarian scientific community to join and sign up for this resolution in order to support the promotion of OS practices.

The key pillars of the OS ecosystem that call for action are (a) open access to research outputs, (b) FAIR (Findable, Accessible, Interoperable, Reusable) and CARE (Collective benefit, Authority to control, Responsibility, Ethic) research data management; (c) research integrity; (d) next-generation metrics in research assessment; (e) new types of rewards and initiatives; (f) international cooperation networks; (g) citizen science; (h) education and skills.

1268 National Research, Development and Innovation Office, 19 October 2021, https://nkfih.gov.hu/english/news-of-the-office/open-science-initiative, accessed 1th August 2023.

**1269 European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions. A new ERA for Research and Innovation. {SWD(2020) 214 final}. Brussels, 30.09.2020.COM(2020)628 final. Available https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0628.**

1270 Association of Hungarian PhD and DLA Students (DOSZ); College of University Library Directors (EKK); Eötvös Loránd Research Network (ELKH); Ministry for Innovationvand Technology (ITM); Government Information Technology Agency (KIFÜ); Hungarian Accreditation Committee (MAB); Hungarian Rectors' Conference (MRK); MTA Libraryvand Information Centre (MTA KIK); National Research Infrastructure Committee (NKIB); National Doctoral Council (ODT); National Council of Student Research Societies

(OTDT).

OA publishing policies are meant to ensure that the Hungarian research community has immediate and free access to the latest scientific results, as well as to increase the visibility of Hungarian scientific works at an international level. This involves shifting from a current and, in many respects, unsustainable scholarly communication system to a transparent, interoperable, competitive, durable, and fundable model that favours scientific output in line with the interests and needs of the scientific community. The steps to be taken in order to achieve these goals shall include shifting to OA by a reduction in the current subscription fees; whenever possible, articles by Hungarian authors should be made openly available from the time of publication; articles should be published under the Creative Commons CC-BY license in repository journals and independent, platinum open access journals with (national or foreign) accreditation, also proving maintenance and ensuring the further development of the Electronic Information Services (EISZ) National Programme.

As to FAIR and CARE Research data management, the Paper supports the establishment, maintenance and continuous improvement of the national research data management infrastructure through the development of a network of publications and data repositories in line with national FAIR - CARE recommendations and by training of professionals through accredited training programmes for data stewards. Furthermore, the Paper calls for the development of research data service platforms, which will enable networking between institutional repositories while preserving the sovereignty of institutional publication and data repositories and providing high-quality services to the national research community. It is also expected that research funding programmes shall define the specific evaluation criteria for data management plans so that permanent identifiers are used and that the data and the permanent identifiers of published datasets are entered in the Hungarian Science Bibliography (MTMT).

Research integrity is another pillar of the Hungarian OS framework and refers to scientific autonomy, which includes diversity and equality, excellence, integrity, responsibility, ethical behaviour, and reflexivity.

The Hungarian OS policies also plan the adoption of next-generation metrics in research assessment based on a new, holistic approach. This requires research assessment processes to primarily focus on the content of the research (qualitative assessments). The Paper recommends that all research assessment organisations shall publish freely accessible and user-friendly guidelines on all the processes they follow when conducting evaluations, providing a description of the criteria and methodology used. However, research funding organisations and decision-making bodies are highly encouraged to incorporate a “response-and-feedback mechanism” into their assessment processes in order to improve their quality.

New types of rewards and initiatives should be included in the frameworks of domestic research funding organisations, supporting both individual excellence research (e.g., through OTKA - Hungarian Scientific Research Fund grants) and research at the institutional level (e.g., thematic programmes).

The International cooperation pillar aims to boost the international visibility of Hungarian science. In order to achieve that, Hungarian scientific-, research-, development- and innovation organisations and institutions are highly encouraged to join EOSC and any other international co-operation programme that is capable of improving the position of Hungarian science globally, promoting the completion of researchers’ careers, and fostering multidisciplinary and cross-sectoral research.

Citizen or Community Science is built around local and regional Citizen Science projects initiated by researchers, which represent special opportunities to promote science. Pursuing this objective requires a stable and predictable funding base over the long term, as well as a widespread, open access mode of dissemination of research results.

In this context, it is worth mentioning that Hungary's RDI strategy for 2021-2030 stresses the importance of increasing public awareness of the value of science and innovation and highlights that it is necessary to promote the accessibility of scientific results and innovation methods not only for universities, research institutes and businesses but also for the society in general.

As István Szabo, Vice President for Science and International Affairs National Research, Development and Innovation Office, stated[1271], there are dedicated citizen science support measures under the national RDI Science Patronage Programme. The programme provides funding for participation in international scientific and innovation events and conferences held abroad; organisation of international scientific and innovation events and conferences in Hungary (with special regard to events related to international research infrastructure memberships); social promotion of the results of science and innovation and of Citizen Science; supporting the publication of scientific books in paper-based and at the same time open access electronic format. The programme attracted 648 applications, and 270 grants were awarded.

Furthermore, Hungary is committed to actively taking part in the ERA Action on "Bring science closer to citizens" under the ERA Policy Agenda. Accordingly, Hungary is part of the Mutual Learning Exercise "Citizen Science Initiatives – Policy and Practice," launched in 2022. Hungary will further work on a top-level policy coordination mechanism on public engagement practices and an exchange network involving responsible national organisations.

According to official sources, further plans based on institutional-level initiatives include the development of a monitoring system for the ongoing Citizen Science projects and the creation of a national Citizen Science network/hub meant to lay the groundwork for a common platform for those organisations that have already been proactive as to citizen science actions or express their commitment to foster and promote public engagement in RDI.

Last, the Education and Skills pillar targets the development of specific and transversal (communication) competencies to understand and practice Open Science, spanning from digital literacy to the use of open education sources and the involvement of the necessary human resources in order to increase access to education and research resources and thus to improve learning and maximise the use of public funding. Also, the skills required to communicate with society should be considered essential components of researchers' training; hence, the Paper highly recommends integrating these communication skills into higher education curricula.

The ongoing "top-level" efforts in pursuing an Open Science Strategy in Hungary are complemented by other initiatives and standing positions meant to upgrade the country-level Open Science commitment while also bringing it into alignment with international standards. In this perspective, it is worth mentioning that the Government Information Technology Agency (KIFÜ) became a member of the EOSC Association; also, in the context of the NI4OS-Europe project, a few Hungarian institutions took action and got involved in the establishment of the NOSCIs (National Open Science Cloud Initiatives)[1272]. As a most recent development, more and more Hungarian institutions are joining the Coalition for Advancing Research Assessment (CoARA)[1273], which aims to reshape the methods of research assessment.

1271 Szabó, I, PhD - Vice President for Science and International Affairs National Research, Development and Innovation Office. Perspectives from Hungary Science Policy And Funding. EOSC Tripartite event, 23 March 2023, Budapest, Hungary.

1272 National Iniatives for Open Science in Europe (NI4OS) https://ni4os.eu/15-national-osc-initiatives/hungary/, accessed 11th August 2023.

1273 Coalition for Advancing Research Assessment (COARA) https://coara.eu/, accessed 11th August 2023.

Overall, Hungarian Open Science policies are in flux. At a practical level, during 2022 and 2023, there were several events where the National Position Paper was presented and discussed with supporters and OS experts. During one of these official events, the first EOSC tripartite event on "Open Science Support in Hungary"[1274], which took place on 23 March 2023, involving decision-makers, end-users and the funding sector, some practical gaps in the implementation of the OS Policies emerged. Discussions generally highlighted that the lack of human resources rather than storage space is the biggest problem for the long-term preservation of open and research data. Stakeholders also discussed the challenges of applying OS practices in different groups. Researchers emphasised that their biggest challenge is handling administration. Funding and communication of Open Science activities are the most problematic areas at the government level. All stakeholders converged around the idea that national policies and instruments should be better aligned and tailored to national needs.

As to further plans, the NRDI Office, as the main RDI funding organisation, will put efforts into collecting and reporting about national data and investments, policies, digital research outputs, Open Science skills and infrastructure capacities related to EOSC, further mainstreaming OS across national research funding programmes; increasing the connection of national/regional research infrastructures to the EOSC platform; intensifying EOSC outreach and communication including through national EOSC events.

Regardless of the advancements in the Hungarian OS policies and agenda, the Hungarian scholarship on the OS predates the adoption of the national strategy on OS, such as *The National Position Paper on Open Science 2021,* so they are not so relevant for the purpose of this study. However, more recently, authors such as Csomós and Farkas[1275] addressed the impetuous entry into the OA market of fast-growing OA publishers such as Frontiers and Multidisciplinary Digital Publishing Institute (MDPI). They revealed that Hungary-based researchers are willing to choose MDPI journals for publishing research results for three main reasons: 1) (relatively) high-quality indicators of journals, 2) short turnaround times, and 3) OA publishing option. Conversely, in 2022 Lencsés, Á. e Süto[1276], P. addressed the *Challenges of Promoting Open Science within the NI4OS-Europe Project in Hungary.* On the one hand, they stated that OS had been receiving attention from the major stakeholders in Hungary. On the other hand, the authors are the first to admit that there are just a few studies on best practices for promoting Open Science in the national research framework.

1274 OpenScience.hu, 'Ez történt hazánk első EOSC Tripartite Eventjén' https://openscience.hu/2023/04/04/ez-tortent-hazank-elso-eosc-tripartite-eventjen/, accessed 11th August 2023 and Department of Further and Higher Education, Research, Innovation and Science, 'Az Open Science támogatottsága Magyarországon'https://nkfih.gov.hu/hivatalrol/hivatal-rendezvenyei/open-science-magyarorszagon.

1275 György Csomós, Jenő Zsolt Farkas. Understanding the increasing market share of the academic publisher "Multidisciplinary Digital Publishing Institute" in the publication output of Central and Eastern European countries: a case study of Hungary, 2022https://doi.org/10.1007/s11192-022-04586-1.

1276 Lencsés, Á.; Süto˝, P. Challenges of Promoting Open Science within the NI4OS-Europe Project in Hungary. Publications 2022, 10, 51. https://doi.org/10.3390/publications10040051.

### 1.1.3.5. Ireland

The development of national OS policies in the Irish context is a gradual evolution that was initiated with the adoption of the National Principles on open access in 2012 and gained impetus, mainly in the aftermath of the global COVID-19 pandemic[1277]. In tandem with the international endeavours to achieve an open and transparent research landscape, the Irish research system positions the EU OS goals at the pinnacle of the Irish research agenda[1278]. Driven by this agenda, the National Open Research Forum (NORF) of Ireland has devised an action plan, namely the National Action Plan for Open Research 2022-2030, which entrenches Ireland's commitment to OS and provides a robust plan to meet the policy objectives set within the National Framework on the Transition to an Open Research Environment (NFTORE)[1279].

Published in 2019, the NFTORE constituted the first step in developing an OS agenda in the Irish context[1280]. It was aimed at easing access to all publicly funded research[1281]. To this end, it primarily provided the prototype of the Irish OA policies. In brief terms, the NFTORE advocated for all publicly funded research to be immediately and freely open access -by-default[1282]. To do so, its principles promoted Creative Commons (CC) licensing schemes, and it further suggested publications be made available without being subject to any embargo periods[1283]. Additionally, the NFTORE advocated for the management of research data in line with the FAIR principles[1284] while also considering the possible synergies between the research organisations and, for instance, EOSC, in order to facilitate the preservation of research data[1285]. Aside from these substantive issues, the NFTORE also promoted the skills and competencies for OS as well as incentives and reward mechanisms to reinforce researchers' and research organisations' consideration of OA methods while publishing their research results[1286].

In line with the overarching aims and objectives set within the NFTORE, the National Action Plan articulates Open Science as follows: 'Open Science is defined as an inclusive construct that combines various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community[1287]. Informed by this definition, the NFTORE offers an answer to what constitutes 'open research'. The document substantiates and contextualises this concept by acknowledging it as a cumulative sum of 'Open access to publications, open research data, open-source software/tools, open workflows, citizen science, open educational resources, and alternative methods for research evaluation'[1288].

1277 See Department of Further and Higher Education, Research, Innovation and Science, 'Impact 2030: Ireland's Research and Innovation Strategy' https://www.gov.ie/en/publication/27c78-impact-2030-irelands-new-research-and-innovation-strategy/, accessed 11th August 2023, 4-5.

1278 Ibid, 3, 8-9.

1279 EOSC, "Ireland launches National Policy for Open Research 2022-2030" (5 December 2022, EOSC) https://eosc.eu/news/ireland-launches-national-action-plan-openresearch-2022-2030, accessed 11th August 2023.

1280 NORF (2019) National Framework on the Transition to an Open Research Environment. https://doi.org/10.7486/DRI.0287dj04d, 3. Also See "CoNOSC Member Members' OS Policies" https://conosc.org/os-policies/#page-content, accessed 11th August 2023.

1281 NORF (2019) (n 90).

1282 Ibid, 6-7.

1283 Ibid.

1284 Ibid, 8.

1285 Ibid, 9.

1286 Ibid.

1287 NORF (2022), National Action Plan for Open Research https://doi.org/10.7486/DRI.ff36jz222, accessed 11th August 2023, 4.

1288 Ibid, 4.

The NFTORE appears to be aligned with the main pillars of the EU's Open Science policy agenda[1289], for it identifies and builds upon five strategic areas: open access to research publications, enabling FAIR research data, infrastructures for access to and preservation of research; skills and competencies; and incentives and rewards for researchers complying with the OS requirements[1290].

Based on these goals, the National Action Plan not only updates the objectives and ambitions of the NFTORE but also envisions a roadmap that would enable open sharing of and reuse of scientific research outputs by operationalising the NFTORE[1291]. To maintain this system, it builds upon a set of international, regional, and national policy briefs and guidelines, including the UNESCO Recommendation to Open Science of 2021, the EC Recommendation on access to and preservation of scientific information of 2018, the NFTORE of 2019 and the National Principles on open access of 2012.

On this basis, the National Action Plan identifies three major themes which guide the overall objectives and standards: establishing a culture of open research, achieving 100% open access to research publications, and enabling FAIR research data and other outputs[1292].

The first theme revolves around the idea of consolidating OS objectives at the organisational and national levels by taking the EU and international policies and strategies as benchmarks with which to be aligned[1293]. Accordingly, this pillar encapsulates various agenda items, such as the encouragement of the national institutions to adopt institutional OS and OA action plans, the uptake and incentivisation of OS goals via reward systems, and the organisation of programmes to train researchers skilled in open research practices[1294].

The second theme deals with finding the ways in which research publications can be immediately and openly made available to the public. On the one hand, it promotes a multitude of open access publishing opportunities that would help the research community have several high-quality options to make their research output openly available[1295]. On the other hand, it ensures the author's retention rights to complement the open access policies fueled by Green and Gold open access routes[1296].

The third theme concerns compliance with the FAIR principles in the context of the research practices, mainly by enabling the findability, accessibility, interoperability and reusability of software codes, algorithms and models, tools and instruments, as well as educational materials and other similar materials[1297].

The National Action Plan for Open Research is to be implemented by the NORF and to be delivered in the context of the Impact 2030: Research and Innovation Strategy of Ireland while being subject to periodic assessments and updates, where necessary[1298].

1289 See: Ibid, 4.

1290 Ibid, 5.

1291 Ibid, 5.

1292 Ibid, 6.

1293 Ibid, 7.

1294 Ibid, 7-10.

1295 Ibid, 12.

1296 Ibid.

1297 Ibid, 17-18.

1298 Ibid, 3.

The interplay of copyright law with OA and OS remains a topic that has been understudied in Irish legal academia. At the time being, literature focusing on the interplay of copyright with OA and/or OS is limited to the research report drafted by the National Forum for the Enhancement of Teaching and Learning in Higher Education, which was published in 2015[1299]. The report, entitled "Learning Sources and open access in Higher Education Institutions in Ireland", is aimed at analysing the ways in which open educational resources can be "utilised, developed and shared in order to enhance teaching and learning in Irish higher education"[1300]. In this context, the report centralises the research and teaching activities of both publicly- and privately-funded higher education institutions, and in so doing, the report touches upon these institutions' awareness and approach to copyright law to fulfil their goals. The study reveals that educators tend to be unaware or unsure of how to use open access educational materials, given the intricacies of copyright law[1301]. Due to the same reason, copyright and licensing of copyrighted materials are considered among the "challenges for teaching and learning"[1302] within this study[1303]. Yet, perhaps the most interesting point that can be extracted from the report is that, whereas there are limited references to the public domain or Creative Commons licenses, there is absolutely no mention of copyright E&Ls and the ways in which they can enhance the quality of teaching and learning.

Aside from the report mentioned above, there is hardly any scholarly endeavour comprehensively discussing this interaction, while the very few scholarly works somewhat related to the topic provide a piecemeal overview of this interaction due to focusing on certain isolated aspects of the topic. In fact, the paper "The exceptional mismatch of copyright teaching exceptions in the post-pandemic university – insights from Germany, Bulgaria, and Ireland"[1304], penned by Alina Trapova and Bernd Justin Jütte, comprises the only scholarly effort elaborating on the topics encompassed within this report.

In their paper, Trapova et al. study the impact of the adoption of the mandatory copyright exception enshrined in Article 5 CDSMD, without necessarily associating the topic with OA and OS, in pursuing online teaching aims and objectives in the aftermath of the optional copyright exception introduced by Article 5(3)(a) InfoSoc. The authors analyse the different implementation strategies of a few selected EU Member States, including Ireland. The authors criticise the Irish legislature for implementing this new exception without necessarily coordinating it with the existing teaching exceptions, especially with the ones that correspond to Article 5(3)(a) InfoSoc, which paves the way to differential treatment of digital and analogue teaching opportunities. Having identified similar caveats in the implementation strategies of the other Member States, the authors conclude that the discrepancies in these national implementation strategies have resulted in further fragmentation rather than pan-European harmonisation of digital teaching. Yet, it is also noted by the authors that Article 5 CDSMD was not intended to achieve such an ambitious goal; instead, it was aimed at setting the minimum standards for the digital delivery of education.

1299 'Learning Sources and Open Access in Higher Education Institutions in Ireland: Focused Research Report No. 1' (National Forum for the Enhancement of Teaching and Learning in Higher Education 2015) <https://eprints.teachingandlearning.ie/id/eprint/4141/1/Project-1-LearningResourcesandOpenAccess-1607%20(1).pdf> accessed 2 November 2023.

1300 Ibid 5.

1301 Ibid 14, 40, 41-44.

1302 Ibid 21.

1303 Ibid.

1304 Alina Trapova and Bernd Justin Jütte, 'The Exceptional Mismatch of Copyright Teaching Exceptions in the Post-Pandemic University – Insights from Germany, Bulgaria, and Ireland' (2023) 14 JIPITEC <http://www.jipitec.eu/issues/jipitec-14-2-2023/5738>.

### 1.1.3.6. Italy

In June 2022, the Italian Ministry of Research published a National Plan for Open Science (NPOS)[1305]. The document is a continuation of the National Programme for Research (PNR) 2021–2027, approved in 2021[1306], which included adopting a separate National Plan for Open Science as an essential element[1307]. The PNR 2021-2017 and the National Plan for OS lay the foundations for the full implementation of OS in Italy, supporting the transition to an open, transparent and equal system in line with the EU mandate. In line with this, the stated goals of the 2022 National Plan are developing transparent processes, enhancing research activity, its verifiability, the integrity of research results and proper scientific communication. The Plan focuses on five areas of intervention, delineating specific objectives for each[1308]. The first area promotes open access to scientific publications, making research findings widely available to the public. The second area focuses on opening research data in all fields of knowledge, encouraging transparency and collaboration through enhanced data-sharing practices. The third area seeks to facilitate collaboration among researchers through enhanced Information and Communication Technologies (ICT) services in networks. The fourth area focuses on the involvement of researchers, research institutions, and infrastructures in adopting Open Science practices. The last aspect of the Plan addresses research evaluation, emphasising the essential value of knowledge sharing, particularly during times of crisis like the SARS-Cov-2 and COVID-19 pandemic.

For each target, the Plan additionally includes a thorough overview of the state of the art, along with action plans to be developed by 2027. The Plan also sets long-term objectives with recommendations for involved stakeholders. This NPOS will span 7 years and will be periodically updated with input from research communities. The Ministry of University and Research will oversee its implementation, ensuring the alignment of proposed initiatives by the scientific community with the defined objectives of the Plan.

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**1305 Ministero dell'Università e della Ricerca, 'Piano Nazionale per la Scienza Aperta' https://www.mur.gov.it/sites/default/files/2022-06/Piano_Nazionale_per_la_Scienza_Aperta.pdf, accessed 11th August 2023. Two important actions were taken in the past to support open science in Italy. The first involved the requirement of making freely available to the public publicly financed research publications yet subject to an embargo period of either 18 or 24 months) by the National Research Evaluation Agency. The second measure was adopting a law in 2013 that required that all the subjects involved "implement the necessary measures for the promotion of Open Access" concerning works publicly funded (at least 50%) and published in periodical collections. See Article 4, Legge 7 ottobre 2013, n. 112, Disposizioni urgenti per la tutela, la valorizzazione e il rilancio dei Beni e delle Attività Culturali e del Turismo, G.U. n. 236, 8.10.2013. The main limit of this provision lies in the fact that it does not override agreements that transfer to third parties the rights to the publication. Thus, a proposal for amending this 2013 law to reinforce Italy's Open Access principles was submitted in 2018, yet it is still under parliamentary consideration. See. Proposal no. 395, titled "Amendments to Article 4 of the decree-law of August 8, 2013, No. 91, converted, with amendments, by Law No. 112 of October 7, 2013, regarding Open Access to scientific information.", https://www.camera.it/leg18/126?tab=&leg=18&idDocumento=0395, accessed 11th August 2023. See Caso, R, 'La rivoluzione incompiuta : la scienza aperta tra diritto d'autore e proprietà intellettuale' (Ledizioni, Ledizioni 2020) https://www.torrossa.com/it/resources/an/4634369, accessed 11th August 2023. In a similar vein, See Margoni and others (n 65). Moreover, in 2016, it shall also be that the OS National Plan is the outcome of several efforts toward this end. For instance, in 2015 it was founded the non-profit organisation Italian Association for Open Science (AISA) with the goal of promoting open science in Italy. This included educating Italian and European legislators about the importance of promoting open science in research evaluation and intellectual property policies. In 2016, the Universities of Milan, Venice, Turin, Bologna, Trento, Parma, Padua, and Trieste, among others, established the Italian Open Science Support Group as a voluntary working group of professionals with expertise in research support, libraries, open science, law, and computer science. See Rosaria Ciriminna and Mario Pagliaro, 'Open Science in Italy: Lessons Learned En Route to Opening Scholarship' [2023] European Review 1.**

**1306 Italian research policies are governed by the National Research Programmeme (PNR), which was created by Decree 204/1998 (Decreto legislativo 5 giugno 1998, n. 204, in materia di "Disposizioni per il coordinamento, la programmemazione e la valutazione della politica nazionale relativa alla ricerca scientifica e tecnologica, a norma dell'articolo 11, comma 1, lettera d), della legge 15 marzo 1997, n. 59", pubblicato nella Gazzetta Ufficiale n. 151 del 1° luglio 1998 Decree 204/1998). The National Research Programmeme (PNR) 2021–2027, approved on December 15, 2020 contained The National Plan for Research Infrastructures and the National Plan for Open Science. See Ministero dell'Università e della Ricerca, 'Programmema Nazionale per la Ricerca (PNR) 2021-2027' https://www.mur.gov.it/sites/default/files/2021-01/Pnr2021-27.pdf, accessed 11th August 2023.**

**1307 Ibid, p. 156. The adoption of FAIR principles and Open Access repositories are other aspects covered under the PNR 2021-2027.**

**1308 Ministero dell'Università e della Ricerca (n 145).**

The first area outlines several recommendations to achieve complete open access to scientific publications. These recommendations include, among others, requiring open access for articles and monographs in all publicly funded calls for proposals, promoting interconnection and interoperability of existing open archives at national and European levels, and utilising initiatives like OpenAIRE[1309] to link publications, projects, and expertise. A further intervention plan includes developing a national research data infrastructure adhering to Open Science Guidelines for all disciplines, with a public portal to collect and enable searchability of scientific production while respecting copyright rules. The recommended actions also involve establishing and maintaining an institutional repository or identifying a certified European archive. Additionally, the Plan seeks to pursue OA policies, primarily through the "Green" route and granting free access and rights for reuse, through the adoption of an organic regulatory framework on copyright enabling open access to scientific publication that includes the inalienable and non-negotiable right of immediate republication (without embargo limits) for scientific publications partially or totally financed with public funds. Other actions include promoting the ORCID-ID, including citation-related services. Last, the Plan aims to promote sustainable publishing initiatives governed by scientific communities that uphold quality standards and support open citation initiatives in collaboration with Italian publishers.

Within the second area, the Plan pursues the implementation of several actions. The most important one is introducing the requirement to produce FAIR data and store it in certified open repositories in all publicly funded tenders[1310]. This action also entails integrating such data into the EOSC. Further measures are the implementation of Article 10 of the ODD and the promotion of training programmes for "data scientists" and training for all researchers on FAIR data management.

The third area, related to research evaluation, includes recommendations for action, such as the requirement that scientific publications considered for national evaluation exercises be deposited in open access repositories. The Plan suggests broadening evaluation criteria to diminish the emphasis on bibliometric indicators and appropriately recognise contributions to Open Science and Third Mission activities. The Plan also recommends supporting the recognition of OS practices in research evaluation criteria and at the institutional level in Third Mission activity assessments.

To ensure community engagement and effective participation at the European and international levels, the fourth dimension of the NPOS addresses the development and adoption of a unified national portal that aggregates data from individual institutions to track progress in various areas of Open Science. Other recommendations include fostering alignment with international standards and EOSC for rules and services related to OS, as well as educating the youth on the principles and methods of OS and the related tools and practices.

The last area deals with open public health data on COVID-19 and SARS-CoV-2 by integrating SARS-CoV-2 and COVID-19 data into EU open platforms. The aim is to support the development of a national COVID-19 data platform fully linked to the European one (i.e. the European COVID-19 Data Platform[1311]) while advocating for the proper implementation of data protection law to disseminate anonymised data for pandemic analysis.

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**1309 See OpenAIRE https://www.openaire.eu/, accessed 11th August 2023.**

1310 Ministero dell'Università e della Ricerca (n 145). p.9

1311 https://www.covid19dataportal.org/the-european-covid-19-data-platform

The five intervention areas envisaged in the National Plan for Open Science and the proposed intervention plan can be summarised as follows[1312].

1312 Adapted from Italy's Ministry of Research National Open Science Plan. See: Ministero dell'Università e della Ricerca (n 145).

**Table 32. The five intervention areas envisaged in the national plan for OS**

| Axis of Intervention | Intervention Plan (based on) |
|---|---|
| Scientific Publications | Open access to publications<br>Non-commercial forms of publication<br>Intervene on copyright framework<br>Monitoring system<br>Open educational resources |
| Research Data | Enabling findable, accessible,<br>interoperable and reusable (FAIR) research data<br>Integration in European Open Science Cloud (EOSC)<br>Collaborative data production<br>Training of technical figures, including educating<br>open research data professionals |
| Research Evaluation | Evaluation processes and criteria<br>Collaboration between research institutions and researchers<br>Open access publishing<br>National Infrastructure |
| Open Science,<br>scientific community and<br>European Participation | A consistent path towards Open Science<br>European-level coordination |
| Open research data<br>on SARS-COV-2<br>and COVID-19 | National portal for FAIR data and content<br>concerning COVID-19<br>Models of open public health data<br>in compliance with GDPR |

*Source: Compiled by the study team.*

As to the scholarly literature on the interaction of copyright and OS, there are several seminal works authored by prominent IP scholars focusing on certain selected elements of copyright and their implications, mainly on research activities. In this context, there is a growing interest in the implementation of the CDSMD in the Italian legal landscape. For instance, Granieri[1313] discusses the regulatory framework for TDM in Italian legislation following the adoption of the CDSMD and its interplay in the context of the broader EU strategy on data access. He argues that the introduction of a mandatory pan-European TDM exception enhances data access and reuse opportunities, particularly in the field of AI, which is closely connected to data access and usage. However, he points out that the scope of such activities is constrained by the scope allowed by the CDSMD, suggesting that the TDM exception should be aligned in national legislation instead, in light of the recent European efforts. This is because both the EU Directive and the corresponding national regulations, which adhere to the EU baseline, raise unforeseen concerns or uncertainties related to the fundamental nature of data and technological advancements. In this sense, Granieri[1314] concludes that an effective European copyright system for OS goals cannot function without a solid foundation- According to the author, this requires more systematic and consistent solutions rather than occasional interventions, which frequently become obsolete *vis-à-vis* technological advancement.

As to the conditions of applicability of the TDM exception, Granieri identifies some gaps in the Italian implementation, also pointing out that these often stem from issues that the

1313 Massimiliano Granieri, 'Il Data Mining Nella Disciplina Del Diritto d'autore e La Strategia Europea Sui Dati' (2022) XXXI Annali Italiani Del Diritto d'Autore della Cultura e

Directive did not address. He criticises, in particular, the EU benchmark requiring legitimate access as a condition for the extraction activity, as it leads to situations in which legitimate access and extraction occur in exchange for compensation (i.e., with a paid subscription contract). Similarly, Montagnani[1315] highlights how the "legitimate access" condition disadvantages individuals not affiliated with institutions or entities, such as startups in the information sector who are interested in data extraction but are unable to afford subscriptions due to resource constraints. Accordingly, Caso[1316] noted that the conflict between copyright and scientific research in the field of TDM is a significant shortcoming of the CDSMD, given the current trends in the research world and the potential marginalisation of individual researchers. Caso[1317] also raises concerns about the *sui generis right* on databases and the newly created neighbouring right for publishers within the CDSMD, calling for their strict scrutiny. He argues that these rights tend to lead to the monopolisation and protection of information and data information, which conflicts with the democratic nature of the science creation process in the digital realm.

Offering a broader perspective on the matter, Sganga[1318], by building on the reCreating Europe project mapping of flexibilities conducted by Sganga et al.[1319], emphasises the need for specific copyright reforms to align the European copyright landscape with the goals of OS. Sganga strongly advocates establishing a mandatory, broad, and unalterable exception for research purposes and the incorporation of non-negotiable provisions in scientific publishing contracts that adhere to European OA and OS standards. She also advocates for the introduction of mandatory reversion rights and a European SPR reserved for authors, particularly for OA archiving, which is not subject to contractual exceptions. She concludes that these reforms have the potential to align the different national solutions that have arisen in the copyright landscape over the last 5 years. Caso[1320] advocates for a similar reform, evidencing that OS facilitates sharing basic research, creating an ideal breeding ground for technological innovation. Accordingly, he concludes that establishing a European-wide right to make scientific works publicly available in OS is a small yet necessary step forward for OS and would place the author (back) at the centre stage rather than the intermediary, fuelling their desire to communicate with the entire potential readership.

### 1.1.3.7. Lithuania

The inception of OA initiatives in Lithuania can be traced back to 2003[1321]. The beginning was marked with a pilot project to establish an information system for electronic theses and dissertations (ETD). This initial endeavour laid the foundation for larger-scale projects within the Lithuanian Academic Libraries Network[1322], setting the stage for future developments. In the same year, two libraries – the Library of Vilnius University Institute of Oncology and Kaunas University of Medicine *"became member of BioMedCentral and started to publish articles in the "gold" Open access portal BioMedCentral"[1323].*

dello Spettacolo 20.

1314 Ibid.

1315 Maria Lillà Montagnani and Giorgio Aime, 'Il Text and Data Mining e Il Diritto d'autore' (2017) 26 Annali Italiani Del Diritto d'Autore della Cultura e dello Spettacolo 384.

1316 Roberto Caso, 'Il Conflitto Tra Diritto d'autore e Ricerca Scientifica Nella Disciplina Del Text and Data Mining Della Direttiva Sul Mercato Unico Digitale' (2020) 2 Il Diritto Industriale 118.

1317 Ibid.

1318 Sganga, Caterina and Contardi, Magali and Turan, Pelin and Signoretta, Camilla and Bucaria, Giorgia and Mezei, Péter and Harkai, István, Copyright Flexibilities: Mapping and Comparative Assessment of Eu and National Sources (January 16, 2023). Available at SSRN: https://ssrn.com/abstract=4325376.

1319 Caterina Sganga, 'Dall'armonizzazione alla frammentazione: obiettivi e fallimenti della Direttiva Copyright (2019/790/UE) in materia di ricerca, educazione e accesso al patrimonio culturale' (2023) 5 Rivista italiana di informatica e diritto 47.

1320 Roberto Caso, La rivoluzione incompiuta : la scienza aperta tra diritto d'autore e proprietà intellettuale (Ledizioni, Ledizioni 2020) <https://www.torrossa.com/it/resources/an/4634369> accessed 25 July 2023.

1321 Kuprienė, J., & Petrauskienė, Ž. (2009). Open Access to scientific publications: the situation in Lithuania. ScieCom Info, 5(2).

1322 Ibid

1323 Ibid, p. 1

Around 2006, the landscape of OA in Lithuania witnessed another remarkable development, establishing the Lithuanian information system for electronic documents, known as eLABa[1324]. It is considered that eLABa, which in 2011 started to work as a national scientific information repository, laid a foundation for self-archiving (aka green open access) in Lithuania. To date, the Research Council of Lithuania coordinates OA activities in Lithuania. The decision was made on the submission of the Ministry of Education and Science and in response to the 2013 request made by the Secretariat of the Lithuanian National Commission for UNESCO to appoint the institution responsible for open access to research information[1325]. The Research Council of Lithuania and the Ministry of Education and Science appoint Lithuanian representatives to the European Commission expert group on National Points of Reference on Scientific Information. The group was initiated on the EC initiative at the end of 2013 while implementing the 17 July 2012 recommendation on access to and preservation of scientific information(2012/417/EU)[1326].

As of 2022, there are 19 repositories in Lithuania, together with various legal acts related to the implementation of open access. Out of those 19 repositories, 14 are institutional, 2 are subject-based, and 1 accepts research data[1327]. According to the open access resolution adopted in 2016[1328], authors of Lithuanian scholarly publications are required *"to submit their peer-reviewed publications to eLABa or another specified repository within a specific period"[1329].* Regrettably, it has been observed that many authors only share partial excerpts of their articles, given that the majority of Lithuanian scholarly journals are already open access, offering reduced incentives to contribute the complete articles to the national repository. In 2016, it was decided that the open access resolution should be implemented until 2020; however, later, the implementation was prolonged to 2024[1330].

The open access resolution requests researchers to submit a published peer-reviewed and approved version to the repository at the time of or before the publication[1331]. Furthermore, these guidelines establish embargo periods, with a duration of up to 12 months for social sciences and humanities and 6 months for biomedical, physics, technology, and agriculture fields[1332]. The scholars are responsible for negotiating with publishers to ensure compliance with these guidelines or seeking publication in journals that align with these principles. Article processing charges and book processing charges, as well as other expenses for open access publications, could be covered by the Research Council of Lithuania. Still, hybrid journal open access [1333] costs are not covered. All books and articles published in open access journals for which article and/or book preparation publication fees were paid must be made available with a Creative Commons CC-BY license.

The interSection of copyright law with OA and OS in Lithuania remains unexplored within academic discourse. Although Lithuania established its copyright statute in 1911, later translated into Lithuanian in 1918, and in effect until 1940, spanning the entire existence of the Republic of Lithuania[1334], it has not been directly associated with OA or OS policies.

1324 Kuprienė, J., & Petrauskienė, Ž. (2009). Open Access to scientific publications: the situation in Lithuania. ScieCom Info, 5(2).

1325 https://lmt.lrv.lt/en/science-policy-implementation/open-science/

1326 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012H0417&rid=1.

1327 Maceviciute, E., & Kepaliene, F. (2022). Factors influencing Lithuanian researchers' use of Open Access repositories as a publishing channel.

1328 https://www.e-tar.lt/portal/en/legalAct/dceeeb10e05711e59cc8b27b54efaf6e

1329 „Žalioji" atviroji prieiga Lietuvoje (F. Kepalienė , Trans.). (2020). Knygotyra, 75, 141-161. https://doi.org/10.15388/Knygotyra.2020.75.64, p. 142

1330 https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=tu0odns4k&documentId=8113c930e0b811e5b18181b790158f61&category=TAD

1331 Maceviciute, E., & Kepaliene, F. (2022). Factors influencing Lithuanian researchers' use of Open Access repositories as a publishing channel.

1332 Ibid.

1333 Hybrid Open Access journals offer options to publish scientific articles in both Open Access format and the conventional pay-to-access, paywalled model.

1334 Mulevičiūtė, J. (2018). Kam priklauso menas? Pastabos apie autorių teisių reglamentavimo Lietuvoje pradžią. Menotyra, 25(4), 299-318.

Notably, the only scholarly work addressing copyright in the context of OA discusses Lithuanian scholars' open access publishing behaviour and its determinants[1335]. This article, which provides an overview of a 2009 survey conducted in Lithuania, highlights scholars' reluctance to deposit scholarly publications into repositories due to concerns about infringing copyright law.

Beyond its relationship with OA and OS, the copyright law in Lithuania underwent implementation of Directive 2001/29/EC on copyright in the information society. This implementation was formalized through the Law N. IX-1355 of 5 March 2003, amending the Law on Copyright and Related Rights, with significant amendments in 2006 and 2011. The implementation process triggered extensive debates, particularly regarding remuneration systems for private use and reprography, which were eventually resolved at the end of 2016[1336].

#### 1.1.3.8. Luxembourg

Luxembourg does not feature any legislation regarding OS. However, there are currently multiple public policies in action, particularly regarding the Luxembourg National Research Fund (Fonds National de la Recherche - FNR), which is the primary sponsor of research endeavours. The policies place significant emphasis on the impact of research outputs on science, industry, policymaking, and society at large and state that they firmly believe that publications resulting from publicly funded research should be regarded as a common good accessible to all, free from paywalls.

In accordance with the National Policy on open access adopted in 2015[1337] and in strong alignment with the European Commission's policy under the Horizon Europe framework programme, the FNR has devised an open access Policy that applies to all publications presenting FNR-funded research outcomes. They adopt the definition of open access outlined in the Berlin Declaration, where research publications can be freely accessed, read, and reused by anyone with internet access, provided that proper attribution is given to the author.

In that sense, publications must be either published in OA Journals, on OA Platforms, or made available through OA Repositories, and they must be published under a Creative Commons CC BY 4.0 license. Furthermore, OA must be granted immediately upon publication, without any embargo periods, while research data supporting research papers must be made available to other researchers at the time of publication, as openly and freely as possible.

In line with the Policy, the FNR requires that publications arising from FNR-funded research be made openly accessible, and it has established an open access Fund to provide financial support for publication fees related to OA. In 2018, the FNR joined cOAlition S, and in 2022, the FNR became a member of CoARA, a coalition that includes numerous research institutions, universities, and funders dedicated to reforming research assessment. Furthermore, the FNR has endorsed the San Francisco Declaration on Research Assessment (DORA), which advocates for research and researchers to be evaluated based on their merits, considering the value and impact of all research outputs during research assessment.

1335 Lithuanian scholars' Open Access publishing behaviour ant its determinants.

1336 Ivanauskiene, E. (2019). LITHUANIA. In COPYRIGHT IN THE INFORMATION SOCIETY (pp. 563-596). Edward Elgar Publishing.

1337 2015 National Policy on Open Access https://www.fnr.lu/Open-Access-plan-s-implementation-guidance-open-for-public-feedback/, accessed 11th August 2023.

Contrary to the abundance of public policy documents on OS, the scholarship on the matter in Luxembourg is quite limited, whereas the identified sources[1338] fall out of the scope of this study due to not elaborating on the intricacies of copyright in operationalising OS.

### 1.1.3.9. Malta

Malta inaugurated its OS policies in 2019 under the auspices of the H2020 Policy Support Facility (PSF) provided by the EU[1339]. Having secured funding to devise a roadmap to operationalise the pan-European Open Science goals, the Malta Council for Science and Technology (MCST) officially adopted its first National open access Policy (NOAP) in December 2021[1340]. The NOAP envisions a future-proof and robust OA action plan whose implementation has commenced in January 2022[1341]. Aimed at ensuring Malta's shift to 'a state of immediate OA in terms of research publications'[1342], the NOAP is mainly addressed to Research Performing Organisations (RPOs) and Research Funding Organisations (RFOs), and it sets several objectives to be met by 2025[1343].

In line with the EU policies on the matter, the NOAP articulates OS as 'a comprehensive term encompassing various elements, all of which spearhead the enhanced openness of all forms of research outputs, resources, methods, or tools, at any stage of the research cycle'.[1344] Accordingly, it acknowledges OA policies as an effective means to achieve this ultimate goal, for it constitutes an innovative way to disseminate knowledge and, especially, publicly-funded research – also by means of technological advancements – as well as to enhance data sharing[1345]. In so doing, the NOAP reflects on the interplay of intellectual property in general, and particularly copyright, with open access policies by underlining that the latter must comply with the existing legal framework[1346]. In this sense, the document highlights the ways in which Green and Gold open access routes can help enhance the availability and accessibility of copyright-protected content for research purposes[1347].

1338 See: Bearda, Romy, Jakobsb, Tom and Jagerhorna, Martin. The Luxembourg National Research Fund and ChronosHub: Lessons learned from implementing an Open Access Management. 2022. https://doi.org/10.1016/j.procs.2022.10.180.

1339 Malta | EOSC Association' https://eosc.eu/tripartite-collaboration/malta, accessed 11th August 2023.

1340 'Malta | EOSC Association' <https://eosc.eu/tripartite-collaboration/malta> accessed 27 July 2023.'Malta | EOSC Association' <https://eosc.eu/tripartite-collaboration/malta> accessed 27 July 2023.

1341 ibid.

1342 ibid.

1343 ibid. Also See 'Malta Adopts a National Open Access Policy' (OpenAIRE, 13 April 2022) <https://www.openaire.eu/blogs/malta-adopts-a-national-Open-Access-policy> accessed 27 July 2023.

1344 'National Open Access Policy' (Malta, December 2021), available at < https://mcst.gov.mt/wp-content/uploads/2022/05/National-Open-Access-Policy-2021.pdf> access 28 July 2023,15.

1345 'National Open Access Policy' (MCST, 28 October 2021) <https://mcst.gov.mt/mcst-news/national-Open-Access-policy/> accessed 27 July 2023.

1346 'National Open Access Policy' (Malta, December 2021) (n 122), 15-16.

1347 Ibid, 15.

Acknowledging Malta's prioritisation of innovation and digitisation, the NOAP provides for an objective evaluation of the state of OA in the Maltese context. According to the report, there was a spike in the number of openly accessible publications in 2018 and 2019, but Malta is 'not yet up to speed when it comes to practising open access [1348]. The document also highlights that despite the keen interest of various stakeholders in developing institutional Open and FAIR Data policies and strategies, not many of these endeavours have been concretised[1349]. Nonetheless, it is worth noting that the Maltese science landscape has witnessed some progress in the field of OA from 2014 onward, primarily due to the endeavours of the University of Malta (UM). Indeed, UM established an Open Science Department in 2014[1350], which adopted its first open access Policy in 2019, later revised in 2021[1351].

As amended, the UM's OA agenda, while promoting OS practices and principles at the UM, incentivises the UM affiliated academics and researchers to deposit copies of their scientific work in a dedicated repository, which gives open access to the full text of the work upon its publication or upon the expiry of the publisher's embargo period[1352]. UM also developed best practices to provide guidelines and training for researchers on Open Science, copyright-related aspects of Open Science practices and policies, CC-licensing schemes, publisher embargoes, and the like[1353].

The NOAP stands on three pillars: (1) Open access to scientific publications, (2) open and FAIR research data, which complies with the EU principle 'as open as possible, as closed as necessary'; and (3) related actions on awareness-raising, skills, training and support, and research assessment. Along these lines, the key action points devised by the NOAP are:

**1.** Opening access to scientific publications. This policy goal is two-pronged. On the one hand, it requires the upscaling of the Green open access route, first by introducing a voluntary deposit system and then shifting to a mandatory deposit system, in order to make research data and publications available as soon as possible[1354]. On the other hand, it aims to move towards a Gold open access route, mainly by providing funding to the institutions and also by supporting the open access journals held by the Maltese institutions[1355].

**2.** Enabling Open and FAIR Data. This policy goal encompasses various elements. As an initial step, it encourages the voluntary sharing of research data based on open research data and FAIR data practices[1356]. This step is to be reinforced by data management plans (DMPs), which are considered key to the concretisation of methods and standards used for collecting, processing, curating, and storing research data[1357]. To complement this, it is also deemed essential to adopt FAIR practices, which can offer technical support to researchers while using their datasets for research purposes, especially in text and data mining activities[1358]. To substantiate and enable FAIR practices, the NOAP also pays attention to data-sharing practices, including the sharing of the research results and the

1348 Ibid, 21.

1349 Ibid, 23.

1350 'Malta | EOSC Association' (n 178). Also see: 'National Open Access Policy' (Malta, December 2021) (n 117), 22-23.

1351 ibid.

1352 ibid. Also See 'University of Malta Open Access Policy' https://www.um.edu.mt/media/um/docs/directorates/library/OpenAccessPolicy.pdf, accessed 11th August 2023.

1353 See: 'University of Malta Open-Access Policy' (n 131).

1354 'National Open Access Policy' (Malta, December 2021) (n 122), 30-32.

1355 Ibid, 33-34.

1356 Ibid, 36-37.

1357 Ibid, 37.

1358 Ibid.

underlying datasets[1359]. Considering data complexity and entropy, this policy aims to accelerate the life span of data by emphasising the importance of the generation and registration of metadata of research datasets, which also enhances their findability[1360]. As an overarching objective, the NOAP urges and supports the development of Open Data (OD) policies and relevant infrastructures at the institutional level[1361].

**3.** Other related actions. Whereas the first two items of the NOAP's action plan constitute Phase 1 of Malta's way towards OS, the actions comprised under this third pillar are acknowledged as 'policy enabling factors' [1362] and associated with Phase 2 of the plan, as they encompass a wide-spectrum of aspects. They range from the development of tools for evaluating research and researchers, running institutional and national campaigns to raise awareness on OA policies, establishing training centres, and providing career development opportunities for researchers abiding by OS principles[1363].

Malta aspires to meet these ambitions by the end of 2025 by transitioning immediately to open access for publications funded by the Maltese Research & Innovation schemes while also upgrading existing infrastructures and developing new ones, with synergies necessary for FAIR research data management[1364]. To achieve this, the NOAP welcomes contributions from key stakeholders, and it aims to provide guidance to ensure that institutional research assessment and evaluation practices are adjusted in a way that adequately rewards and incentivises OA practices[1365].

Maltese scholarship on the synergies of copyright law, OA and OS is at its earliest stages. Except for the reports or policy papers produced by the Maltese public institutions, which were mapped above, there is hardly any evidence or source that would help provide insight into the state of the art in Maltese academia.

#### 1.1.3.10. Portugal

The Portuguese Government and its Ministry of Science, Technology, and Higher Education have placed great emphasis on embracing the principles and practices of OS, making it a top priority by formulating and implementing a comprehensive National Open Science Policy driven by the belief that "Knowledge is for All and by All"[1366]. In this sense, OS is perceived not as an end in itself but as a powerful means to effectively disseminate scientific knowledge to the scientific community, society, and businesses.

1359 Ibid, 38.

1360 Ibid.

1361 Ibid.

1362 Ibid, 40.

1363 Ibid, 40-47.

1364 'National Open Access Policy' (Malta, December 2021) (n 122), 27-28.

1365 Ibid.

1366 Ciencia Aberta (Ministry of Science, Technology, and Higher Education), https://www.ciencia-aberta.pt/home, accessed 11th August 2023.

This approach serves to enhance the recognition and broaden the social and economic impact of scientific endeavours. Beyond merely providing open access to data and publications, OS embodies the complete opening up of the scientific process, underlining the importance of scientific social responsibility. In pursuit of these objectives, the Ministry of Science, Technology, and Higher Education (MCTES or 'Ministério da Ciência, Tecnologia e Ensino Superior') published the "Guiding Principles for Open Science | Knowledge for All" [1367] in February 2016, followed by the approval of a resolution by the Council of Ministers in March of that same year, which outlines the guidelines for the National Open Science Policy. Furthermore, The National Open Science Policy was publicly introduced in April 2017 and made open to public discussions, fostering inclusivity and collective engagement in shaping the future of OS in Portugal.

The *Resolução do Conselho de Ministros* n.o 21/2016 (Resolution of the Council of Ministers No. 21/2016)[1368] was part of the Programme of the XXI Portuguese Constitutional Government, emphasising the significance of knowledge as a determining factor for promoting development and well-being, considering access to knowledge a fundamental right for all Portuguese citizens. The Programme aimed at furthering the right to access knowledge, information and education (Articles 37, 42, and 43) as well as economic, social, and cultural rights and duties (Articles 73 and 78) enshrined in the Constitution of the Portuguese Republic.

The Foundation for Science and Technology, I.P. (FCT, I.P. or 'Fundação para a Ciência e a Tecnologia') plays a vital role at the national level, facilitating access to scientific publications for the scientific community. It also encourages open access dissemination of scientific data financed by public funds by requiring the deposit of publications in the open access Scientific Repository of Portugal.

Decree-Law No. 115/2013 of 7 August 2013[1369] has had the most substantial impact on open access since it stipulates the mandatory deposit of digital copies of doctoral theses, research works subject to publication in journals with recognised international merit selection committees, innovative works or achievements, and master's dissertations in repositories forming part of the Foundation for Science and Technology, operated by FCT, I.P. This regulation was further reinforced by the Technical Regulation for the Deposit of Theses, Doctoral Works, Dissertations, and Master's Works, through Ordinance No. 285/2015, dated September 15, 2015.

The Specific Regulation for the Domain of Competitiveness and Internationalisation within the scope of Portugal 2020 also emphasises the need to ensure free and open access to all scientific publications (peer-reviewed) generated within the R&D sphere (Articles 75 and 120).

In compliance with the Resolution of the Council of Ministers 21/2016, the Ministry of Science, Technology, and Higher Education was entrusted with the creation of an Interministerial Working Group with the primary objective of formulating a Strategic Plan for the implementation of a National Open Science Policy (WG-PNCA).

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1367 Ministry of Science, Technology, and Higher Education (MCTES or 'Ministério da Ciência, Tecnologia e Ensino Superior'), 'Guiding Principles for Open Science | Knowledge for All' (February 2016) https://www.ciencia-aberta.pt/guiding-principles, accessed 11th August 2023.

1368 Resolução do Conselho de Ministros n.o 21/2016 (11th April 2016) https://www.sec-geral.mec.pt/pt-pt/legislacao/resolucao-do-conselho-de-ministros-no-212016-de-11-de-abril, accessed 11th August 2023.

1369 Decree-Law No. 115/2013 of 7 August 2013, Diário da República Eletrónico (DRE) (7th August 2013) https://dre.tretas.org/dre/310994/decreto-lei-115-2013-de-7-de-agosto, accessed 11th August 2023.

The responsibilities of the working group encompass (1) providing strategic guidance to the Ministry of Science, Technology, and Higher Education on Open Science initiatives; (2) conducting a comprehensive assessment of the current state of OS practices in Portugal, covering various components; (3) engaging in active dialogues with the scientific community and society at large to address pertinent issues related to Open Science. These discussions encompass open access to publications and data, the establishment of information infrastructure for publications and data, digital repositories, digital preservation, institutional policies, evaluation and incentives, intellectual property, collaborative research practices, and social engagement; (4) identifying best practices in OS and formulating guidelines, training programmes, and awareness initiatives tailored to different profiles; (5) proposing sector-specific targets and indicators to facilitate a monitored and transparent transition to OS.

The WG-PNCA operates through two commissions, comprising members from national scientific and technological institutions, as well as other relevant organisations. The Consultative Committee offers non-binding opinions on interim and final reports generated by the working subgroups. The Executive Committee oversees the overall progress of the work. The work subgroups are organised around four key lines, which are (a) OA and OD, (b) infrastructure and digital preservation, (c) scientific evaluation, (d) scientific social responsibility.

In spite of this meticulous OS agenda, the Portuguese scholarship on the interplay of OS with copyright is at its earlier stages.

### 1.1.3.11. Romania

Romania is consolidating the ground to create optimal national conditions for the transition to OS. The Romanian Open Science framework relies on a national strategy supported by a complex process of collaboration with international initiatives and experts in the field, as well as national consultations with the academic, research, development, and innovation community.

This collaborative process resulted mainly in the *National Strategic Framework for Open Science*, the main output of which is the White Paper on the Transition to Open Science (2023-2030)[1370], which details the implementation of the OS principles, challenges, and actions of *Objective 1.2. Ensuring the transition to Open Science and facilitating the pathway towards excellence in the scientific research* of the broader National Strategy on Research, Innovation and Smart Specialisation for 2022-2027[1371].

The White Paper was produced within the project "Increasing the capacity of the research, development and innovation system to respond to global challenges" [1372] of the Romanian Ministry of Research, Innovation and Digitisation and represents the institutional version of the "Green Paper on the transition to Open Science"[1373], submitted to public consultation in September 2022. Launched in December 2022, the White Paper envisages eight objectives

1370 'CARTEA ALBĂ A TRANZIȚIEI CĂTRE ȘTIINȚA DESCHISĂ
https://uploads-ssl.webflow.com/615f0ec368dc44a3d513e3ba/63a23b5a3853df2aac215bc1_Carte%20Alba%20OS_18.12.pdf, accessed 11th August 2023, adopted by Gov. Decision no. 933 of 20 July 2022. https://www.old.research.gov.ro/uploads/comunicate/2022/strategia-na-ional-de-cercetare-inovare-i-specializare-inteligent-2022-2027.pdf , accessed 11th August 2023.

1371 Ibid.

1372 SIPOCA 592 (MySMIS Code 127557)
https://uefiscdi.gov.ro/consolidarea-capacitatii-anticipatorii-de-elaborare-a-politicilor-publice-bazate-pe-dovezi-in-domeniul-cercetarii-dezvoltarii-si, accessed 11th August 2023.

1373 'Cartea Verde A Tranziției Către Știința Deschisă (2022-2030)', https://www.open-science.ro/resurse/cartea-verde-a-tranzitiei-catre-stiinta-deschisa-2022-2030 , accessed 11th August 2023

and related actions to be reached by 2030, in line with EU and UNESCO recommendations and conclusions[1374].

**Strategic Objective 1** (*Ensuring OA for scientific publications resulting from publicly funded research*) states that OA should happen "as soon as possible, preferably at the time of publication, starting with the new research funding cycle, aiming, until 2030, to align with the existing best practice at the international level. The objective entails ensuring OA to peer-reviewed scientific publications stemming from publicly funded projects, including articles and long text formats such as monographs and other types of books). Regardless of the publication route chosen (gold, diamond/platinum or green open access), articles should be made immediately available in open access via deposit on a digital repository by applying the latest available version of the Creative Commons Attribution International Public License (CC BY) or an equivalent which allows reuse, in accordance with and without prejudice to copyright law. For monographs and other types of books, the license may exclude commercial uses and derivative works/materials (e.g., CC BY-NC and CC BYND licenses). The metadata of publications must be open access under the Creative Commons Public Domain Dedication (CC0) or equivalent and must be in accordance with FAIR principles. This objective also encompasses the following notion that authors of publications or institutions should maintain sufficient ownership of IPRs in order to guarantee OA, which in turn would facilitate broader distribution, exploitation and reuse of results.

**Strategic Objective 2** (*"Research data management and ensuring open access to research data"*) details the actions needed so that Research Data Management become a standard scientific practice in the research process while generating, collecting or reusing data. Responsible data management must be based on a mandatory Data Management Plan (DMP), ensuring compliance with the FAIR principles, and open access to data must be ensured in compliance with the principle "as open as possible, as closed as necessary." The White Paper reports a very low availability of open research data due to limited incentives in funding rules, underdeveloped dedicated research data infrastructure and low awareness of these practices in research organisations. Proposed actions to tackle the problem are, apart from dedicated skill-development training (Objective 6), the introduction of mandatory data management plans, made publicly available with a CC BY license and covering not only data but also, e.g., software, models, algorithms, workflows, protocols, simulations, research notes etc.; compliance mechanism, and the development of dedicated digital repositories.

**Strategic objective 3** (*Ensuring transparency, equity of the Article Processing Charges (APCs), and of the costs of accessing international scientific databases*) describes the necessary steps for ensuring transparency and avoiding double funding with regards to open access scientific publishing and access to scientific databases.

**Strategic objective 4** (*Developing the infrastructure and services for Open Science*) details actions to promote and support the development of dedicated initiatives, infrastructure, digital repositories, and services to support OA and implement FAIR principles to research results (publications and research data) and the integration into the European Open Science Cloud (EOSC) and/or in trustworthy disciplinary databases/platforms.

1374 The reference goes to the EC Recommendation (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information, C/2018/2375, OJ L-134/12 of 31 May 2018; the UNESCO Recommendation on Open Science (2021), SC-PCB-SPP/2021/OS/UROS, 10.54677/MNMH8546, EU Council Conclusions on research assessment and implementation of Open Science, 10 June 2022, 10126/22. The White Paper affirms that "by 2030, the research culture will go through a transformational process towards the openness, reuse, and reproducibility of research results, increasing the transparency, quality, and efficiency of research, enriching knowledge, accelerating innovation and response to the major societal challenges."

**Strategic objective 5** (*Ensuring Open Science governance*) states that in order to align with the recommendations and policies of the EU and to facilitate and ensure the transition to OS at a national level, it is necessary to develop institutional capacity by setting up and implementing an institutional support mechanism, as provided by the National Strategy for Research, Innovation and Smart Specialisation (SNCISI) 2022-2027.

**Strategic Objective 6** (*Capacity building to implement Open Science*) refers to the development and consolidation of skills needed for Open Science, especially by researchers and staff in academic and research institutions, but also by other relevant actors, to achieve an effective transition to digitalisation, in line with EU recommendations and policies and international best practices.

**Strategic objective 7** (*Adapting the process of research assessment and rewarding in the new context of Open Science*) affirms that for OS to become a reality, it is necessary to change how research is assessed and rewarded, for instance, by providing a review and update of the current evaluation system to reward the implementation of OS-specific practices such as early sharing of research results, open collaboration, OA and the involvement of citizens in science, to the extend it is possible. Moreover, this process can be accompanied by a transformation of the evaluation system to recognise a wider range of results and research activities. The objective proposes actions aligned with international recommendations such as the CoARA's Agreement on Reforming Research Assessment[1375] and the EU Council's conclusions on Research Assessment and Implementation of Open Science (2022)[1376].

**Strategic Objective 8** (*Involving citizens in science (citizen science)*) states that in order to get science closer to society, strengthen citizens' trust in science and the relevance of research in addressing societal challenges, the involvement of citizens in different stages of the scientific research process needs to be supported and encouraged within the context of research projects financed through the national research funding programmes and proposes specific actions in this regard.

1375'COARA Agreement'
https://coara.eu/agreement/the-agreement-full-text/#:~:text=The%20Agreement%20on%20Reforming%20Research,quality%20and%20impact%20of%20research, accessed 11th August 2023.

1376 Research assessment and implementation of Open Science - Council conclusions (adopted on 10 June 2022), Council of the European Union
https://www.consilium.europa.eu/media/56958/st10126-en22.pdf, accessed 11th August 2023.

The White Paper also sets specific targets in a definite timeline, as follows:

- (2030) 100% of scientific publications resulting from publicly funded projects are open access.
- (2027) 70% of research data is FAIR, and as much as possible open.
- (2030) Specific infrastructures, services, and digital repositories are adapted to Open Science and, where possible, integrated into the EOSC.
- (2026) The national curriculum is adapted to the European data stewards training framework.
- (2030) 80% of researchers and staff in academic and research institutions have the necessary skills to implement specific Open Science practices;
- (2026) A more diverse range of Open Science-specific research activities and outputs are recognised and rewarded in research assessment.

In Romania, free access to scientific publications as part of OS has received little support in the National Strategy for Research, Development and Innovation (SNCDI 2014-2020) and the National Plan for Research Development and Innovation (PNCDI III - 2015-2020). It is worth nothing, however, that Romania was among the first EU Member States to mandate the open access of doctoral theses in 2022[1377]. June 2022 also marked the date of implementation of the ODD by Law no.179/2022, which obliges public entities to ensure open access to data obtained from publicly funded research, the management of data according to the principle "as open as possible, as closed as necessary" and in compliance with the FAIR principles, the respect of third parties' IPRs, personal data and legitimate commercial interests, and the availability of such data for commercial and non-commercial reuses.

Another tool to support Open Science at the national level is the Institutional Development Fund[1378], which has a dedicated action (since 2022) falling under Area 6: Development of institutional capacity for research in universities, according to which state higher education institutions can apply for funding for specific institutional development projects meant to build their capacity for the implementation of OS practices.

1377 As from February 2020, Open Access to the results of doctoral research through the publication of doctoral theses is being ensured according to Article 168 para. (9) of the National Education Law no. 1/2011, as amended, the Decision No 681 of 29 June 2011 approving the Code of Doctoral Studies and Order No. 3482/2016 of 24 March 2016 on the approval of the Regulation on the organization and functioning of the National Council for the Accreditation of University Degrees, Diplomas and Certificates.
1378 Fondul de Dezvoltare Instituţională (FDI), https://uefiscdi.gov.ro/fondul-de-dezvoltare-institutionala-fdi, accessed 11th August 2023.

As to *Objective 1.2. Ensuring the transition to Open Science and facilitating the pathway towards excellence in the scientific research*, which is part of the broader National Strategy on Research, Innovation and Smart Specialisation for 2022-2027, the pillars of the transition to OS and excellent scientific research are built upon mandatory publication in open access journals in the main stream of knowledge or in open access platforms e.g. Open Research Europe; support through rewards and incentives for Romanian journals indexed in Web of Science, having an impact factor or with an absolute influence score above the average in their field and the adoption of good open access publishing practices - such as obtaining DOAJ SEAL accreditation, etc.; open access to research data according to the European principle of "as open as possible, as closed as necessary" and in line with the principle of responsible data management; establishment and implementation of a national support mechanism for the transition to Open Science, overseen by the Open Science Council of the Romanian Ministry of Research, Innovation and Digitisation (for coordination tasks, institutional skills and capacity building and management of Open Science); citizens' participation (citizen science).

Another step forward was the establishment in 2021 of the National Cloud Initiative for Open Science - RO-NOSCI[1379] linked up to the broader "NI4OS Europe" project[1380]. RO-NOSCI is a coalition of organisations at the national level[1381], coordinated by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), aiming at building the national cloud for Open Science in the context of the development of the EOSC ecosystem; optimising and coordinating activities related to the integration of national infrastructures and services in the EOSC; facilitating access academic and research environment to EOSC resources; promoting and implementing policies on OS policies at national level.

In April 2012, the Romanian Academy signed the Declaration, entitled Open Science for the 21st century, as a member of All European Academies (ALLEA), stating, *inter alia*, that the publications "should be made openly available online, as soon and as freely as possible, as should also educational resources and software resulting from publicly funded research".

1379 'Inițiativa națională cloud pentru știința deschisă (RO-NOSCI)' https://uefiscdi.gov.ro/ro-nosci, accessed 11th August 2023.

1380 National Initiatives for Open Science in Europe: See NI4OS https://ni4os.eu, accessed 11th August 2023, and UEFISCDI https://uefiscdi.gov.ro/nationalinitiatives-for-open-science-ni4os, accessed 11th August 2023.

1381 The National Institute of Research and Development in Informatics - ICI Bucharest, and the National Institute for Research and Development in Physics and Nuclear Engineering "Horia Hulubei" - IFIN-HH

Last, the promotion of OS at the national level, as well as dialogue and linking to the main European initiatives, are ensured, to a large extent, through the National Open Science Portal[1382] and by the Open Science Knowledge Hub Romania (OSKH), both coordinated by UEFISCDI. OSKH is a partner or member in the most important international communities and initiatives dedicated to Open Science (OpenAIRE, Research Data Alliance - RDA, EOSC Association, European projects such as, e.g., NI4OS-Europe, FAIR-IMPACT[1383] OPUS: Open Universal Science[1384], GraspOS: Next Generation Research Assessment to Promote Open Science[1385], The Sustainable Careers for Researcher Empowerment - SECURE[1386]), Science Europe, CoNOSC-OS network. UEFISCDI - OSKH also represents Romania in the Policy Support Facility Challenge - Mutual Learning Exercise (MLE) "Citizen Science Initiatives - Policy and Practice" headed by the EC - DG RTD. OSKH also collaborates with UNESCO's Division for Science and Innovation Policies, with an Open Science Lab that provides support for policy development, capacity building and implementation of Open Science on specific research themes.

Except for the reports or policy papers produced by the Romanian public institutions, which were mapped above, there is hardly any source that would shed light upon the interplay of copyright with OS in the Romanian context, whereas the sources identified in this context fall out of the scope of this study[1387].

### 1.1.3.12. Spain

According to the National Strategy for Open Science, or "Estrategia Nacional de Ciencia Abierta" (ENCA)[1388,] for the 2023-2027 period, the Spanish Strategy for Science, Technology, and Innovation (EECTI) 2021-2027 advocates for OS in its objective 4 "Generation of knowledge and scientific leadership" and in action axis 14 "Science and innovation in society." Similarly, the State Plan for Scientific, Technological, and Innovation Research (PEICTI) 2021-2023 includes various initiatives under the state programme for institutional strengthening aimed at implementing models of open and inclusive science.

The ENCA 2023-2027 is based on commitments to OS made by various stakeholders in the system, including those included in Law 17/2022[1389,] LOSU[1390], EECTI 2021-2027[1391], and PEICTI 2021-2023[1392]. It is also supported by the Ministry of Science and Innovation's declaration regarding Open Science and Knowledge, as well as by specific actions taken by

1382 OpenScience.ro https://www.open-science.ro, accessed 11th August 2023.

1383 'Expanding FAIR solutions across EOSC', https://fair-impact.eu, accessed 11th August 2023, and https://uefiscdi.gov.ro/fair-impact, accessed 11th August 2023.

1384 Open Universal Science, https://opusproject.eu, accessed 11th August 2023, and https://uefiscdi.gov.ro/opus, accessed 11th August 2023.

1385 GraspOS: next Generation Research Assessment to Promote Open Science, https://www.open-science.ro/proiecte, accessed 11th August 2023.

1386 Proiectul SECURE https://www.open-science.ro/stiri-si-evenimente/proiectul-secure-sustainable-careers-for-research-empowerment, accessed 11th August 2023.

Daniel FODOREAN, Claudia Violeta POP, Ovidiu Aurel POP, Adrian DINESCU - Universitatea Tehnica din Cluj Napoca (Commissioned by the Authority for the Digitalization of Romani). Analysis report on the state of development of open science initiatives at the national level. June 2021; Alexandru Coman; Alexandru Cîtea; Sabin C. Buraga. Towards Open Source/Data in the Context of Higher Education: Pragmatic Case Studies Deployed in Romania. Conference Paper, May 2016 (Conference: IFIP International Conference on Open Source Systems DOI: 10.1007/978-3-319-39225-7_15.

1388 Estrategia Nacional de Ciencia Abierta (ENCA) 2023 – 2027 (Ministerio de Ciencia e Innovación) https://www.ciencia.gob.es/InfoGeneralPortal/documento/c30b29d7-abac-4b31-9156-809927b5ee49, accessed 11th August 2023.

1388 Law 17/2022 https://www.boe.es/buscar/act.php?id=BOE-A-2022-14581, accessed 11th August 2023.

1389 Law 17/2022 (n.d.) https://www.boe.es/buscar/act.php?id=BOE-A-2022-14581 accessed 7th August 2023.

1390 Ley Orgánica 2/2023, de 22 de marzo, del Sistema Universitario, Boletín Oficial del Estado (BOE) (22nd March 2023) https://www.boe.es/buscar/act.php?id=BOE-A-2023-7500, accessed 11th August 2023.

1391 Estrategia Española de Ciencia, Tecnología e Innovación 2021-2027 (Ministerio de Ciencia e Innovación) https://www.ciencia.gob.es/Estrategias-y-Planes/Estrategias/Estrategia-Espanola-de-Ciencia-Tecnologia-e-Innovacion-2021-2027.html;jsessionid=3EA11F416B3A615FADDE379ACA197B28.1, accessed 11th August 2023.

1392 Plan Estatal de Investigación Científica y Técnica y de Innovación (PEICTI) (Ministerio de Ciencia e Innovación) https://www.ciencia.gob.es/Estrategias-y-Planes/Planes-y-programmeas/PEICTI.html, accessed 11th August 2023.

funding agencies (State Research Agency, AEI, and Carlos III Health Institute, ISCIII), evaluation agencies (National Agency for Quality Assessment and Accreditation, ANECA), universities, and public research organisations (OPIs). It should also be duly noted that the previously referenced Law 17/2022230, includes relevant provisions asking researchers to maintain sufficient IPRs to comply with OA requirements.

Additionally, the recent deployment of the strategic project for economic recovery and transformation (PERTE) "New Language Economy," which includes initiatives to strengthen Spanish science and invest in artificial intelligence with a focus on multilingualism, reflects the Spanish government's commitment to measures that aim to eliminate barriers to public access to science.

This commitment is also evident in other measures, such as the implementation of the Open Government Plan, with the creation of the Data Office to promote data sharing and use across all productive sectors; the transposition of EU Directive 2019/1024 on open data and the reuse of public sector information; and the National Statistical Plan 2021-2024, which includes increasing the exploitation of administrative records and establishing a common data architecture from various administrative records.

OA involves providing free online access to scientific literature under licenses that allow use and exploitation by researchers, administrations, companies, and the public without economic, legal, or technological barriers. OA enhances the transparency of the scientific process, improves access to knowledge, facilitates the dissemination of science to the public, and empowers society to tackle the challenges of the 21st century.

Spain has a policy of open access to scientific publications established in Law 14/2011 of 1 June 2011 on Science, Technology, and Innovation1393. Article 37 ("Open Science") establishes that researchers have an obligation to deposit scientific articles, data, codes, and methods produced within publicly funded projects in institutional or thematic open access repositories and encourages open participation in civil society scientific activities. Furthermore, Article 12 ("Promotion of Open Science and Citizen Science,") of the Organic Law 2/2023 of 22 March 2023, on the University System (LOSU) reinforces the mandate for open deposit of research results in the university context and highlights institutional repositories as key tools for compliance.

So far, evaluations of compliance with the mandate in the 2011 law have shown a low level of compliance, mostly due to a lack of coordination among key decision-makers and the obligations contractually undertaken with scientific publishers. Both issues have been addressed in the amendments introduced by Law 17/2022 of 5 September 2022, which obliges researchers from the public sector or whose research activity is primarily funded with public funds and choose to disseminate their research results in scientific publications to deposit a copy of the accepted final version of their papers, together with related datasets, in institutional or thematic open access repositories at the time of publication.

1393 Law 14/2011 of 1 June 2011 on Science, Technology, and Innovation, Boletín Oficial del Estado (BOE) (1st June 2011) https://www.boe.es/buscar/act.php?id=BOE-A-2011-9617, accessed 11th August 2023.

Article 37 also outlines the following guidelines on open access dissemination: (1) public agents within the Spanish System of Science, Technology, and Innovation should actively promote the establishment of repositories, whether their own or shared, to provide open access s to publications by their research staff. They should also develop systems to connect with similar initiatives at the national and international levels; (2) research personnel whose projects are primarily funded by the General State Budget are required to make the electronic version of accepted papers publicly accessible in open access repositories within the relevant field of knowledge or institutional open access repositories. The deposit should occur as soon as possible, ideally within 12 months from the official date of publication; (3) deposited copies should be used by Public Administrations during their evaluation processes; (4) the Ministry of Science and Innovation should facilitate centralised access to the repositories and establish connections with similar national and international initiatives to enhance access and collaboration; (5) The Guidelines are without prejudice to any pre-existing agreements that attributed or transferred publication rights to third parties. Additionally, they will not apply in cases where research, development and innovation results are eligible for IPRs protection.

### 1.1.4. **Analysis of the EU copyright framework vis-à-vis the EU Open Science goals**

The EU copyright *acquis* features fourteen Directives and two Regulations, harmonising several aspects of the regulation of copyright and related rights[1394].

- Council Directive 93/83/EEC on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable transmission[1395] (SCD),
- Directive 96/9/EC on the legal protection of databases[1396] (Database),
- Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society[1397] (ISD),
- Directive 2001/84/EC on the resale right for the benefit of the author of an original work of art[1398] (Resale),
- Directive 2004/48/EC on the enforcement of intellectual property rights[1399] (IPRED),
- Directive 2006/115/EC on rental rights and lending rights and on certain rights related to copyright in the field of intellectual property[1400] (RLD),
- Directive 2009/24/EC on the legal protection of computer programmes[1401] (Software),

1394 See 'The EU Copyright Legislation | Shaping Europe's Digital Future' (European Commission, 4 May 2023) <https://digital-strategy.ec.europa.eu/en/policies/copyright-legislation> accessed 20 July 2023.

1395 Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission [1993] OJ L 248/15.

1396 See (n 5). Directive 96/9/EC.

1397 See (n 6). Directive 2001/29/EC.

1398 Directive 2001/84/EC of the European Parliament and of the Council of 27 September 2001 on the resale right for the benefit of the author of an original work of art [2001] OJ L 272/32.

1399 Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/45.

1400 See (n 7). Directive 2006/115/EC.

1401 See (n 4). Directive 2009/24/EC.

- Directive 2011/77/EU amending Directive 2006/116/EC on the term of protection of copyright and certain related rights[1402] (Term Directive),

- Directive 2012/28/EU on certain permitted uses of orphan works[1403] (OWD),

- Directive 2014/26/EU on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market[1404] (CMOD),

- Directive (EU) 2017/1564 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled[1405] (Marrakesh Directive),

- Regulation (EU) 2017/1563 on the cross-border exchange between the EU and third countries of accessible format copies of certain works and other subject matter protected by copyright and related rights[1406] (Marrakesh Regulation),

- Regulation (EU) 2017/1128 on cross-border portability of online content services in the internal market[1407] (Portability Regulation),

- Directive 2019/789 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmission of television and radio programmes[1408] (SCD II),

- Directive (EU) 2019/790 on copyright and related rights in the Digital Single Market[1409] (CDSMD).

#### 1.1.4.1. ENABLERS OF OPEN SCIENCE

Looking at EU Directives and Regulations and the CJEU case law, this Section analyses the most relevant provisions and decisions that may positively impact access and reuse of research materials and thus for the fulfilment of OS goals. On this basis, the following Section lays down a comprehensive analysis of national implementations to assess the level of harmonisation of the selected EU provisions across the EU and evaluate the degree of flexibility offered by each Member State's copyright law vis-à-vis OS principles and objectives.

The following pages will identify and comment upon E&Ls directed to allow access and reuse of software (i) and databases (ii), research-related E&Ls such as those for text and data

1402 Directive 2011/77/EU of the European Parliament and of the Council of 27 September 2011 amending Directive 2006/116/EC on the term of protection of copyright and certain related rights [2011] OJ L 265/1.

1403 Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works [2012] OJ L 299/5.

1404 Directive 2014/26/EU of the European Parliament and of the Council of 26 February 2014 on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market [2014] OJ L 84/72.

1405 Directive (EU) 2017/1564 of the European Parliament and of the Council of 13 September 2017 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled and amending Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society [2017] OJ L 242/6.

1406 Regulation (EU) 2017/1563 of the European Parliament and of the Council of 13 September 2017 on the cross-border exchange between the Union and third countries of accessible format copies of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled [2017] OJ L 242/1.

1407 Regulation (EU) 2017/1128 of the European Parliament and of the Council of 14 June 2017 on cross-border portability of online content services in the internal market [2017] OJ L 168/1.

1408 Directive (EU) 2019/789 of the European Parliament and of the Council of 17 April 2019 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmemes, and amending Council Directive 93/83/EEC [2019] OJ L130/82.

1409 See (n 8). Directive (EU) 2019/790.

mining and illustration for teaching and research (iii), general E&Ls complementary to research-specific E&Ls, such as temporary reproduction, private study, quotation, preservation of cultural heritage (iv), licensing schemes (v) and public domain rules (vi), complemented by an analysis of related CJEU case law.

### i. Access to and reuse of computer programmes

The Software Directive equates computer programmes to literary works for the purpose of copyright protection as long as they constitute original intellectual creations of their author[1410]. The protection applies not only to the software itself but also to preparatory design materials[1411]. Yet, the Directive clearly excludes from its scope the ideas and principles that underlie any element of a computer programme, including those that underlie its interfaces, which are in line with the idea-expression dichotomy[1412].

Article 4(1) Software grants to the software author the exclusive rights to do or authorise (a) the permanent or temporary reproduction of a computer programme by any means and in any form, in part or in whole, including when required for loading, displaying, running, transmission or storage of the computer programme; (b) the translation, adaptation, arrangement and any other alteration of a computer programme and the reproduction of the results thereof, without prejudice to the rights of the person who alters the programme; (c) any form of distribution to the public, including the rental, of the original computer programme or of copies thereof.

E&Ls to such exclusive rights are regulated by Articles 5 and 6 Software.

Article 5(1) Software allows the lawful acquirer to perform all restricted acts covered by the exclusive rights of the author of a computer programme (permanent or temporary reproduction, translation, adaptation, arrangement and any other alteration and the reproduction thereof, any form of distribution, including the rental), without the authorisation of the rightsholder, when they are necessary for the use of the programme in accordance with its intended purpose, including for error correction. Lawful users are also allowed to make a back-up copy of the programme, and this privilege cannot be excluded by contract in so far as it is necessary for the use of the software (Article 5(2) Software). Similarly, Article 5(3) Software allows the person having a right to use a copy of the programme to observe, study or test its functioning in order to determine the ideas and principles which underlie any element of the programme; if this is done while performing any of the acts of loading, displaying, running, transmitting, or storing it. Any contractual provision contrary to this shall be null and void (Article 8 Software).

1410 See: Directive 2009/24/EC (n 4), Art. 1 paras. (1), (3).

1411 Ibid, Art. 1(1).

1412 See: Agreement on the Trade-Related Aspects of Intellectual Property Rights, Art. 9(2).

Article 6 Software allows the licensee or another person having the right to use the programme, or another person acting on their behalf, to reproduce and translate the programme when this is indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that the information has not previously been readily available and those acts are confined to the parts of the original programme which are necessary in order to achieve interoperability. The information so obtained cannot be used for other purposes, nor can it be given to others, except when necessary for the interoperability of the independently created programme, nor used for the development, production, or marketing of a programme substantially similar in its expression, or for any other act which infringes copyright. The acts permitted by this exception, according to Article 6(3), shall be performed in accordance with the three-step-test, as provided by the Berne Convention. Any contractual provision contrary to this shall be null and void (Article 8 Software).

It is worth mentioning that the right of distribution (but not the rental right) is subject to exhaustion after the first authorised sale of the programme within the territory of the EU (Article 4(2) Software).

The CJEU had the opportunity to intervene in the interpretation of Articles 5(1)-(2) and 6 Software multiple times. These judgements are paramount in clarifying the room left for lawful users to access and make copies of computer programmes vis-à-vis rightsholders, which, inter alia, can also be useful to stimulate reuse for research goals.

In *UsedSoft v Oracle*, the notion of "lawful acquirer" was also extended to cover the second-hand acquirer of software who benefitted from the operation of the principle of exhaustion under Article 4(2) Software[1413]. In this sense, the CJEU denied that the concept related only to a subject authorised under a license agreement concluded directly with the copyright holder to use the computer programme, arguing that this conclusion would allow rightsholders to prevent the effective use of any used copy in respect of which their rights have been exhausted[1414]. Consequently, "in the event of a resale of the copy of the computer programme by the first acquirer, the new acquirer will be able, in accordance with Article 5(1) of Directive 2009/24, to download onto his computer the copy sold to him by the first acquirer. Such a download must be regarded as a reproduction of a computer programme that is necessary to enable the new acquirer to use the programme in accordance with its intended purpose"[1415].

1413 Judgment of 3 July 2012, UsedSoft v Oracle International Corp, C-128/11, EU:C:2012:407, para 80.

1414 Ibid, para 82-83.

1415 Ibid, para 81.

This decision is crucial as it underlines that "the downloading of a copy of a computer programme and the conclusion of a user license agreement for that copy form an indivisible hole"; those "two operations must therefore be examined as a whole for the purpose of their legal classification"[1416]. From this perspective, as consumers are provided with an exclusive and non-transferable user right, lasting for an unlimited period, the license in question concretely amounts to a "sale" falling under the scope of Article 4(2) Software. According to such view, whether the copies are tangible or intangible does not gain any relevance to determine the applicability of Article 4(2) Software. It follows that, with sole regard to copyrighted computer programmes, "digital exhaustion" applies. This may create disparities for the purpose of reuse (also for research-related goals) among copyrighted works that fall under the InfoSoc Directive and copyrighted computer programmes in relation to which digital exhaustion comes into play[1417].

Following up on this, in *Ranks and Vasiļevičs*[1418], the Court excluded the application of the *UsedSoft* doctrine and of the principle of exhaustion to a copy of a software programme duplicated and thus stored on a non-original medium, even if the original material medium has been damaged. The CJEU grounded this conclusion on a detailed interpretation of Articles 5(1) and 5(2) Software. With regard to Article 5(2) Software, the Court held that the making of a backup copy is subject to two conditions, which are that the copy must (i) be made by a person having a right to use that programme and (ii) be necessary for that use[1419]. This provision must be interpreted strictly[1420], which also implies that the copy "may be made and used only to meet the sole needs of the person having the right to use that programme and that, accordingly, that person cannot — even though he may have damaged, destroyed or lost the original material medium — use that copy in order to resell that programme to a third party"[1421].

With regard to Article 5(1) Software, the Court stated that the situation of the lawful acquirer of a copy of a computer programme stored on a material medium that has been damaged, destroyed or lost and that of the lawful acquirer of a copy of a computer programme purchased and downloaded on the internet are comparable with regard to the rule of exhaustion of the distribution right and the exclusive reproduction right granted to the rightsholder[1422]. Still, the initial acquisition of a copy of a computer programme that resells it must make any copy in his possession unusable at the time of its resale so as not to infringe the rightsholder's exclusive right of reproduction[1423]. It follows that "although the initial acquirer of a copy of a computer programme accompanied by an unlimited user licence is entitled to resell that copy and his licence to a new acquirer, he may not, however, in the case where the original material medium of the copy that was initially delivered to him has been damaged, destroyed or lost, provide his back-up copy of that programme to that new acquirer without the authorisation of the rightsholder"[1424].

1416 Wolk, S, "EU court rules back that back-up copies cannot be resold", Kluwer Copyright Blog, 20 October 2016, available here: https://copyrightblog.kluweriplaw.com/2016/10/20/eu-court-rules-that-back-up-copies-cannot-be-resold/, accessed 11th August 2023, 2.

1417 Extensively, Sganga, C, "A Plea for Digital Exhaustion in EU Copyright Law", 9 (2018) JIPITEC 211 para 1; Sganga, C, "Digital Exhaustion after Tom Kabinet: A Non exhausted Debate" (June 15, 2020), in T Synodinou et al (eds.), EU Internet Law in the Digital Single Market, Springer, 2021, Available at SSRN: https://ssrn.com/abstract=3803940, accessed 11th August 2023.

1418 Judgment of 12 October 2016, Ranks and Vasiļevičs, C-166/15, EU:C:2015:762.

1419 Ibid, para 41.

1420 Ibid, para 42.

1421 Ibid, para 43.

1422 Ibid, para 52.

1423 Ibid, para 55.

1424 Ibid, para 57.

More details on the interpretation of Article 5 Software came from *Top System SA v Belgian State*[1425]. The questions raised to the CJEU were whether Article 5(1) Software had to be interpreted as permitting the lawful purchaser of a computer programme to decompile all or part of that programme where this was necessary to enable the correction of errors affecting the operation of the programme, including where this correction consisted in disabling a function that was affecting the proper operation of the application of which the programme formed a part. Should there be an affirmative answer, the referring court asked whether the conditions for decompilation set by Article 6 Software had to be satisfied. While the Court noted that Article 5(1) allows to perform all restricted acts under Article 4(a) and (b) Software, including reproduction and translation, for the normal use of the programme and the correction of errors and that this list does not make explicit reference to decompilation[1426], the latter activity requires, in fact, the reproduction of the code and its translation (as also specified in Article 6 Software)[1427].

From this, it follows that Article 5(1) Software allows the lawful purchaser of a programme to decompile it in order to correct errors affecting its functioning[1428]. Article 6 Software, in fact, cannot be interpreted as meaning that the only permitted decompilation of a computer programme is the one effected for interoperability purposes[1429]. While it is true that, read in light of Recitals 19 and 20, Article 6(1)(b) and (c) Software makes clear that the EU legislature "intended to limit the scope of the exception (…) to circumstances in which the interoperability of an independently created programme with other programmes cannot be carried out by any other means"[1430], and this is also supported by Article 6(2)-(3) Software, which prohibits the use of information obtained by decompilation for other goals, it is also true that it cannot be inferred from the provision that the EU legislature wanted to exclude any possible reproduction/translation of the code other than for interoperability purposes[1431]. Since Articles 5 and 6 Software have different purposes, they can operate independently without excluding each other. From this, it also derives that the requirements provided by Article 6 Software are not applicable to the exception laid down in Article 5(1) Software[1432], so the lawful purchaser who wishes to decompile a programme in order to correct errors affecting the operation thereof is not required to satisfy the requirements laid down in Article 6. However, and again in line with Article 5(1) Software, which allows errors to be corrected subject to specific contractual provisions[1433], lawful users are entitled to carry out such decompilation only to the extent necessary to affect that correction and in compliance, where appropriate, with the conditions laid down in the contract with the rightsholder[1434].

The CJEU also took the opportunity to rule that the notion of "error" under Article 5(1) Software, absent a reference to Member States' laws, should be defined at the EU level. In the silence of the Directive, this implies interpreting it in accordance with its usual meaning in everyday language, as "a defect affecting a computer programme which is the cause of the malfunctioning of that programme"[1435], in accordance with its intended purpose.

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1425 Judgment of 6 October 2021, Top System SA v État belge, C-13/20, EU:C:2021:811

1426 Ibid, para 33.

1427 Ibid, para 40.

1428 Ibid, para 42.

1429 Ibid, para 43.

1430 Ibid, para 46.

1431 Ibid, para 46-48.

1432 Ibid, para 55.

1433 Ibid, para 64.

1434 The CJEU notes, however, that " under recital 18 of Directive 91/250, neither the acts of loading and running necessary for the use of the copy of a programme that has been

lawfully acquired nor the correction of errors affecting the operation of that programme may be prohibited by contract (…) Accordingly, Article 5(1) of Directive 91/250, read in conjunction with recital 18 thereof, must be understood as meaning that the parties cannot prohibit any possibility of correcting those errors by contractual means." (ibidem, para 65-66).

1435 Ibid, para 59.

Article 5(3) Software, which allows the lawful acquirer to observe, study or test the functioning of that programme in order to determine the ideas and principles that underlie any element of the software, has been subject to interpretation in *SAS Institute Inc v World Programmeming Ltd*[1436]*.* In this decision, the CJEU stated that Article 5(3) Software also applies in case the acquirer carries out acts covered by the license with a purpose that goes beyond the contractual framework. This is not only because Article 9 Software declares the provision mandatory, and thus any contrary contractual provision shall be deemed null and void[1437], but also because Article 5(3) Software has the aim to ensure that the ideas and principles that underlie any element of a computer programme are not protected by the owner of the copyright by means of a licensing agreement[1438]. As a consequence, the determination of those ideas and principles may be carried out within the framework of the acts permitted by the licence, no matter whether the latter had any purpose limitation[1439]. This, however, is on condition that the person does not infringe the exclusive rights of the owner in that programme[1440].

This decision is particularly relevant for the interface between copyright and (re)use of software and also for research aims, as it curtails the reach of exclusive rights to allow the lawful acquirer of a license for the use of a computer programme "to observe and test a programme in order to reproduce its functionality in a second programme"[1441], provided that they do not access the source code. These considerations are reinforced by a narrow reading of the scope of copyright, where the Court specifies that "the functionality of a computer programme, the programming language, and the format of data files […] do not constitute a form of expression […] and therefore do not enjoy copyright protection"[1442].

The CJEU has never intervened directly on Article 6(4) InfoSoc.

**Conclusions and takeaways for Open Science purposes**

Articles 5 and 6 of the Software Directive facilitate access to and use of computer programmes by the lawful acquirer and the persons authorised to use the computer programme. However, when tested against Open Science goals, the two provisions reveal all their inner limitations. In fact, the E&Ls provided herein are addressed to a narrowly defined group of beneficiaries and neither aim nor attempt to enable the reuse of computer programmes for any purpose beyond the normal use of the programme or the need to achieve interoperability.

1436 Judgment of 2 May 2012, SAS Institute, C-406/10, EU:C:2012:259.

1437 Ibid, para 53.

1438 Ibid, para 51.

1439 Ibid, para 55.

1440 Ibid, para 59.

1441 Ibid, para 61.

1442 Barker, E, Harding, I, 'Copyright, the ideas/expression dichotomy and harmonisation: digging deeper into SAS', JIPLP, 2012, Vol 7, No 9, 674.

In addition to that, there are many cases where the narrow boundaries of the exceptions under the Software Directive were reinstated by the CJEU, further curtailing the scope and effectiveness of the prerogatives entitled to lawful users of computer programmes. The outcome of *Ranks and Vasiļevičs* is emblematic in this respect, as the CJEU conditions the possibility of making backup copies to the circumstance that the original medium on which the copy is stored has not deteriorated, gone lost or broken. Rather, the holding in *SAS Institute* is of little relevance for underlining the non-overridable character of Article 5(3) Software. Through this exception, lawful users of computer programmes are allowed to study their inner functioning in order to understand the underlying ideas and principles thereof. This is useful to prevent rightsholders from discouraging individual research activities conducted on lawfully purchased computer programmes, but it cannot serve to foster more structured teamwork. In fact, data cannot be shared, and there is no significant prerogative, apart from consultation, for the benefit of lawful users.

### ii. Access to and reuse of databases

According to Article 1 of Directive 96/9/EEC, “database” shall mean a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means, with the exclusion of computer programmes used in its making or operation. Databases are protected via copyright (Article 5) and/or *sui generis* right (Article 7).

Copyright protection is granted over databases “which, by reason of the selection of arrangement of their content, constitute the author’s own intellectual creation”; it does not extend to their contents, and it is without prejudice to any rights subsisting therein compiled within the database (Article 3). Database authors have the exclusive rights to carry out or authorise the (a) temporary or permanent reproduction by any means and in any form, in whole or in part; (b) translation, adaptation, arrangement and any other alteration; (c) any form of distribution to the public of the database or of copies thereof; (d) any communication, display or performance to the public; (e) any reproduction, distribution, communication, display or performance to the public of the results of the acts referred to in (b) (Article 5).

To avoid potential abuses, Article 6(1) Database introduces a mandatory exception, not overridable by contract (Article 15 Database), in favour of lawful users of a database or of a copy thereof, allowing the performance of any of the acts covered by exclusive rights of the database author for the purposes of access to and normal use of the contents of the database. When the lawful user is authorised to use only part of the database, the provision applies only to that part. The Directive leaves the Member States free to implement three additional optional E&Ls enshrined in Article 6(2) Database, respectively, for (a) private copies of non-electronic databases, (b) uses for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved; (c) uses for the purposes of public security or for the purposes of an administrative or judicial procedure. National legislators may also freely decide to extend their general copyright exceptions to the rights granted under Article 5 Database (Article 6(2) Database). All E&Ls are subject to the three-step test. Whereas Article 6(2)(b) Database sets an exception that aims to facilitate scientific research, the optional nature and uncertain connection with the correspondent InfoSoc exception hamper its cogency and create legal uncertainty. Makers of databases which show that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents may prevent extraction and/or reutilisation of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database (Article 7(1) Database). Extraction comprises the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form. Reutilisation covers any form of making all or a substantial part of the contents of a database available to the public by distribution, renting, and online or other forms of transmission. Repeated and systematic extractions and/or reutilisation of insubstantial parts of the contents of the base are also covered by the provision, for they are deemed to unreasonably prejudice the legitimate interests of the maker. Also, Article 7 Database shall be deemed without prejudice to pre-existing rights over the content of the base.

Three types of flexibilities are introduced to balance the sui generis right against conflicting interests, the first two being mandatory implementation by Member States. Article 7(2)(b) Database provides the exhaustion of the right to control resales after the first sale of a copy of a database within the Community. Article 8(1) Database allows lawful users to extract and/or re-utilise insubstantial parts of the database content, evaluated qualitatively and/or quantitatively, for any purpose whatsoever. When the lawful user is authorised to use only part of the database, the provision applies only to that part. Lawful users should not perform acts that conflict with the normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database (Article 8(2) Database), nor can they cause prejudice to the holder of a copyright or related right on works or subject matter contained therein (Article 8(3) Database). However, numerous drawbacks can be found within the formulation of these flexibilities, which are articulated in a narrow manner. In fact, Article 7(4) Database specifies that sui generis rights can apply in coexistence with other copyright or exclusive rights that may cover database contents, thus leaving room for overlaps of IPRs. Moreover, within the next paragraph, Article 7(5) Database, it is stated that the repeated and systematic extraction and reutilisation of insubstantial parts of a database can infringe sui generis rights if it can be demonstrated that the legitimate interests of database makers have been prejudiced and the act goes beyond normal exploitation of the contents thereof. Articles 8(2) and (3) are articulated in the same way, thus prohibiting acts that may prejudice the interests of copyright holders and holders of related rights with regard to database contents.

Article 9 Database introduces a list of E&Ls fraught with a narrow scope. According to the text of this provision, Member States can introduce rules exempting from infringement the unauthorised act of extraction and reutilisation of substantial parts of non-electronic database contents also for the purpose, inter alia, of permitting the illustration of such contents for teaching and scientific research purposes. In line with Recital 50, this provision should be intended for non-commercial purposes only and interpreted strictly[1443].

The CJEU has tackled many key aspects with regard to the interpretation of provisions embodied in the Database Directive[1444].

With regard to the definition of "database" for the purpose of Article 1(2) Database, it must be recalled that the CJEU first touched on this point in *Fixtures Marketing Ltd v OPAP*, addressing the infringement nature of the unauthorised use of fixture lists of professional football matches[1445]. In this respect, the Court deemed the circumstance under which the database contents come from external sources irrelevant. To qualify a data collection as a "database" under Article 1(2) Database, it plays no role in the circumstance that the database can qualify for copyright protection under Article 3 or for sui generis protection under Article 7 of the Directive[1446]. In particular, the CJEU affirmed that the concept of "database" under the Database Directive must be intended broadly, also evaluating the intention of the EU legislator first drawing the scope of the term. In this sense, for the purpose of the Directive, the term "database" should be "unencumbered by considerations of a formal, technical or material nature"[1447]. According to the text of Article 1(2) Database, a database can include a variegated array of materials, regardless of their nature and the size of the collection itself[1448]. In this sense, the CJEU stressed the importance of reading in light of its function, which is storing and processing information[1449]. In particular, a database amounts to a "collection of independent materials" that can be separated without affecting the value and nature of the data included thereof, "systematically and methodically arranged and individually accessible in one way or another"[1450]. In addition, there must be a fixed base, thanks to which data collections are arranged, allowing the retrieval of independent data or materials contained in it[1451].

In *Fixtures Marketing Ltd v Oy Veikkaus Ab*[1452]*, Fixture Marketing Ltd v OPAP* and *Fixtures Marketing Ltd v Svenska Spel AB*[1453]*,* the contours of Article 7 Database, with specific regard to the concept of "**substantial investment"**, were progressively delineated by the CJEU.

1443 Triaille, J-P, and Strowel, A, 'Le droit d'auteur, du logiciel au multimédia: droit belge, droit européen, droit compare' (Kluwer 1997), p.287.

1444 Extensively, Sganga, C, "Sui Generis Protection of Non-Creative Databases" in Bonadio, E, and Goold, P, (eds), The Cambridge Handbook of Investment-Driven Intellectual Property (Cambridge University Press 2023), 27-53.

1445 Case C-444/02 Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP) [2004] ECR I-10549.

1446 Ibid, para 26.

1447 Ibid, para 20.

1448 Ibid, para 24.

1449 Ibid, para 27.

1450 Ibid, para 29.

1451 Ibid, para 30.

1452 Case C-46/02 Fixtures Marketing Ltd v Oy Veikkaus Ab [2004] ECR I-10365.

1453 C-338/02 Fixtures Marketing Ltd v Svenska Spel AB [2004] ECR I-10497.

*Fixtures Marketing Ltd v Oy Veikkaus Ab*, the main question submitted to the CJEU was whether the term "obtaining" within the meaning of Article 7 Database may also cover some investment leading to the very same creation of database contents. In this regard, the CJEU went through an analysis of the scope of sui generis rights. To do so, the Court referred to Recitals 9, 10, 12 and 39 Database, which shed light on the purpose of sui generis rights as tools "to safeguard the results of the financial and professional investments made in obtaining and collecting the contents of a database"[1454]. As the protection over databases serves to incentivise data storage and processing of information, the definition of "obtaining" naturally excludes the investment made to create it. Recital 19 was also called into question for excluding from sui generis protection compilations of musical performances and recordings fixed in a CD due to the lack of substantial investment. The CJEU interpreted this as a confirmation of the fact that investment in the obtaining of database contents plays no role in determining whether such contents can qualify for sui generis protection[1455]. To determine whether the investment has been substantial, attention must be paid to the resources "used to seek out existing independent materials and collect them in the database, and not to the resources used for the creation as such of independent materials"[1456]. Moreover, the notion of "investment" should also cover the assessment of unquantifiable aspects, such as the intellectual and human effort spent to put the dataset together[1457]. In this sense, the Court held that even if most of the investment was made to create the dataset, sui generis protection can only be granted if it can be demonstrated that there has been an additional substantial investment in the obtaining, verifying and presenting of the contents[1458].

The same approach has been endorsed in *British Horseracing Board (BHB) Ltd v William Hill*[1459]*.* Apart from replicating the reasoning of *Fixtures Marketing Ltd v Oy Veikkaus Ab*, this judgement has the autonomous merit of specifically addressing the notions of **"substantial" and "insubstantial" parts** for the purpose of Article 7 Database. In particular, the question underlying the case revolved around whether Article 7 applies to a situation where the reutilisation and/or extraction of database contents also involved their alteration[1460]. In this sense, the CJEU embarked on a teleological reading of Article 7 Database, looking at whether the user, by extracting and/or re-utilising "part" of database contents, caused some prejudice to the investment, intended either quantitatively or qualitatively, required for putting them together[1461]. In particular, by clarifying the notion of "substantiality" for the purpose of determining the applicability of the Article 7 Database, the Court added further clarity on the concepts of "qualitatively" and "quantitatively" substantial parts. Accordingly, a "quantitatively substantial part" should be intended to refer to the volume of data extracted and/or reutilised by way of comparison with the database in its entirety, also drawing attention to the resources deployed to collect it[1462]. Rather, a "qualitatively substantial part" should be linked with the human, technical or financial investment deployed to obtain, verify, and present the overall dataset, regardless of the size and nature of the data contained therein[1463]. In addition to that, the CJEU clarified the scope of Article 7(5) Database. According to the Court, sui generis rights might have been infringed even if acts are not singularly but cumulatively relevant as to cause detriment to the investment of the database maker[1464].

1454 Fixtures Marketing Ltd v Oy Veikkaus Ab, para 35.

1455 Ibid, para 39.

1456 Ibid, para 44.

1457 Ibid, para 38.

1458 Ibid, paras 39-40.

1459 C-203/02 The British Horseracing Board Ltd and Others v William Hill Organization Ltd [2004] ECR I-10415.

1460 Ibid, para 68.

1461 Ibid, para 69.

1462 Ibid, para 70.

1463 Ibid, paras. 70-71, 78-79.

1464 Ibid, para 86.

Contrary to the impact on the rightsholder's economic interests, whether the user extracted or reutilised part of the dataset to put a new dataset together does not gain any relevance[1465].

In 2009, the CJEU in *Apis-Hristovich v Lacorda*[1466] held that whether the contents reutilised or extracted are publicly accessible is paramount in establishing the substantial character of the investment within the meaning of Article 7(1) Database. However, the Court added that the public accessibility of the contents reutilised does not suffice to exclude infringement[1467]. Moreover, it was specified that if the contents are not copyrightable, there is no need for national courts to verify satisfaction of the protection requirements listed in Article 7(1) Database and whether there has been an infringement[1468].

The CJEU also detailed **the concepts of "extraction" and "reutilisation"**. In the aforementioned *BHB* case, it addressed whether the source of the data reutilised or extracted is paramount for the infringement test under Article 7(1) Database. In particular, the Court was called to determine whether the protection offered under Article 7 also extends to those data that, apart from being included in a sui generis-protected database, are also available and takeable from other sources. In this regard, the CJEU pointed to the rationale of the provision as conceptualised by the EU legislator. Accordingly, the acts of "reutilisation" and "extraction" should be intended with a very broad scope, as to comprise every user's act that is capable of causing some economic detriment to the database maker "by any means or in any form", resulting in "any form of making available to the public"[1469]. In this sense, the notions of "reutilisation" and "extraction" are so ample as to cover every unauthorised act that is able to deprive the database maker of the revenue that would allow him to recover from the expenditure made to build up the dataset[1470]. In this respect, the purpose of the act undertaken by the user is irrelevant[1471]. In this respect, the notions of "reutilisation" and "extraction" should be understood as sheltering under the umbrella of Article 7 Database all acts that, by taking the database contents from a third party or an alternative source, "indirectly" affect the investment made by the database maker[1472].

1465 Ibid, para 87.

1466 Case C-545/07 Apis-Hristovich EOOD v Lakorda AD (2009) ECR I-1627.

1467 Ibid, paras 66-68.

1468 Ibid, paras 69-70.

1469 The British Horseracing Board Ltd and Others v William Hill Organization Ltd, para 51.

1470 Ibid.

1471 Ibid, paras 47-48.

1472 Ibid, paras 53-54.

In *BHB*, the CJEU made explicit that the act of consultation of a protected database cannot be held as infringement[1473], while, conversely, every unauthorised act of making available and transferring database contents from one medium to another falls under Article 7 and thus amounts to an infringement[1474]. The Court further went deeper on these issues with *Directmedia Publishing GmbH v Albert-Ludwigs-Universitat Freiburg*[1475]*.* In this landmark judgement, the CJEU was asked whether the concept of "extraction" should also cover the transferal of database contents from one protected to another by a person who first consulted the original database and then selected the contents to transfer. By answering this question, the Court held that to serve its function of preventing free-riding from competitors, whether there has been an "extraction" should also be assessed concerning the modalities of the act undertaken by the user[1476]. It makes no difference whether the user manually or technically transferred database contents, as well as whether the volume of data extracted is substantial or the purpose of the act[1477]. In fact, the Directive aims to provide rightsholders with a high level of protection, unveiling the intention to protect free competition, as inferred from the text of Article 16(3) and the Recital 46 Database[1478]. Noticeably, relevant hints about the nature of the act of "transferal" for the purpose of Article 7 Database were inserted by the CJEU in *Apis-Hristovich*. In this case, the CJEU held that the difference between "temporary transfer" and "permanent transfer" has an impact on the level of compensation[1479].

The CJEU once again addressed the scope of Article 7 Database in *Innoweb BV v Wegener ICT Media BV et al[1480].* Specifically, in this decision, the Court focused on " reutilisation" to apply it to the activities run by meta-search engines. It referred to the broad interpretation of "reutilisation" embraced in *Directmedia*[1481]*.* While analysing the activities of meta-search engines, the Court held that the same was eager to provide access to many database contents so that users of the original database no longer need to look at it and, as a consequence, database makers lose some revenues. In line with that, the activity run by meta-search engines cannot be associated with one of consultation, excluded from the scope of Article 7 Database, while the same can rather be assimilated with an act of putting one database together, but without the effort to seek for the data to put in it[1482]. Thus, the CJEU concluded that meta-search engines perform acts of "reutilisation" for making available content without authorisation and, therefore, infringe Article 7(2)(b) Database[1483].

In *Ryanair v PR Aviation*[1484]*,* the CJEU addressed key issues with regard to the interplay between freedom to license and countervailing interests in sui generis database law. Specifically, the Court was called to assess whether the Ryanair dataset could be held as a "database" within the meaning of Article 1(2) Database, albeit staying unprotected under copyright or sui generis[1485]. Then, the question submitted to the Court mainly revolved around whether access to unprotected databases could benefit from the balancing clauses enshrined in Articles 6(1), 8 and 15 Database, thus prevailing over freedom of contract.

The CJEU denied this possibility by affirming that the scope of Articles 6(1) and 8 Database is specifically directed to databases protected by copyright and sui generis rights[1486].

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1473 Ibid, para 54.

1474 Ibid, paras 58-59.

1475 Case C-304/07 Directmedia Publishing GmbH v Albert-Ludwigs-Universitat Freiburg [2008] ECR I-7565.

1476 Ibid, para 35.

1477 Ibid, paras 36-38, 39, 43.

1478 Ibid, paras 56-57.

1479 Apis-Hristovich EOOD v Lakorda AD, paras 42-44.

1480 Case C-202/12 Innoweb BV v Wegener ICT Media BV et al [2013] EU:C:2013:850.

1481 Innoweb, paras 37-38, as in BHB, para 67.

1482 Ibid, para 48.

1483 Ibid, paras 50-53.

1484 Case C-30/14, Ryanair Ltd v PR Aviation BV [2015] EU:C:2015:10.

1485 Ibid, para 29.

1486 Ibid, para 35.

Similarly, Article 15 Database, according to which the aforementioned provisions are mandatory and a contractual clause establishing the contrary is null and void, only applies in the case both Articles 6(1) and 8 Database also apply[1487]. This interpretation was held in line with the underlying rationale of the Directive and the intention of the EU legislator. This might underpin the interest in seeking copyright or sui generis protection under such a Directive, as rightsholders can reach the same or even a higher level of protection through private ordering.

The interpretation of Article 7(2) Database was brought again before the CJEU in the seminal *CV-Online Latvia v Melons* case[1488]. In this ground-breaking decision, the Court was asked whether a hyperlink directing users to a protected database in order to help them with consulting it for job advertisement purposes might fall under the notion of "reutilisation" within the meaning of Article 7(2)(b) Database. Then, the Court has also requested whether the metatags shown on a meta-search engine of this kind can be held as a "temporary transfer" of a substantial part of a protected database, thus falling under the definition of "extraction" under Article 7(2)(a) Database[1489].

The CJEU decided to address both questions altogether. In particular, it held that the two essentially amounted to establishing whether a meta-search engine specialised in searching for freely accessible database contents for the aim of making copies and indexing them in order to offer a specific job advertising service to users according to its own criteria, can be held as "extracting" or "reutilising" such contents and therefore rightsholders are entitled to prohibit them[1490]. In order to address the question, the CJEU had to clarify the scope of sui generis rights once again. In this sense, the Court recalled *Innoweb*, where it was spelt out that the scope of Article 7 is to ensure rightsholders a fair return for their investment, also contributing to the development of the information market[1491]. Going further, the Court recalled the elements that must be considered in order to assess the degree of investment: (i) the resources used to "seek out independent materials and collect them in the database"; (ii) the resources used to determine the credibility, accuracy and reliability of the information presented in the database; (iii) the means used to ensure that the database serves its function, which is to process, also methodically and systematically arranging, a large array of materials, with a view to granting individual access to single pieces of information.[1492]

1487 Ibid, paras 36-39.

1488 Case C-762/19, CV-Online Latvia SIA v Melons SIA [2021] EU:C:2021:434.

1489 Ibid, para 15.

1490 Ibid, para 20.

1491 Ibid, para 22-23, also in Innoweb BV v Wegener ICT Media BV and Wegener Mediaventions BV, paras 35-36.

1492 Ibid, paras 25-27.

Then, the Court established the most relevant principles about whether the metatags provided by the meta-search engine accused of infringing sui generis rights could be held as "reutilising" and "extracting" a substantial part of a protected database. Referring to *Innoweb*, the Court held that a specialised meta-search engine whose activity is limited to the making available of the contents already present in another protected database so users do no longer need to consult the original database undoubtedly amounts to "reutilisation" for depriving the database maker of the revenues redeeming the cost of the investment[1493]. However, the meta-search engine at stake is slightly different from the one in *Innoweb*. Contrary to that search engine, the one at stake "does not utilise the search forms of the websites on which it enables searches to be carried out and does not translate in real time the queries of its users into the criteria used by those forms"[1494]. Rather, "it regularly indexes those sites and keeps a copy on its own servers" and, by using its own search form, it enables its users to carry out searches according to the criteria which it offers, such searches being carried out among the data that have been indexed''[1495]. Despite being different from the one in *Innoweb*, it is clear that all search engines allow access to the contents of several databases simultaneously, performing acts that fall under the scope of Article 7(2)(b) Database[1496]. In particular, the meta-search engine at issue offers access to all contents of the relevant freely accessible databases online, performing an act of making available to the public "by indexing and copying the content of the websites on its own servers", the search engine at stake also transfers the contents from one medium to another[1497]. It follows that the unauthorised act of transferring all or substantial parts of database contents, also making them available to the public, falls under the definitions of "extraction" and "reutilisation" for the purpose of Article 7(1) Database, abstractly capable of subtracting revenues to the database maker. In this respect, hyperlinks are not the substance but a mere corollary of the infringing acts[1498].

Afterwards, the CJEU determined whether and to which extent the acts cited above have a material impact on the investment of the database maker. In this sense, the Court remarkably stated that "it is necessary to strike a fair balance between, on the one hand, the legitimate interest of the makers of databases in being able to redeem their substantial investment and, on the other hand, that of users and competitors of those makers in having access to the information contained in those databases and the possibility of creating innovative products based on that information".[1499]

1493 Ibid, para 32.

1494 Ibid, para 33.

1495 Ibid.

1496 Ibid, para 35, also in Innoweb (n 273), para 51.

1497 Ibid, 36.

1498 Ibid, para 37.

1499 Ibid, para 41.

In this sense, the Court highlighted that the function of the meta-search engine goes in parallel with the rationale of the Database Directive, which is to promote and provide adequate incentives for the processing and storage of information, giving a strong impulse to the information market. By classifying, indexing, and making database contents available to users according to specific criteria, data aggregators and search engines also play a relevant role in this regard, contributing to the functioning and ensuring fair competition. For this reason, the Court hinted at the necessity of balancing sui generis protection against the valuable role played by search engines and aggregators in serving the same objectives for which data collection is incentivised through reward under the Database Directive. In this sense, the Court made a relevant statement by saying that, despite the acts performed by the search engine in question falling under Article 7(1) Database, in order to establish whether the database maker can prohibit them or not, it is important to understand whether the same negatively affect the investment made in the obtaining, verification or presentation of the contents, as "they constitute a risk to the possibility of redeeming that investment through the normal operation of the database in question, which it is for the referring court to verify".[1500]

This decision is remarkable for putting a stalemate to the possibility of database makers declaring the infringement nature of the acts performed by those willing to "reutilise" and "extract" database contents for valuable purposes. Embracing a teleological and proportionality-like reading of the rationale behind the Directive, the CJEU evaluated an effect-based interpretation of the infringement test enshrined in Article 7(1) Database[1501]. Accordingly, national courts, after having determined that the acts of the alleged infringer fall under the definition of Article 7(1) Database, cannot stop there and declare the infringement. Rather, they should go ahead with the analysis and assess whether such acts, despite potentially infringing, substantially affected the investment of the database maker, encroaching on the possibility of redeeming it in an irreversible way.

**Conclusions and takeaways for Open Science purposes**

The Database Directive contains several provisions that may help achieve Open Science goals and support the activities of research organisations. Nevertheless, its balancing tools remain tainted by several shortcomings. The most relevant exceptions for teaching and research purposes – Article 6(2)(b) and Article 9(b), respectively, in the field of copyright and sui generis right – share flaws that weaken their potential, such as their optional nature, which negatively affect their degree of harmonisation, their limitation to strictly non-commercial purposes and their overridability by contract. Lawful uses under Article 8 Database may concern only insubstantial parts of their contents.

1500 Ibid, para 47.

1501 Derclaye, E, Husovec, M, 'Sui Generis Database Protection 2.0: Judicial and Legislative Reforms', LSE Legal Studies Working Paper No. 11/2022, Available at SSRN: https://ssrn.com/abstract=4138436, accessed 11th August 2023, or http://dx.doi.org/10.2139/ssrn.4138436, accessed 11th August 2023.

The interventions of the CJEU in the field further complicated the scenario. After a stream of cases which progressively enlarged the scope of the act of "reutilisation" and "extraction", thus paving the way to a broad interpretation of the infringement test under Article 7(1) Database, the CJEU has only recently started questioning the long-lasting rightsholder-oriented approach in *CV Online*. Here, the Court inserted another step in the infringement assessment, according to which, once having assessed whether the acts performed by the alleged infringer can be put under the umbrella of Article 7(1) Database, national courts must concretely evaluate whether the same caused some irreversible detriment to the investment of the database maker, zeroing the possibilities of recovering from that. This contributes to increasing the threshold for the infringement test, thus potentially encouraging acts of reutilisation and extraction which, despite formally falling under the broad scope of Article 7 Database, cause no irreversible harm to database makers yet serve the purpose of incentivising innovation in the digital platform market.

Moreover, it must be noted that *Ryanair* is un-overruled in the EU. Accordingly, unprotected and non-creative databases risk being de-facto "propertised" through contract rules establishing data ownership, without the need to resort to sui generis protection and therefore frustrating the purpose of the Directive overall, as well as of its balancing clauses, E&Ls for research purposes included. In fact, in the light of *Ryanair*, the lawful-use rights enshrined in Article 6 and the E&Ls for research and teaching that Member States are free to implement might be fruitless. In fact, a database that deserves lower protection for being non-original and the fruit of any investment might be prevented from accessing it through contract rules. This creates uncertainty and furthers problems for creators and researchers who use database content for both their R&D and research activities.

### iii. Access to and reuse of protected works in general

In line with the overarching objectives of this study and in order to provide a comprehensive overview of the enablers for Open Science within the EU copyright legislation, the E&Ls provided for works of authorship protected by copyright or related rights are clustered into two categories: (1) research-specific E&Ls and (2) general E&Ls indirectly useful for Open Science purposes.

***Research-specific E&Ls***

In the EU copyright *acquis*, only three provisions feature E&Ls to copyright and related rights that are directly related to teaching and scientific research purposes - Article 5(3)(a) ISD, Article 10(1)(d) RLD (illustration for teaching and research), and Article 3 CDSMD, regulating text and data mining for the purpose of scientific research.

- **Illustration for teaching and scientific research**

Article 5(3)(a) ISD enshrines an *optional* E&L to the rights of reproduction and communication/ making protected works available to the public for the purpose of illustration for teaching and scientific research. The provision requires the indication of the sources of the work in use, including the author's name, unless this turns out to be impossible, and admits the use of protected works only to the extent justified by the non-commercial purpose to be achieved. Article 5(3)(a) is also subject to the three-step test.

Article 10(1)(d) RLD also introduces an optional E&L to the fixation right of performers and broadcasting organisations; the right for broadcasting of performers and broadcasting organisations; the right for communication to the public of performers and broadcasting organisations; and the distribution right of performers, producers of phonograms, producers of first fixation of films and broadcasting organisations for the sole purpose of illustration of teaching or research. Whereas this provision does not distinguish commercial from non-commercial purposes, it still requires compliance with the three-step-test[1502].

The only CJEU case cursorily mentioning this exception is *Renckhoff*[1503]*.* However, the reference to the provision is minimal and just made to state that the EU legislature took into account the need for a balance between copyright and the right of education by providing an E/L "to the rights laid down in Articles 2 and 3 of that directive so long as it is for the sole purpose of illustration for teaching or scientific research and to the extent justified by the non-commercial purpose to be achieved"[1504].

**Conclusions and take-aways for Open Science**

Despite the limitation coming from the non-commercial purpose of the activities enshrined therein, the E&Ls for illustration for teaching and research contained in the ISD and RLD represent two major starting points to foster Open Science across the EU, covering not only copyright-protected works but also objects of related rights.

- **Text and Data Mining (TDM)**

The CDSM Directive provides two exceptions with respect to TDM, defined as any automated analytical technique aimed at analysing text and data in digital form to generate information including but not limited to patterns, trends, and correlations (Article 2(2) CDSMD).

The first exception (Article 3 CDSMD) allows TDM for scientific research purposes. The notion of scientific research is not further specified, set aside the cursory reference made by Recital 12 CDSMD, which clarifies that the term encompasses both natural sciences and human sciences. Beneficiaries include research organisations (Ros) and cultural heritage institutions (CHIs). The former is defined by Article 2(1) CDSMD as encompassing "a university, including its libraries, a research institute and any other organisations the primary goal of which is to conduct scientific research or carry out educational activities also involving the conduct of scientific research: (a) on a non-for-profit basis or by reinvesting all the profits in its scientific research; or (b) pursuant to a public interest mission recognised by a Member State". The provision also specifies that access to the results generated by such scientific research cannot be enjoyed on a preferential basis by an undertaking that exercises a decisive influence upon the RO. However, Recital 11 of the Directive explains that ROs should benefit from the exception when conducting research within the context of public-private partnerships.

The notion of CHI includes publicly accessible libraries, museums, film archives, and audio heritage institutions (Articles 2(3) and Recital 12 CDSMD). Insofar as their archives and publicly accessible libraries are concerned, Recital 13 includes in the list of CHI-beneficiaries national libraries and national archives, educational institutions, public sector broadcasting organisations and ROs.

1502 Directive 2006/115/EC (n 7), Art. 10(3).

1503 Judgment of 7 August 2018, Land Nordrhein-Westfalen v Dirk Renckhoff, C-161/17, EU:C:2018:634, para 43.

1504 Ibid.

This exception limits the exclusive rights of the database author[1505], the sui generis right of the database maker[1506], the right of reproduction under the ISD[1507], and the exclusive rights of press publishers[1508] against reproductions and extractions made by ROs and CHIs[1509]. Therefore, beneficiaries are permitted to reproduce and extract works or other subject matter to which they have lawful access in order to undertake TDM for scientific research. The notion of "lawful access" is clarified by Recital 14 CDSMD, which exemplifies it by referring to content obtained through open access policies, contractual agreements including subscriptions, and other "lawful means". Lawfully accessed material also includes "content that is freely available online"[1510].

Beneficiaries are allowed to store copies of the reproductions or extractions of works made in the TDM process so long as their storage is subject to an appropriate level of security, with no temporal limitation. The only requirement is that the retention of the mined results is justified by scientific research purposes, including verifying research results[1511]. Recital 15 CDSMD further stipulates that the copies may also be retained for scientific research applications beyond TDM, such as scientific peer review and joint research, if such acts are covered by the E&Ls provided in Article 5(3)(a) ISD, again with no temporal limitation.

Rightsholders may also adopt measures to guarantee the security and integrity of networks and databases where work is hosted[1512]. Recital 16 CDSMD clarifies that these measures should be adopted considering the potentially high number of access requests to and downloads of works and other subject matter. Measures employed may encompass, for instance, means to ensure that only authorised beneficiaries with legal access can access their data, including IP address validation or user authentication. However, they must be strictly limited to achieving their intended objective. To this end, the Directive calls the Member States to facilitate the development of best practices mutually agreed upon by rightsholders and beneficiaries of the exception[1513].

Article 7(1) CDSMD declares this exception not overridable by contract.

1505 Article 5(a) Directive 96/9/EC (n 5).

1506 Ibid, Article 7(1).

1507 Article 2, Directive 2001/29/EC (n 6).

1508 Article 15(1), Directive (EU) 2019/790 (n 8).

1509 Ibid, Article 3(1).

1510 Ibid, Recital 14.

1511 Ibid, Article 3(2).

1512 Ibid, Article 3(3).

1513 Ibid, Article 3(4).

Article 4 of CDSMD obliges Member States to provide for a broad TDM exception and limitation. This provision also limits the reproduction right of the database author, the sui generis right of extraction and reutilisation of the database maker[1514], the right of reproduction under the ISD[1515], the exclusive rights of press publishers[1516], and the exclusive rights to reproduce, translate, adapt, arrange, and alter in any other manner a computer programme[1517]. Article 4 CDSMD is not confined to specific beneficiaries[1518] and lacks a purpose limitation. However, it does not apply where rightsholders expressly reserve TDM activities, for instance, by "machine-readable means" (Article 4(2) CDSMD), or metadata, website terms and conditions or contractual agreements and unilateral declarations (Recital 18 CDSMD). Again, unlike Article 3 CDSMD, Article 4(2) sets a temporal and purpose limitation to the retention of copies and extractions made, which can be used only for TDM and stored as long as required for TDM purposes.

Both provisions are limited by the three-step test (Article 7(2) CDMSD). Since the possible harm to rightsholders is deemed to be minor, Member States are precluded from creating a compensation scheme for the enjoyment of the TDM exception (Recital 17 CDSMD). In addition, the Directive indicates that Articles 3 and 4 CDSMD are included in the list of exceptions for which Article 6(4) InfoSoc provides for safeguards for their enjoyment against the impact of TPMs (Article 7(2) CDSMD, paragraphs (1), (3) and (5)).

Article 4(4) CDSMD clarifies that the E&Ls outlined in the provision are without prejudice to the application of Article 3 CDSMD. This, in turn, suggests that any reservation made under Article 4 CDSMD does not override the application of the exception under Article 3. Member States remain free to implement or retain more extensive regulations that align with the E&Ls outlined in the Database Directive and the ISD for uses or areas covered, among others, by the TDM E&Ls[1519].

**Conclusions and take-aways for Open Science purposes**

The TDM exceptions within the CDSMD make an undoubted step ahead in reducing the high level of uncertainty on whether the deployment of data analytics tools over copyright-protected works can be held as infringement. In spite of this, both Articles 3-4 CDSMD encompass several limits for research, with particular regard to the strict limitations as to beneficiaries enshrined in Article 3 CDSMD and to the possibility to opt-out offered by Article 4 CDSMD. In addition, the interplay with other exceptions, such as Article 5(1) ISD, is clarified on paper (since the CMDSD leave unprejudiced the E&Ls of the ISD), but their functional interpretation, as offered by the CJEU, still clashes with the technical and not normative reading of the right of reproduction under Article 2 ISD, which the TDM exceptions have reinforced rather than put in doubt.

***General E&Ls complementary to research-specific E&Ls***

Several other E&Ls may play a complementary role in facilitating research activities against copyright enforcement. The most relevant examples are temporary reproduction (Article 5(1) ISD), quotation (Article 5(3)(d) ISD), private study (Article 5(3)(n) ISD), and preservation of cultural heritage (Articles 5(2)(c) ISD and Article 6 CDSMD).

1514 Article 5(a) and Article 7(1), Directive 96/9/EC (n 5).

1515 Article 2, Directive 2001/29/EC (n 6).

1516 Article 15(1), Directive (EU) 2019/790 (n 8).

1517 Article 4(1)(a) and (b) of Directive 2009/24/EC (n 4).

1518 Article 4(1), Directive (EU) 2019/790 (n 8).

1519 Ibid, Article 25.

- **Temporary reproduction**

Article 5(1) ISD introduces a mandatory exception to the right to reproduction of authors, performers, phonogram producers, film producers, and broadcasting organisations[1520]. This provision permits temporary acts of reproduction, which are transient or incidental and which are an integral and essential part of a technological process for the sole purpose of enabling transmission in a network between third parties by an intermediary or for the lawful use of a work or other-subject matter. The temporary reproduction of a work, fixation of a performance, phonogram, cinematographic work, or the fixation of a broadcast can be made by any means and in any form, in whole or in part[1521], and it shall not have any independent economic significance.

Article 5(1) ISD represents one of the best examples of the positive impact of the CJEU case law on the harmonisation of EU copyright law. Decisions in this area have massively contributed to increasing the level of legal certainty and systematic consistency, particularly with regard to the definition of scope and boundaries of the provision. Temporary reproduction is also one of the first ISD provisions touched by the Court's harmonising intervention.

Already in 2009, *Infopaq*[1522] laid down the five conditions that should be met in order to apply the exception, which should be understood as cumulative[1523]. The act should (a) be temporary; (b) transient or incidental; (c) have an integral and essential part of a technological process; (d) have the sole purpose of enabling transmission in a network between third parties by an intermediary of lawful use of a work or protected subject-matter; and (e) no independent economic significance[1524]. Also, for the first time in this context, the CJEU stated that exceptions should be interpreted strictly and in light of the three-step test in order to satisfy the need for legal certainty for authors with regard to the protection of their works[1525].

With regard to the case at stake, the Court held that in order to satisfy the conditions listed above, the storage and deletion of the reproduction should not be dependent on discretionary human intervention, particularly by the user of protected works, since there is no guarantee that in such cases the person concerned will actually delete the reproduction created or, in any event, that he will delete it once its existence is no longer justified by its function of enabling the completion of a technological process[1526]. This conclusion was also deemed supported by Recital 33 ISD, "which lists, as examples of the characteristics of the acts referred to in Article 5(1) thereof, acts which enable browsing as well as acts of caching to take place, including those which enable transmission systems to function efficiently. Such acts are, by definition, created and deleted automatically and without human intervention"[1527].

As regards the concept of "transient", the CJEU specified that an act can be qualified as such only if its duration is limited to what is necessary for the proper completion of the technological process in question and terminates by deleting automatically the copy without human intervention[1528].

1520 See: Directive 2001/29/EC, Art. 5(1) in conjunction with Art. 2(1).

1521 See: Directive 2001/29/EC, Art. 5(1) in conjunction with Art. 2(1).

1522 Judgment of 17 January 2012, Infopaq International A/S v Danske Dagblades Forening, C302/10, EU:C:2012:16.

1523 Ibid, para. 55

1524 Ibid, para. 54

1525 Ibid, paras 56, 58-59.

1526 Ibid, para. 62

1527 Ibid, para. 63

1528 Ibid, para. 65

A few years later, the *Football Association Premier League (FAPL)* offered the same definition of the conditions and the same reference and rationale to support a strict interpretation of exceptions[1529], including the reference to Article 5(5) ISD[1530], yet with a new and important notation. Introducing a principle that is now set in stone in EU copyright law, the Court stated that "the interpretation of those conditions must enable the effectiveness of the exception thereby established to be safeguarded and permit observance of the exception's purpose"[1531] which for Article 5(1) ISD is to "allow and ensure the development and operation of new technologies and safeguard a fair balance between the rights and interests of right holders, on the one hand, and of users of protected works who wish to avail themselves of those new technologies, on the other"[1532].

*FAPL* introduced an interesting specification on the fifth condition, ruling that, in order not to make the provision redundant, the economic significance should be effectively independent. That is, it should go beyond the economic advantage that users may derive from the technological process[1533].

Apart from reiterating the key concepts developed by its precedents, the *InfoPaq II*[1534] order in 2011 offered several additional specifications.

First, it clarified that the concept of "an integral and essential part of a technological process" requires the temporary acts of reproduction to be carried out entirely in the context of the implementation of the technological process and, therefore, not to be carried out, fully or partially, outside of such a process. This concept also assumes that the completion of the temporary act of reproduction is necessary in that the technological process concerned could not function correctly and efficiently without that act[1535]. In fact, temporary reproduction can occur at any stage of the process – at the very beginning or the very end[1536]. With a shift in the original approach to the matter, however, the CJEU wanted to stress that "there is nothing in that provision to indicate that the technological process must not involve any human intervention and that, in particular, manual activation of that process be precluded, in order to achieve a first temporary reproduction".[1537]

1529 Judgment of 4 October 2001, Football Association Premier League Ltd and Others v QC Leisure and Othersand C-429/08, ECLI:EU:C:2011:631, paras 160-162.

1530 Ibid, para. 181.

1531 Ibid, para. 163.

1532 Ibid, para. 164.

1533 Ibid, para 175.

1534 Opinion of Advocate General Trstenjak delivered on 12 February 2009, Infopaq International A/S v Danske Dagblades Forening, C-5/08, EU:C:2009:89.

1535 Ibid, para. 30, in line with see, to that effect, Infopaq, para. 61.

1536 Ibid, para. 31.

1537 Ibid, para. 32.

The decision was also relevant since it further specified the notion of independent economic significance. The Court ruled, in fact, that acts like browsing and caching have the purpose of facilitating the use of a work or making that use more efficient; thus, they may enable the achievement of efficiency gains in the context of such use and, consequently, lead to increased profits or a reduction in production costs. This, however, does not mean that they have an independent economic significance. Not to have it, the economic advantage derived from their implementation must not be distinct or separable from the economic advantage derived from the lawful use of the work concerned and should not generate an additional economic advantage going beyond that derived from that use of the protected work[1538]. This is the case for efficiency gains resulting from the activities mentioned above. On the contrary, "an advantage derived from an act of temporary reproduction is distinct and separable if the author of that act is likely to make a profit due to the economic exploitation of the temporary reproductions themselves".[1539] The same applies to reproduction, causing a change in the subject-matter reproduced, as it exists when the technological process concerned is initiated because those acts no longer aim to facilitate its use but the use of a different subject matter[1540].

1538 Ibid, para. 50.

1539 Ibid, para. 52.

1540 Ibid, para. 53.

*Public Relations Consultants (Meltwater)*[1541] added a number of important interpretative points to this framework. First, it assessed and admitted the compliance of on-screen cache copies with the five requirements of Article 5(1) ISD, once again reiterating that the requirement of automatic deletion does not preclude such a deletion from being preceded by human intervention directed at terminating the use of the technological process[1542]. In this context, it also noted that to meet the second condition laid down in Article 5(1) ISD, it was not necessary for the copies to be categorised as "transient" once it has been established that they are incidental in nature in the light of the technological process used[1543]. Thus, even if cached copies were retained on the user's device after the related technological process was terminated, this did not exclude their legitimacy since they were still to be considered incidental, for they could not exist independently of, nor have a purpose independent of, the technological process at issue[1544]. The decision also performed a much more articulated assessment of the national provision *vis-à-vis* the three-step test regulated under Article 5(5) ISD. Since on-screen and cached copies are created only for the purpose of viewing websites, they constitute, on that basis, a special case[1545]. Even if they make it possible for users to access works displayed on websites without the authorisation of the copyright holders, the copies do not unreasonably prejudice the legitimate interests of those rightsholders. Also, works are made available to internet users by the publishers of the websites, which are required, under Article 3(1) ISD, to obtain authorisation from the copyright holders concerned[1546]. This guarantees that the legitimate interests of the copyright holders concerned are properly safeguarded, so "there is no justification for requiring internet users to obtain another authorisation allowing them to avail themselves of the same communication as that already authorised by the copyright holder in question".[1547] Last, the creation of on-screen and cached copies does not conflict with a normal exploitation of the works. Since, in fact, the viewing of websites by means of the technological process at issue represents a normal exploitation of the works, which makes it possible for internet users to avail themselves of the communication to the public made by the publisher of the website concerned, and the creation of copies forms part of such viewing, this cannot operate to the detriment of such an exploitation of the works[1548].

1541 Judgment of 5 June 2014, Public Relations Consultants Association Ltd v Newspaper Licensing Agency Ltd and Others, C-360/13, EU:C:2014:1195.

1542 Ibid, para. 41.

1543 Ibid, para. 48.

1544 Ibid, para 49.

1545 Ibid, para 55.

1546 Ibid, paras 56-57.

1547 Ibid, para. 59.

1548 Ibid, para. 61.

In the very last case to date fully devoted to Article 5(1) ISD, *Stichting Brein v Wullems* (also known as *Filmspeler*)[1549], the CJEU was called to assess whether the exception could cover the temporary reproduction on a multimedia player of a protected work obtained by streaming from a website belonging to a third party, offering that work without the consent of the copyright holder. As regards to the condition that the sole purpose of the process is to enable the transmission in a network between third parties by an intermediary or a lawful use of a work or protected subject-matter, since rightsholders did not authorise the use of the works at issue, the Court held necessary to assess whether the aim of the acts in question was to enable the use of the works that were not restricted by the applicable legislation, taking into due account the constraints imposed by the three-step test[1550]. Applying the principles developed in *FAPL* (the mere reception of broadcasts in itself did not reveal an act restricted by the relevant legislation since the sole purpose of the acts of reproduction at issue was to enable a 'lawful use' of the works within the meaning of Article 5(1)(b) ISD) and in *Infopaq* (the drafting of a summary of newspaper articles, even though it was not authorised by the rightsholder, was not restricted by the applicable legislation, with the result that the use at issue could not be considered to be unlawful)[1551], the CJEU noted that the case at stake had radically different characteristics. On the one hand, purchasers of the multimedia player were attracted by it and used it deliberately and in full knowledge of the fact that it gave access to a free and unauthorised offer of protected works. On the other hand, such temporary acts of reproduction severely affected the normal exploitation of protected works and caused unreasonable prejudice to the legitimate interests of rightsholders, for they resulted in a diminution of lawful transactions relating to the protected works[1552]. On this basis, the Court held the conditions set by Articles 5(1)(b) and 5(5) ISD were not met.

**Conclusions and take-aways for Open Science purposes**

Also, thanks to the functional interpretation brought forward by the CJEU and to the mandatory nature of Article 5(1) ISD, the exception for temporary reproduction represents a key provision for the development of datasets for TDM, for the training of AI agents and for the development of machine learning applications. However, as already noted, its reach may be limited in practice by the intervention of the TDM exceptions, with a generally negative impact on the European research space.

- **Quotation**

Article 5(3)(d) ISD introduces an *optional* E&L to the rights of reproduction and communication/making available to the public, allowing quotations for purposes such as criticism or review, which shall be accompanied by the indication of the source, including the name of the author, unless this turns out to be impossible, and shall be in accordance with fair practices and limited to the extent required by the specific purpose. The provision is subject to the three-step test (Article 5(5) ISD).

1549 Judgment of 26 April 2017, Stichting Brein v Jack Frederik Wullems, C-527/15, ECLI:EU:C:2017:300.

1550 Ibid, para 66.

1551 Ibid, para 67-68.

1552 Ibid, para 70-71.

Article 17(7) CDSMD has declared the quotation exception mandatory in favour of specific categories of digital platforms named "OCSSPs" (the definition is enshrined in Article 2(6) CDSMD), by stipulating that "the cooperation between online content-sharing service providers and rightsholders shall not result in the prevention of the availability of works and other subject matters uploaded by users, which do not infringe the copyright or related rights, including where such works or other subject matter are covered by an exception or limitation"[1553].

Despite its relevance, its old roots in the Berne Convention, and its frequent application by national courts, the number of CJEU cases on the quotation is relatively limited.

The first attempt to provide some guidelines to interpret the very general language of Article 5(3)(d) ISD comes from Painer[1554]. Here, the Court went through all the requirements set by the provision, arguing that even if the exception is interpreted strictly[1555], it should still be read in a manner that does not frustrate its effectiveness and the fair balance between rightsholders' interests and other conflicting rights[1556]. In the case of quotation, this means a balance between copyright and the right to freedom of expression[1557], which the provision strikes by preventing the author from blocking the reproduction of extracts from their work which has already been lawfully made available to the public, whilst ensuring that their name is indicated[1558].

In this sense, the condition that the work has been lawfully made available to the public shall be referred only to the work quoted and not to the subject-matter in which the quotation is made[1559]. Similarly, the obligation to mention the source and the name of the author represents a precondition for the lawfulness of the quotation, in the absence of which the exception cannot apply. However, the exemption due to "impossibility" shall be read flexibly enough to encompass all those cases where the mention would cause excessive hardship to the quoting party[1560]. The Court also emphasised the need for the quoted work to have already been lawfully made available to the public, as confirmed by the French and German versions of Article 5(3)(d) ISD and Article 10(1) BC[1561].

To have another intervention on Article 5(3)(d) InfoSoc, one has to wait until the Grand Chamber trio of July 2019.

1553 Directive (EU) 2019/790 (n 8), Art. 17(7).

1554 Judgment of 1 December 2011, Eva-Maria Painer v Standard VerlagsGmbH and Others, C.145/10, EU:C:2011:798, para 133.

1555 Ibid.

1556 Ibid, para 131-32.

1557 Ibid, para 134.

1558 Ibid, para 135.

1559 Ibid, para 131.

1560 Ibid, para 143 – 145: "However, it should also be noted that the main proceedings are unusual, in that they are taking place in the context of a criminal investigation, as part of which, following the kidnapping of Natascha K., in 1998, a search notice, with a reproduction of the contested photographs, was launched by the competent national security authorities. (…) Consequently, it is conceivable that the national security authorities were the cause of the making available to the public of the contested photographs which were the subject of subsequent use by the defendants in the main proceedings. (…) Such making available does not require, under Article 5(3)(e) of Directive 2001/29, in contrast to Article 5(3)(d) of that directive, the author's name to be indicated".

1561 Ibid, paras 126-128.

In *Spiegel Online*, the Court was asked to determine whether the notion of quotation could also cover a reference made by means of a hyperlink to a file that could be downloaded independently. In response, it stated that the term "quotation", absent a definition in the ISD, should be delineated "by considering its usual meaning in everyday language while also taking into account the legislative context in which it occurs and the purposes of the rules of which it is part"[1562]. On this basis, the CJEU argued that the essential characters of an act of quotation are (a) the use, by a user other than the copyright holder, of work or, more generally, of an extract from work for the purposes of illustrating an assertion, of defending an opinion or of allowing an intellectual comparison between that work and the assertions of that user[1563]; and (b) the establishment of a direct and close link between the quoted work and his own reflections, thereby allowing for an intellectual comparison to be made with the work of another, since Article 5(3)(d) of Directive 2001/29 states in that regard that a quotation must inter alia be intended to enable criticism or review. The use of the quote should also be secondary "in relation to the assertions of that user, since the quotation of a protected work cannot, moreover, under Article 5(5) of Directive 2001/29, be so extensive as to conflict with a normal exploitation of the work or another subject matter or prejudices unreasonably the legitimate interests of the rightsholder"[1564].

Last, the Court focused on the condition that the work should have already been lawfully made available to the public. Building on *Painer*, it specified that this requirement is met if the work "has been made available to the public with the authorisation of the copyright holder or in accordance with a non-contractual licence or a statutory authorisation"[1565].

In *Pelham*, instead, the question posed to the CJEU was whether Article 5(3)(d) InfoSoc could apply to cases where it was not possible to identify the work concerned by the quotation in question. In this context, the Court recalled the everyday language definition introduced in *Spiegel Online*, emphasising the need for the quoting work to enter into "a dialogue" with the quoted work[1566]. For this to happen, an identification of the latter is necessary[1567].

**Conclusions and take-aways for Open Science purposes**

While the quotation exception is of pivotal importance for academic freedom, its vague wording may lead to undue restriction of its scope and to the frustration of its potential – a situation made worse by the restrictive interpretation offered by the CJEU.

- **Private study**

Article 5(3)(n) ISD features an optional E&L, allowing CHIs mentioned in Article 5(2)(c) ISD (publicly accessible libraries, educational establishments, museums, archives) to communicate or make available works and other subject-matter not subject to purchase or licensing terms which are contained in their collections, to individual members of the public, for the purpose of research or private study.

1562 Judgment of 29 July 2019, Spiegel Online GmbH v Volker Beck, C-516/17, ECLI:EU:C:2019:625, para 77.

1563 Ibid, para 78.

1564 Ibid, para 79.

1565 Ibid, para 89.

1566 Judgment of 29 July 2019, Pelham GmbH and Others v Ralf Hütter and Florian Schneider-Esleben, C-476/17, EU:C:2019:624, para 71

1567 Ibid, para 73.

The CJEU intervened on the interpretation of Article 5(3)(n) ISD in *Technische Universitat Darmstadt v Ulmer*[1568]*,* addressing three key questions. First, it was called to clarify whether the concept of the presence of "purchase or licensing terms" excluding or regulating the exercise of the exception shall be extended to also cover the case where the rightsholder has merely offered to conclude a license to the CHI beneficiary of the provision. Second, it was asked whether Article 5(3)(n) ISD could be interpreted as also covering the possibility for CHIs to digitise the works contained in their collections, if such an act of reproduction was necessary for the purpose of exercising the exception, that is making those works available to users, by means of dedicated terminals, within those establishments. Last, as a side question, the referring court requested clarification on whether Article 5(3)(n) ISD could be stretched to allow patrons of CHIs to print out or save on USB stick works made available to them on dedicated terminals.

As to the first question, the Court adopted a strict interpretation. Building its argument on the rationale of the exception, which is to "promote the public interest in promoting research and private study, through the dissemination of knowledge, which constitutes, moreover, the core mission of publicly accessible libraries"[1569], the CJEU excluded that the mere unilateral and discretional offer of license by the rightsholder could frustrate the effectiveness of the exception[1570], and thus prevent it from realising its core mission and promoting the public interest[1571]. This is – according to the Court – the only interpretation that may allow maintaining "a fair balance between the rights and interests of rightsholders, on the one hand, and, on the other hand, users of protected works who wish to communicate them to the public for the purpose of research or private study undertaken by individual members of the public"[1572]. As a side note, this reading was also in line with Recital 40 ISD, which states that specific contracts or licences should be promoted which, without creating imbalances, favour such establishments and the disseminative purposes they serve[1573].

In this context, the Court also took the opportunity to clarify that all limitations listed under Article 5(3) ISD and mentioning contractual agreements refer to existing relations and not mere prospects thereof.

1568 Judgment of 11 September 2014, Technische Universität Darmstadt v Eugen Ulmer KG, C-117/13, EU:C:2014:2196.

1569 Ibid, para 27.

1570 Ibid, para 32 – "since, were it to be accepted, the limitation would apply, as Ulmer has maintained, only to those increasingly rare works of which an electronic version, primarily in the form of an e-book, is not yet offered on the market."

1571 Ibid, para 28.

1572 Ibid, para 31.

1573 Ibid, para 29.

With an important step forward in the development of the fair balance doctrine and of the horizontal effects of fundamental rights on exceptions and their interpretation, the CJEU offered a positive answer to the second question raised by the referring court. In fact, the Court interpreted Article 5(3)(n) ISD as implicitly granting a right to its beneficiaries and ruled that "the right of communication of works enjoyed by establishments such as publicly accessible libraries covered by Article 5(3)(n) (…), within the limits of the conditions provided for by that provision, would risk being rendered largely meaningless, or indeed ineffective, if those establishments did not have an ancillary right to digitise the works in question"[1574]. The same establishment are recognised – once again – "as having such a right pursuant to Article 5(2)(c) of Directive 2001/29, provided that 'specific acts of reproduction' are involved[1575]. While the condition of specificity is generally understood as excluding the possibility for CHIs to digitise their entire collections, this condition is still observed every time the digitisation is functionalised to the communication to the public of the work under Article 5(3)(n) ISD[1576]. This interpretation – the CJEU stated – is also in line with the three-step test since the digitisation of works by publicly accessible libraries cannot have the result of the number of copies of each work made available to users by dedicated terminals being greater than that which those libraries have acquired in analogue format and, as such and coupled with an obligation to provide compensation, does not impair disproportionately the legitimate interests of rightsholders[1577].

By the same token, the Court denied the possibility to include under the jointly applied exception the reproduction made by patrons by printing out those works on paper or storing them on a USB stick, arguing that this would not only cover acts that are not necessary for the fulfilment of the purpose of Article 5(3)(n) ISD[1578] but also conflict with the three-step test[1579].

**Conclusions and take-aways for Open Science purposes**

Although the private study exception is not directly addressed to researchers or research organisations, it offers the opportunity to access content protected by copyright through the assistance of CHIs, which act as intermediaries for public access to information and engagement with culture. However, the EU text envisages several conditions of applicability, such as, inter alia, allowing access to users only on-site and via dedicated terminals as recipients of acts of reproduction and making them available to a restricted public undertaken by a restricted array of entities. As the subjective scope of the exception is limited and the conditions to apply it quite strict, this exception is likely to stimulate small-scale and mostly individual research activities embarked on by students and researchers who attend libraries and archives. It shall also be noted that this exception has been stretched by the CJEU so as to cover the digitisation of libraries' collections among the acts that are necessary to ensure the effective applicability of the exception for private study, with a long-due update that brought it closer – but still not aligned to – the evolution of technologies.

- **Preservation of cultural heritage**

1574 Ibid, para 43.

1575 Ibid, para 44.

1576 Ibid, paras 45-46.

1577 Ibid, para 48.

1578 Ibid, para 54.

1579 Ibid, para 56.

Although not explicitly finalised to the purpose of preservation of cultural heritage, Article 5(2)(c) ISD has been used to this end since it introduces an optional E/L in respect of specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage. Article 6 CDSMD introduces a mandatory E/L, which allows publicly accessible libraries and museums, as well as archives, film or audio heritage institutions (Article 2(3) CDSMD), including, inter alia, national libraries and national archives, and, as far as their archives and publicly accessible libraries are concerned, educational establishments, research organisations and public sector broadcasting organisations (Recital 13 CDSMD), to make copies of any works or other subject matter, works covered by the press publishers' right, databases and computer programmes that are permanently in their collections, in any format or medium, for the sole purpose of the preservation of such works or other subject-matter and to the extent necessary for such preservation.

Both provisions are subject to the three-step test (Article 5(5) InfoSoc).

Whereas no preliminary ruling request on the interpretation of Article 6 CDSMD has been received by the CJEU so far, the Court had the opportunity to intervene on Article 5(2)(c) InfoSoc is *Ulmer*, which has already been analysed above[1580].

**Conclusions and take-aways for Open Science purposes**

As a complement to the private study exception, E&Ls for the preservation of cultural heritage not only constitute a prerequisite to access to information via CHIs, but they also secure the restoration and continued existence of certain content by means of digitisation. Digital twins of copyright-protected content have been used by several stakeholders, including research organisations, to train AI and to create immersive technologies based on large quantities of (digitalised) datasets, with an obvious positive impact on Open Science goals.

- **Licensing schemes**

Several EU copyright flexibilities are subordinated to the payment of fair or equitable compensation to rightsholders or revert around the transformation of an exclusive right into a remuneration right. While in some instances, the EU provision also compels the management of such a right via CMOs, in other cases, the rule is silent on the matter, remitting to Member States the decision on the matter (e.g., to mention but a few, the private copy and reprography exceptions under Article 5(2)(a)-(b) ISD, the optional compensation for the orphan work exception under Article 8(5) OWD, the optional compensation for the digital teaching exception under Article 5 CDSMD, etc.). The EU copyright *acquis* does not envision any specific licensing scheme directed to facilitate research activities. However, some provisions may still be used by Member States to pursue Open Science goals indirectly.

A glaring example comes from Article 8(1) CDSMD**,** which introduced an ECL for out-of-commerce works to increase their free availability. The provision requires Member States to allow a CMO, in accordance with its mandates from rightsholders, to conclude a non-exclusive licence for non-commercial purposes with a CHI for reproduction, distribution, communication to the public or making available to the public of out-of-commerce works or other subject matter permanently in the collection of the institution, irrespective of whether all rightsholders covered by the licence have mandated the CMO to administer their rights.

1580 See ut supra (n 350).

The licensing mechanism described above applies on condition that **(a)** the CMO is, on the basis of its mandates, sufficiently representative of rightsholders in the relevant type of works or other subject matter and of the rights subject of the license, and **(b)** all rightsholders are guaranteed equal treatment in relation to the terms of the license.

As specified by **Recital 43 CDSMD**, the licensing mechanism shall be without prejudice to the use of such works or other subject matter under exceptions or limitations provided for in EU law or under other ECLs where such licensing is not based on the out-of-commerce status of the covered works or other subject matter.

Article 8(6) CDSMD requires the license to be sought from a CMO that is representative of the Member State where the CHI is established. Article 12 CDSMD introduces the possibility for Member States to provide, as far as the use on their territory is concerned and subject to the safeguards provided by the Directive, that where a CMO that is subject to the national rules implementing the CMO directive, in accordance with its mandates from rightsholders, enters into a licensing agreement for the exploitation of works or other subject matter: **(a)** such an agreement can be extended to apply to the rights of rightsholders who have not authorised that collective management organisation to represent them by way of assignment, licence or any other contractual arrangement; or **(b)** with respect to such an agreement, the organisation has a legal mandate or is presumed to represent rightsholders who have not authorised the organisation accordingly. Such ECLs should only apply within well-defined areas of use, where obtaining authorisations from rightsholders on an individual basis is typically onerous and impractical to the degree that makes the required licensing transaction unlikely and should ensure that such licensing mechanism safeguards the legitimate interests of rightsholders (Article 12(2) CDSMD).

Article 12(3) CDSMD provides a number of safeguards, from the representativeness of the CMO to the equal treatment of rightsholders (including in relation to the terms of the license), the presence of easy and effective out-out mechanisms, and the presence of Appropriate and timely publicity measures to inform rightsholders about the ability of the CMO to license works or other subject matter, including the indication of possibility for rightsholders to exclude their works from the licensing. The provision leaves unaffected the application of ECLs for out-of-commerce works under Article 8(1) CDSMD or another licensing mechanism with an extended effect envisaged in EU law, including EU rules imposing mandatory collective management of rights, as well as the provisions that allow exceptions or limitations.

According to Article 5(2) CMOD, as a matter of principle, the exercise of exclusive rights under copyright remains a prerogative of rightsholders. Member States shall give them a choice to manage their rights, categories of rights or types of works and other subject matter for the territories of their choice and, regardless of the nationality, residence, or establishment of the CMO or rightsholders. Exceptionally, Member States may accommodate other forms of licensing that restrict the rightsholders' individual exercise of rights.

The CJEU had the opportunity to clarify in two decisions that Member States are not free to provide licensing schemes in any matter of their choice, but they should follow general principles and doctrines that could be applied horizontally. The first case, *Soulier and Doke*[1581]*,* intervened before the enactment of the CDSM Directive, and it raised challenges for ECL schemes, which the EU legislator decided to tackle with Article 8 and 12 CDSMD. The second case, *Spedidam*[1582]*,* elaborated on similar principles but with regard to the mandatory collective management of remuneration rights. In fact, the arguments raised by the Court to solve the two cases are largely the same[1583].

In *Spedidam* the heirs of a musician died in 1985 sued INA for marketing without their consent phonograms and videos of the musician's performances, which were produced and broadcast by national television. INA commercialised them on the basis of Article 49 of the French law on freedom of communication, which derogates from the French Intellectual Property Code and allows INA to exercise the exploitation rights of performers providing the remuneration and according to terms fixed in agreements between INA and performers (or their organisations).

In the first and second instance, French courts ruled in favour of the heirs, arguing that the agreement between INA and the performers' associations only determined the remuneration due for new exploitations, while the first authorisation from performers was still needed. The *Cour de Cassation* denied, instead, that the letter of the law required INA to prove the first authorisation but asked the CJEU whether this solution was compatible with Articles 2, 3 and 5 InfoSoc.

1581 Judgment of 16 November 2016, Marc Soulier and Sara Doke v Premier ministre and Ministre de la Culture et de la Communication, C-301/15, EU:C:2016:878.

1582 Judgment of 14 November 2019, Spedidam and Others, C-484/18, EU:C:2019:970.

1583 Judgment of 16 November 2016, Marc Soulier and Sara Doke v Premier minister and Ministre de la Culture et de la Communication, C-301/15, EU:C:2016:878.

*Soulier and Doke*[1584] originated from the request of two French authors of literary works, Mark Soulier and Sara Doke, to the *Conseil d'État* to annul Decree No 2013-182, which introduced within the French Intellectual Property Code, an extended licensing scheme to increase the availability of out-of-commerce books[1585]. According to the decree, the National Library was in charge of managing a database that enlisted new books published in France every year before 1 January 2001, no longer commercially distributed by a publisher and not currently published in print or in digital form[1586]. 6 months after enlisting, the right to authorise the reproduction and communication of the books in digital format to the public was transferred to a collecting society approved by the Ministry of Culture. The society was obliged to offer a license back to the original publisher, which, should there be acceptance, would have received it in exclusivity for 10 years, with the possibility of tacit renewal and the obligation to commercialise the title within 3 years. Should there be a refusal or no response, the collecting society was free to put the license on the market. Stringent safeguards were provided to ensure the fairness of the scheme, from the equal representation of authors and publishers in the society's governance bodies to fair rules of income distribution and two possibilities to opt out from the scheme[1587]. First, rightsholders had 6 months to oppose the enlisting of their works in the database. If they were publishers, they had the obligation to commercialise the book within 2 years. Second, authors could still withdraw their titles if they proved that the publication would have harmed their honour or reputation. Aside from that, they could opt out only upon demonstrating that they were the sole holders of exclusive rights to digital exploitation. Were this not the case, the law admitted only a joint author-publisher withdrawal, with an obligation of the latter to commercialise the book within 18 months. No withdrawal was possible; instead, after another publisher acquired and began exploiting a license from the collecting society[1588].

*Soulier and Doke* complained that the Decree constituted an unconstitutional violation of their property rights and that the scheme was incompatible with the ban against formalities provided by Article 2(5) of the Berne Convention and with the provisions of Articles 2 to 5 ISD. The *Conseil d'Etat* rejected the claim of unconstitutionality[1589] and ruled in favour of the compatibility of the scheme with the Berne Convention, arguing that the opt-out mechanism did not interfere with the existence of copyright but only with its exercise[1590]. The question of admissibility of the scheme *vis-à-vis* the InfoSoc Directive, instead, was referred to the CJEU.

With a decision that was foreseeable but dangerous in its potentially far-fetched implications[1591], the Court struck down the French scheme, declaring it incompatible with Articles 2 to 5 ISD. Most of the arguments used in *Soulier* can be found *in mutatis mutandis, and* in *Spedidam,* which cited the precedent in multiple passages.

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1584 This excerpt, from "Soulier and Doke"(n 363) to the end of this paragraph ("among all holders of neighboring rights"), is taken verbatim from the pre-print version in Open Access of Caterina Sganga, 'The Many Metamorphoses of Related Rights in EU Copyright Law: Unintended Consequences or Inevitable Developments?' (2021) 70 GRUR International 821.

1585 JORF No 51, 1 March 2013, p.3835.

1586 As in Article L.134-2 of the Code de la Propriété Intelléctuelle. See Jane Ginsburg, 'Fair Use for Free, or Permitted-but-Paid?' (2014) 29 Berkeley Technology Law Journal 1383; Oleksandr Bulayenko, 'Permissibility of Non-Voluntary Collective Management of Copyright under EU Law – The Case of the French Law on Out-of-Commerce Books' (2016) 7 Journal of Intellectual Property, Information Technology and E-Commerce Law <http://www.jipitec.eu/issues/jipitec-7-1-2016/4402>.

1587 As in Article L.134-3-6 CPI.

1588 On the pitfalls and criticisms raised against the scheme, and particularly against its weak withdrawal rules and the favour towards commercial publishers, see Emmanuel Derieux, 'Le Régime Juridique de l'exploitation Numérique Des Livres Indisponibles Du XXe Siècle (1)' (2012) 87 Revue Lamy droit de l'immatériel 64; Sylvie Nérisson, 'La gestion collective des droits numériques des "livres indisponibles du XXe siècle" renvoyée à la CJUE: le Conseil d'État face aux fondamentaux du droit d'auteur' (2015) 191 Recueil Dalloz 1427. Similarly Bulayenko (n 426); Ginsburg (n 426). Who maintains that "the law expropriate authors"; see also Emmanuel Emile-Zola-Place, 'L'exploitation Numérique Des Livres Indisponibles Du XXe Siècle: Une Gestion Collective d'un Genre Nouveau' (2012) 295 Légipresse 35.

1589 On this claim it also consulted the Conseil Constitutionel, which also rejected it. Marc S and another, Conseil Constitutionel, Decision no 2013-370, QPC (question prioritaire de constitutionnalité), 28 February 2014. The decision was severely criticized for its industry-oriented interpretation of the concept of public interest. See e.g. Nérisson (n 428); Derieux (n 428).

1590 Conseil d'Etat, Decision No 368208, 6 May 2015, M.S., MMme D. The ECLI FR:CESSR:2015:368208.20150506.

1591 See, more extensively, Caterina Sganga, 'The Eloquent Silence of Soulier and Doke and Its Critical Implications for EU Copyright Law' (2017) 12 Journal of Intellectual Property Law & Practice 321.

As in *Soulier*, the exclusive rights of reproduction and making available were given a broad scope to ensure legal certainty[1592]. The protection offered by Articles 2 and 3 InfoSoc, "in the same way as the protection conferred by copyright", covers not only their enjoyment but also their exercise[1593]. Both rights were defined as preventive in nature, which means that all acts of reproduction or communication to the public require prior consent of the rightsholder or, in the alternative, should be covered by an exception in order to be held legitimate and not infringement[1594]. The CJEU considered this interpretation to be in line with the high level of protection requested under Recital 9 ISD and with the need to obtain appropriate remuneration for the use of the phonogram[1595].

Again, like in *Soulier*, the Court admitted that the rightsholders consent could also be expressed implicitly to the extent that conditions are clearly defined and do not fully frustrate the principle of prior consent[1596]. However, and this time differently than in the previous decision, the French scheme was held compatible with EU law, for the Court believed that it could be presumed that performers authorised the fixation of their work, and this presumption was considered legitimate since it may be rebutted at any time, and intervenes on a requirement - the written authorisation of performers – which is not part of EU law but only of the French Intellectual Property Code[1597]. As a complement to the main argument, the CJEU also underlined that the scheme is in line with EU law since it enables a fair balance to be struck between conflicting fundamental rights for two parallel reasons. On the one hand, if INA could not fully exploit its collections, a number of rightsholders would perceive less or no remuneration; on the other hand, the legal presumption does not affect performers' right to obtain an appropriate remuneration[1598].

The latter is probably the most important sentence of the entire decision and the one that puts in doubt the possibility of drawing a full analogy between *Spedidam* and *Soulier*. In *Spedidam*, in fact, the CJEU puts the greatest emphasis on remuneration, and the safeguards requested for implied consent and rebuttal are subject to very light scrutiny. In *Soulier*, instead, the importance of consent explicitly prevails over remuneration since the author's right to control the use of the work is the most important value to be preserved. This differentiates, once again, traditional author's rights from "industrial" related rights, even if granted to performers, who are the closest category to authors among all holders of neighbouring rights.

1592 Judgment of 14 November 2019, Spedidam and Others v Institut national de l'audiovisuel, C-484/18, EU:C:2019:970, para 36, as in Judgment of 16 November 2016, Marc Soulier and Sara Doke v Premier minister and Ministre de la Culture et de la Communication, C-301/15, EU:C:2016:878, para 30, and the case law cited therein.

1593 Ibid, para 37, as in Judgment of 16 November 2016, Marc Soulier and Sara Doke v Premier ministre and Ministre de la Culture et de la Communication, C-301/15, EU:C:2016:878, para 31.

1594 ibid, para 38, as in Soulier and Doke, paras 33-34, later confirmed in Judgment of 7 August 2018, Renckhoff, C-161/17, EU:C:2018:634, para 29

1595 ibid, para 39.

1596 Ibid, para 40, as in as in Judgment of 16 November 2016, Marc Soulier and Sara Doke v Premier ministre and Ministre de la Culture et de la Communication, C-301/15, EU:C:2016:878, para 35.

1597 Ibid, para 43.

1598 Ibid para 44.

**Conclusions and take-aways for Open Science purposes**

As a matter of fact, special licensing schemes have never been used as leverage by the EU IPR legislator to pursue Open Science goals. However, some of the provisions that are currently in the scope of the EU copyright *acquis* could potentially be used for this purpose by Member States. In addition, national legislators enjoy some room for discretion in the creation of research-oriented ECLs under Article 8 CDSMD, in compliance with the guidelines formulated by the CJEU. However, these tools should thus be taken into further consideration by EU legislators as potential enablers for Open Science policies. In fact, although Article 8 CDSM provides Member States with a tool to ensure the availability of out-of-commerce works, this licensing scheme is restricted in scope. No similar instruments exist, on an EU-wide level, for other subject-matters and with the specific purpose of streamlining the obtaining and sharing of research output data. In this sense, although the CDSMD has made some steps forward in the operationalisation of EU-harmonised licensing schemes to tackle specific public policy purposes, Open Science goals still remain uncovered at the EU level.

- **Public domain**

Public domain is an all-encompassing category that includes subject matters that are not protected by copyright and of subject matters on which copyright protection has expired.[1599] Its boundaries have never been defined holistically by EU law. However, its regulation has an exponential effect on the possibility of accessing and re-using materials for research purposes, and thus further EU OS goals since setting its boundaries entails the identification of raw materials that can be used for "new creation, innovation and development'[1600].

Only a handful of EU provisions exclude specific subject matters from copyright and database protection. This is the case for Article 1(2) Software, Article 14 CDSMD, and the proposed version of Article 35 of the Data Act[1601]. Article 1(2) Software stipulates that "[i]deas and principles which underlie any element of a computer programme, including those which underlie its interfaces"[1602] are not protected by copyright. No reference is made by the InfoSoc Directive nor by the Database Directive. Article 14 CDSMD holds that the reproduction of a work of visual art, on which the term of protection has expired, is not eligible for copyright protection "unless the material resulting from that act of reproduction is original in the sense that it is the author's own intellectual creation"[1603]. Article 35 of the proposal of the Data Act states that "the sui generis right provided for in Article 7 of Directive 96/9/EC does not apply to databases containing data obtained from or generated by the use of a product or a related service falling within the scope of this Regulation" – a definition that carves out from the scope of Article 7 Database all bases that are constituted only by data generated by IoT devices.

In spite of their narrow reach, these provisions are already carving out from the scope of copyright law private control interfaces, upstream source code that may be widely used within research communities, and a wealth of datasets that are produced by commonly used devices. However, the lack of a clear-cut definition of the boundaries of the public domain leaves the matter unharmonised at the EU level, with clear drawbacks in terms of the legal certainty needed to identify freely accessible materials for cross-border research endeavours.

1599 Bently L and others, 'Intellectual Property Law' (2018) http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9780191084188, accessed 11th August 2023.

1600 Séverine Dusollier, 'Scoping Study on Copyright and Related Rights and the Public Domain' (WIPO: Publications, 2010) 5 <https://www.wipo.int/publications/en/details.jsp?id=4143&plang=EN> accessed 13 September 2022.accessed 11th August 2023.

1601 Data Act, Amendments adopted by the European Parliament on 14 March 2023 on the proposal for a regulation of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act) (COM(2022)0068 – C9-0051/2022 – 2022/0047(COD) 2019-2024 https://www.europarl.europa.eu/doceo/document/TA-9-2023-0069_EN.pdf, accessed 11th August 2023.

1602 Directive 2009/24/EC (n 4), Art. 1(2).

1603 Directive (EU) 2019/790 (n 8), Art. 14.

Similarly, the notion of the public domain has not been analysed holistically by the CJEU, nor has it ever been used as a general doctrine or framework to guide the interpretation of the EU secondary sources. Still, it is possible to get an understanding of the CJEU's approach to the matter through the lens that directly or indirectly elaborates on the notion of protected work.

In this context, the first landmark decision is represented by *Infopaq*[1604], where the CJEU was asked whether the reproduction of an 11-word excerpt of a newspaper article would result in a violation of Article 2 InfoSoc. To respond to the question, the CJEU had to first determine what constituted a protected work, using, to this end, a contextual interpretation of other EU copyright law sources[1605]. This analysis required a joint reading of Articles 2(5) and (8) of the Berne Convention, Article 1(3) Software, Article 3(1) Database and Article 6 RLD[1606], elevating the result to the role of general principle of EU copyright law under the InfoSoc Directive[1607]. As a consequence, protected (literary) works were deemed as any combination or sequence of words through which 'the author may express his creativity in an original manner and achieve a result which is an intellectual creation'[1608].

These judgments were followed by others which aimed at better framing the over-broad, hence risky, definition of the concept of public domain. For instance, in *BSA*[1609], the CJEU excluded the possibility of considering a graphic user interface (GUI) as a protected expression under Article 1(2) Software but accepted the idea of covering it with a general InfoSoc protection if it entailed the 'author's own intellectual creation'[1610]. Given the particular characteristics of the GUI, the CJEU also had to clarify, by relying on the originality criterion, that copyright cannot cover the elements necessitated by their technical function 'since the different methods of implementing an idea are so limited that the idea and the expression become indissociable'[1611] and the author is not called to make any creative and original choice that could be qualified as their own intellectual creation[1612].

1604 Order of 17 January 2012, Infopaq International A/S v Danske Dagblades Forening, C-302/10, EU:C:2012:16.

1605 Ibid, para. 36.

1606 Ibid, paras. 34, 35.

1607 Ibid, para. 37.

1608 Ibid, paras. 44, 45.

1609 Judgement of 22 December 2010, Bezpečnostní softwarová asociace - Svaz softwarové ochrany v Ministerstvo kultury, C-393/09, EU:C:2010:816 (BSA).

1610 Ibid, para. 42.

1611 Ibid, para. 48.

1612 Ibid, para. 50.

The principles discussed in the context of *BSA* were applied in other cases, for instance, to items of unregistered design to which the Design Directive could not apply (*Flos*[1613]); to videogames, which were excluded from the subject matter of the Software Directive due to their complex nature (*Nintendo*[1614]); to sports events (*FAPL*[1615]), which were not considered protectable since the existence of rules of the game does not admit creative freedom[1616], thus excluding their potential originality[1617]; to portrait photographs (*Painer*[1618]), which were qualified as protected work if it represented an intellectual creation, which constituted an author's own and reflected her personality[1619] and personal touch[1620] when 'the author was able to express his creative abilities in the production of the work by making free and creative choices'[1621]. In the last decision, however, the CJEU adopted a certain specification, which paved the way to potential misunderstanding, as it stated that the level of protection granted cannot and should not depend on the degree of originality of the work[1622]. This interpretation has eventually led to the merge of the notion of protected work with the concept of originality, creating an overlap between the preliminary identification of the subject-matter of copyright and the subsequent requirement of protection, thus raising issues yet to be resolved on the external boundaries of the public domain.

In another case, the CJEU had to decide on a relatively far-fetched topic. Indeed, in *Levola Hengelo*[1623] the Court had to tackle whether the notion of work, understood as the author's own intellectual creation, could be extended to cover the original taste of cheese. In brief terms, the Court decided to add some more specifications to its very general doctrine by defining 'work as an autonomous concept of EU law, to be interpreted uniformly throughout the EU, in light of the missing reference to national laws for determining its meaning and scope'[1624]. Emphasising that any creation can be protected by copyright only if it can be classified as a 'work' under the InfoSoc Directive[1625], the Court elaborated on the two cumulative requirements that are to be met for this purpose[1626]. Regarding the first criterion, the creation should be 'original in the sense that it is the author's own intellectual creation'[1627]. As to the second criterion, the creation as such should represent an 'expression of the author's own intellectual creation'[1628] To clarify what "expression" means, since no definition is provided in EU sources, the CJEU referred to Article 2 of the WCT and Article 9(2)of the TRIPs Agreement, which introduces the idea-expression dichotomy by excluding copyright protection over ideas, procedures, and methods of operation or mathematical concepts as such[1629].

1613 Judgment of 27 January 2011, Flos SpA v Semeraro Casa e Famiglia SpA, C-168/09, EU:C:2011:29.

1614 Judgment of 23 January 2014, Nintendo, C-255/12, EU:C:2014:25.

1615 Judgment of 4 October 2011, Football Association Premier League and Others, C-403/08 and C-429/08, EU:C:2011:631.

1616 Ibid, paras. 98.

1617 Ibid, paras. 96, 97.

1618 Painer (n 336).

1619 Ibid, para. 88.

1620 Ibid, para. 92.

1621 Ibid, para. 89.

1622 Ibid, para. 97.

1623 Judgment of 13 November 2018, Levola Hengelo BV v Smilde Foods BV, C-310/17, EU:C:2018:618.

1624 Ibid, para. 33.

1625 Ibid, para. 34.

1626 Ibid, para. 35.

1627 Ibid, para. 36.

1628 Ibid, para. 37.

1629 Ibid para. 39, citing SAS Institute (n 208), para. 33.

The Court's reasoning in *Levola Hengelo* was translated into a definition similar to that of the graphic requirement for trademarks under *Sieckmann*[1630]*.* To be protected, a work should be 'expressed in a manner which makes it identifiable with sufficient precision and objectivity, even though that expression is not necessarily in permanent form'[1631]. This is deemed necessary to make sure that authorities and competitors can 'identify, clearly and precisely' the subject matter protected and to preserve legal certainty against any form of subjectivity in the identification of the protected work[1632]. Tastes and smells are thus excluded from protection, for they cannot be defined subjectively and depend on variables such as age, food preferences, consumption habits, context of consumption, etc[1633]. Still, this also means that 'it is not possible in the current state of scientific development to achieve by technical means a precise and objective identification of the taste', which hints at the fact that such the scope of copyright protection may be broadened once the technological process would allow their description as 'expression'. The same principles were later reiterated in *Cofemel*[1634] and *Brompton Bicycle*[1635]*.*

**Conclusions and take-aways for Open Science purposes**

While the clarifications offered by the CJEU are useful to reiterate the importance of the idea-expression dichotomy in order to dispel the risk of an overreach of copyright law to cover unorthodox subject matters and to carve out from copyright protection raw and upstream materials that are key for the development of further creations, they are still unfit to tackle the key interpretative challenges raised by new technologies and the data-driven economy. Uncertainties as to the scope of copyright protection, particularly in light of copyright territoriality, are likely to trigger chilling effects on cross-border uses and sharing of research materials, with negative consequences on the proper development of a seamlessly open European research environment.

### 1.1.4.2. DISABLERS OF OPEN SCIENCE

Compared to the overview of the enablers, the analysis of the disablers of Open Science policies, or gaps that may require intervention, is much more overarching and goes beyond the scope of copyright balancing tools. At the same time, in light of their nature and number and their very broad reach, disablers will be analysed in a more concise fashion than enablers and will grouped per Directive involved, while cross-cutting themes will be listed to conclude. While starting from EU law provisions, the analysis inevitably also embeds considerations that stem from the results of the comparative analysis, which are illustrated below (Sections G and H).

1630 Judgment of 12 December 2002, Sieckmann v German Patent and Trademark Office, C-273/00, EU:C:2002:748.

1631 See (n 403), para. 40.

1632 Ibid, para. 41.

1633 Ibid, para. 42.

1634 Judgment of 19 September 2019, Cofemel Sociedade de Vestuário SA v G-Star Raw CV, C-683/17, EU:C:2019:721.

1635 Judgment of 11 June 2020, SI and Brompton Bicycle Ltd v Chedech / Get2Get, C-833/18, EU:C:2020:461.

## I. Software Directive

The **testing and interoperability** exceptions contribute to Open Science goals. However, they are **not well coordinated with general research exceptions** featured in other Directives. This creates a hiatus in national copyright laws (particularly since the Software Directive E&Ls enjoy a much higher degree of harmonisation than other research exceptions), with uncertainties that may have a negative impact on software-related research activities, especially in cross-border settings. Moreover, the concept of "interoperability" is unclear and left to judicial discretion. This contributes to exacerbating legal uncertainty and resizing the role of this provision as a "remover" of barriers to innovation.

## II. Term Directive

**Articles 4 and 5 Term** left Member States free to decide whether or not to take back from the public domain (a) works that have not been published during the term of protection by awarding a related right for 25 years from publication/communication to the person who for the first time publishes or communicates them to the public; and (b) critical and scientific publications that have fallen into the public domain, by awarding a related right for 30 years from the first lawful publication. It is especially the second provision that raises concerns for its negative impact on the availability of freely accessible scientific materials for the general public and for research purposes, to the detriment of Open Science goals.

## III. Database Directive

a. The **optional nature of the E&Ls** to the copyright and sui generis right on databases for illustration for teaching and research **(Article 6(2)(b) and 9(2)(b))** have a negative impact on the degree of harmonisation of the provisions across the EU. This severely impacts legal certainty and cross-border research endeavours, and thus, the correct development and functioning of a common EU research environment inspired by Open Science principles. In addition, **their weak coordination with other teaching and research exceptions** (particularly Article 5(3)(a) ISD) poses similar challenges, also considering the fact that copyright over database contents can subsist regardless of whether the overall dataset is protectable through copyright/sui generis rights.

b. The **broad scope of the sui generis right (Article 7) and the uncertain boundaries of its subject matter** have been identified by several commentators as one of the most problematic provisions of the Database Directive vis-à-vis Open Science goals. While the recent EU Data Package reforms have tried to tackle the issue with ad hoc measures, the general provision remained untouched, together with the uncertainties surrounding some of its key concepts and principles (see, e.g., the notion of substantial investment or extraction of a substantial part to define the limits of lawful use under Article 8). The risk of divergent national interpretations is prone to create serious challenges to the cross-border implementation of OS principles, particularly those related to Open Data.

## IV. Rental Directive

Despite the VOB decision, the CJEU has clarified that Article 6(2) RLD should also apply to the public lending of e-books; this area is still tainted by uncertainty as to the conditions of applicability of the exception, and by a general low harmonisation across the EU. In light of the key relevance of lending by CHIs for access to scientific products and of the fact that the majority of research output is published in (often only) digital format), this lacuna acts as a disabler for EU Open Science.

## V. InfoSoc Directive

a. As also clarified by the CJEU, exclusive rights are subject to maximum harmonisation. While this represents a positive note for the creation of a common and open EU research environment based on clear rules and legal certainty, which decrease the risk of chilling effects on access and reuse of protected works, it also "imposes" to all Member States the problems raised by the way how such exclusive rights are conceptualised and shaped. The two most challenging elements for the interplay between EU copyright law and Open Science policies are (a) **the technical rather than normative interpretation of the right of reproduction** and (b) the **uncertain and expanding boundaries of the notion of communication to the public**, which both negatively impact on the flexibilities offered by the copyright framework.

   i. As to reproduction rights, the prevalence of the "technical" reading of their scope tends to expand their borders, also due to the advancement of technology and the rise of AI-based tools. According to this heavily criticised interpretation[1636], the right of reproduction should group within its scope every act that, by nature and due to their technical features, can be put under the definition of Article 2 ISD without taking into account its impact on the exploitation of protected works. To the contrary, a "normative" effects-based reading of the scope of this right would hold as "reproduction" all acts resulting in an economic detriment to rightsholders, thus limiting protections to what is necessary for the rightsholder to obtain an adequate remuneration while balancing copyright with other conflicting needs. Steps in this regard have been moved by the EU legislator and the CJEU in the context of temporary reproduction and with the development of the fair balance doctrine.[1637] Yet, the vague wording of Article 2 InfoSoc still gives rise to uncertainties, which restrict the room for flexibility vis-à-vis Open Science goals.

   ii. As to the right of communication to the public, the judicial activism of EU courts has contributed to the creation of a complex and problematic scenario. The conditions to find an infringement of Article 3(1) ISD for unauthorised communication of a protected work to the public are unclear. Many definitional quandaries have blossomed up with specific regard to "hyperlinking", in the context of which the CJEU has developed a multi-factored test based on both functional and technical elements. Nevertheless, the intermingling of heterogenous criteria and the lack of clarity on the relationship among them is prone to result in a high level of uncertainty. The effect is the risk of applying the test on a case-by-case basis, also causing an expansion in the borders of the right without pre-determined limits. Although the CJEU has refused a purely technical appraisal of Article 3(1) ISD, the provision currently acts as a residual take-all clause, including all forms of exploitation that do not fall under other exclusive rights. This poses the risk of resizing the effectiveness of those E&Ls that extend their objective scope so as to include acts of communication to the public and, more generally, of producing negative effects on the dissemination of copyright-protected works, to the detriment of Open Science goals.

b. The teaching and research exception under **Article 5(3)(a) ISD** is phrased in a **vague and general language**, with a problematic limitation introduced by the cryptic term "illustration", which may trigger restrictive interpretations. At the same time, the provision **covers two very different activities and goals and has an optional nature**, leaving Member States free to decide whether and to which extent to implement it. As foreseeable, these two features have led to a great degree of fragmentation among national transpositions, making this provision **one of the least harmonised E&Ls in the EU**. Optional nature and vague, double-faced focus have paved the way towards the enactment of a wide variety of national solutions, covering either both categories or just one (usually teaching) and addressing the definition of beneficiaries and permitted uses in a similarly various fashion. The fragmentation of national solutions can be noted at all levels.

    i. Member States present a highly diversified approach towards the definition of the subjective scope of their teaching and research L/Es by choosing either not to identify beneficiaries or to provide an open or closed list of educational (and, more rarely, research/scientific) entities. Vague or too general definitions often lead to restrictive judicial interventions, which bring rigidity without adding legal certainty. In this respect, it is notable that under some national laws, the list of beneficiaries is closed and restricted to the entities set by law. This can have a chilling effect on research in light of the disparities that these rules create among different types of research organisations.

    ii. Lack of harmonisation is even more evident in the case of the objective scope, both with regard to the array of permitted uses and the works covered. In some situations, national exceptions for teaching and research encompass a general right of use, opening the door to broad interpretations. Much more frequently, Member States define a circumscribed number of permitted uses, with the effect of resizing their positive impact on Open Science. However, options are too various to sketch common trends.

    iii. The same can be said for the limits to the types or quantity of works that can be used, where Member States present a wide array of very specific (and different) provisions, or to additional conditions of applicability such as limitations in purpose, necessity benchmarks, three-step-test and remuneration. Limitations as to the purpose are also prone to be strictly interpreted by courts, also imposing that educational and teaching activities should take place within the premises of those entities that have been indicated among the beneficiaries of the exception. This leads to a narrow reading of the notion of educational activities and related goals.

    iv. On top of this, research purposes are almost completely neglected, for the great majority of national provisions are directly and solely addressed to teaching or general educational activities.

c. By the same token, among the various array of permitted uses featuring the national implementations of Article 5(3)(a) ISD, no Member States mention the possibility of reproducing a copy of a work and sharing it among the research project members. This makes the provision useless vis-à-vis cross-border activities, where the exchange of data and research materials is of key importance.

d. The exception for private study may be used to foster Open Science goals, but, in its current formulation, it is still too narrowly tailored with regard to beneficiaries and conditions for access and is also tainted by a low degree of harmonisation in national transpositions.

e. **E&Ls for cultural uses are often strictly limited to preservation purposes** and do not explicitly include research organisations among their beneficiaries (with the exception of virtuous examples from a few Member States), thus excluding key OS players from the scope of the provisions and preventing further use for research-driven purposes under the supervision of the same entities.

f. The optional nature and vague wording of Article 5(3)(c) ISD and Article 6(2) RLD have led to the adoption of a piecemeal approach by national legislators – a circumstance that has radically weakened its potential positive impact on the pursuance of Open Science goals. As better illustrated in the comparative analysis below (Section G), the pre-CDSMD exceptions for CHI preservation and the array of copyright flexibilities for public lending are paramount in illustrating the vacuum of harmonisation in the area. Three different approaches are equally distributed across the EU with regard to beneficiaries (unidentified, closed or open lists of selected beneficiaries, single beneficiaries), works covered and permitted uses (general right of use, only a selected list of rights, one single use, as well as unspecified, a selected list of works or single categories thereof). Conditions of applicability - remuneration duties and limitations in purpose - are read in a highly diversified manner by national legislators and courts, exacerbating the patchwork of national solutions. In addition, Member States provisions often envision different regimes for different works. This means that, apart from orphan and out-of-commerce works, and to a certain extent, the reproduction of CHI collections for preservation purposes under Article 6 CDSMD, there is very little harmonisation across the EU, and various level of flexibility/rigidity can be found among national solutions. This is detrimental to legal certainty, hinders the possibility of developing cross-border cooperation and exchanges, and may ultimately create obstacles to the development of consistent EU cultural and Open Science policies when protected works are involved.

g. By the same token, Article 5(2)(c) ISD has been implemented restrictively as to the purpose-limitation, with the effect of replicating the same rationale of Article 6 CDSMD. Rather, the ISD rule had been originally formulated as a purpose-unspecific provision empowering specific entities (among which research organisations might and should have been fruitfully inserted) with the prerogative of reproducing and making protected works available. In this sense, national implementations have mostly downpinned the potential of the provision.

h. Quotation has been sometimes used for many purposes, including teaching and research. Yet, most of the time, it has also been implemented to reduce the work/objective scope. Thus, an exception for quotation compensating for the lack of a rule expressly implementing Article 5(3)(a) ISD into national copyright law risks being comparatively less flexible and damaging instead of fostering the fulfilment of Open Science policies. It is also relevant that the boundaries of the concept of “quotation”, the maximum amount of work that can be used and the limitation in purpose are usually clarified and further defined by national courts. This judge-made shaping of the legal meaning and practical implications of the quotation exception is likely to have chilling effects on potential beneficiaries and discourage them from leveraging on the provision in the pursuance of their research goals.

## VI CDSMD

The first research-oriented-only flexibility introduced in EU copyright law – **Article 3 CDSMD on text and data mining for research purposes** – has also been implemented almost verbatim by Member States so far, with only a few divergences on permitted uses and on the list of beneficiaries, usually in favour of broader approaches. This represents a novelty in the interplay between EU and national legal systems, and despite all the criticisms raised by the TDM exceptions, it shows a path that may be successfully followed in the future to tackle the challenges raised by Article 5(3)(a) ISD and its features. However, the interplay between the applicability of the CDSMD exceptions and the scope of Article 5(1) ISD risks being tainted with uncertainty. This, in turn, carries with it the risk of attracting within the realm of copyright acts that should rather be put under the umbrella of Article 5(1) ISD. It is also noteworthy that there is a misalignment between the scopes of the two exceptions. In fact, while Article 5(1) ISD has not been extended to cover sui generis-protected databases, Articles 3-4 CDSMD also apply to them.

### a) In general

a. EU copyright law **does not cover the question of authorship and ownership** of copyright, which represents a key building block for the implementation of several policy options directed to the fulfilment of EU Open Science goals. The same can be said for key aspects such as the scope of assignment and exploitation rights, as well as the borders of the notion of “derivative work”.

b. Similarly, the **boundaries of the public domain have not been harmonised** across the EU, again leaving to the discretion of the Member States an area which is of key importance for the fulfilment of Open Science objectives. This is particularly true in the realm of research data, information and AI technologies. In this respect, it is also noteworthy that, in many Member States, rules dedicated to defining the boundaries of copyright protection do not explicitly exclude from copyright data, facts, news and information. This may encourage the privatisation of information, especially in light of the CJEU Ryanair doctrine, which has negative impacts on Open Data processes.

c. In some cases, **beneficiaries of E&Ls touching both directly and indirectly research activities** (e.g. illustration for teaching and research, TDM, quotation, private study, preservation of cultural heritage) **are not consistent among each other**. Overlaps of legal regimes and divergences among national solutions trigger extreme legal uncertainty, which negatively impacts cross-border research endeavours and more complex, larger research projects.

d. Despite the move towards a **special licensing scheme** as an alternative source of flexibility compared to classic E&Ls (see Articles 8 and 12 CDSMD), **EU copyright law lacks a similar provision tackling research and Open Science needs**, and the same can be said for national laws. Only a few Member States have introduced specific provisions to facilitate work use for teaching purposes but never enacted rules establishing a research-specific licensing/ECL scheme for research-related aims.

e. Most E&Ls feature limits to the amount of work that can be used, yet usually without specifying the cap in a detailed manner. This creates bewilderment and uncertainty among researchers and the public, especially when different caps are provided for specific uses or works, with obvious chilling effects on access and reuse.

**Table 33. Enablers and disablers of Open Science goals**

| Research-specific tools | | |
|---|---|---|
| **Provisions** | **Enabling factors** | **Disabling factors** |
| **Articles 6(2)(b) and Article 9(b) DBD** | • Explicitly targeting teaching and research<br>• Broad interpretation of "reutilisation" and "extraction" by the CJEU in the context of Article 9(b) DBD | • Optional nature<br>• Strict limitation to non-commercial uses<br>• Contractual overridability<br>• Do not apply on non-protected databases (see *Ryanair* decision)<br>• Weak coordination with other research exceptions |
| **Article 5(3)(a) ISD** | • Explicitly targeting teaching and research<br>• Broad language | • Vague notion of “illustration”<br>• “Teaching” together with “research”<br>• Limitation to non-commercial purpose<br>• Optional nature = contractual overridability + national fragmentation<br>• No coverage of collaborative research |
| **Article 10(1)(d) RLD** | • Explicitly targeting teaching and research<br>• No distinction between commercial and non-commercial purpose | • Vague notion of “illustration” |
| **Article 3 CDSMD** | • Mandatory and not overridable by contract<br>• Clarifies treatment of TDM activities<br>• Admits PPP | • Limited to non-commercial purposes<br>• Reinforces the technical and not normative reading of Article 2 ISD (expanding it)<br>• Unclear interplay with Article 5(1) ISD and misalignment in scope (ISD not applicable to databases, Article 3 CDSMD yes) |
| **General tools complementary to research-specific provisions** | | |
| **Provisions** | **Enabling factors** | **Disabling factors** |

| | | |
|---|---|---|
| **Articles 5 and 6 Software** | • Rightsholders cannot prevent lawful users to perform act necessary for normal use of and interoperability of the software in individual research activities | • Uncertain notion of "lawful use" and "lawful acquirer"<br>• Strict purpose limitation<br>• No coverage of collaborative research (no data sharing)<br>• Not well coordinated with general research exceptions in other Directives |
| **Article 8 DBD** | • Rightsholders cannot prevent lawful users to extract or re-utilise insubstantial parts of the database<br>• No distinction between commercial and non-commercial purpose<br>• No other limitations on the purpose of extraction and reutilisation | • Covers only insubstantial parts of database content |
| **Article 5(1) ISD** | • Key provision for the development of TDM datasets | • Limited by Article 3 CDSMD |
| **Article 5(3)(d) ISD** | • Leverage for academic freedom of expression | • Vague language<br>• Optional nature<br>• Restrictive interpretation by CJEU |
| **Article 5(3)(n) ISD** | • Offers opportunity of individual access for researchers | • Several conditions of applicability limits beneficiaries and permitted uses<br>• Only for individual researchers and activities |
| **Article 5(2)(c) ISD + Article 6 CDSMD** | • Indirect positive effect on availability and access to resources<br>• Allows restoring of collections<br>• Allows creation of digital twins to be used for research on and by AI and immersive technologies | • Exclusion also of indirect commercial advantage<br>• Article 5(2)(c) ISD optional; Article 6 CDSMD mandatory<br>• Strict limitation in purpose (preservation) |
| **Article 8(1) CDSMD** | • Increase free availability of out-of-commerce works | NONE |
| **Article 12 CDSMD** | • Possibility for Member States to introduce research-oriented ECL | • Not mandatory<br>• Not directly linked to OS |

| Further disabling factors | |
|---|---|
| **In general** | **In specific provisions** |
| • No EU-wide definition of authorship and ownership, detrimental to cross-border research activities<br>• Boundaries of public domain not harmonised | • Broad scope of sui generis database right (Article 7 DBD) and uncertain boundaries of subject matter<br>• Member States' discretion on possibility to introduce related right for critical/scientific publications already fallen into the public domain (Article 5 Term Directive)<br>• Unclear applicability of Article 6(2) RLD on e-books after CJEU's *VOB* decision<br>• "Technical" rather than normative reading of the reproduction right (Article 2 ISD)<br>• An expansive reading of right of communication/making available to the public (Article 3 ISD)<br>• Beneficiaries of E&Ls provisions touching directly/indirectly research activities are not harmonised nor consistent |

*Source: Compiled by the study team.*

## 1.2. Overview of the national copyright frameworks of the EU Member States in light of the EU copyright framework

The EU copyright *acquis* provides users with several flexibilities which may help – directly or indirectly – to foster research activities. This Section offers a concise overview of the most relevant E&Ls, licensing schemes and public domain rules implemented or independently introduced by Member States, which may have an impact on the access to and reuse of copyrighted works for the benefit of researchers and the public as a whole, for the pursuit of OS goals The comparative mapping is largely based on the results of the research conducted from 2020 to January 2023 by the H2020 project reCreating Europe, and complemented by an updated analysis of the national transposition of the CDSMD from January to August 2023.

The following pages outline, with a **dedicated sub-Section for each of the 27 Member States**, the convergences and divergences of national solutions compared to the EU model and the presence of additional provisions that do not correspond to any EU rule, focusing on (i) access and reuse of computer programmes (Articles 5-6 Software); (ii) access and reuse of databases (Articles 6, 8 and 9 Database); (iii) research-specific E&Ls, such as general exceptions for illustration for teaching and research (Article 5(3) ISDISD), and exceptions for text and data mining (Articles 3-4 CDSMD); (iv) general E&Ls which may have an indirect impact on access to and reuse of research materials (temporary reproduction – Article 5(1) ISD, quotation – Article 5(3)(d) ISD, private study – Article 5(3)(n) ISD, preservation of cultural heritage – Articles 5(3)(c) ISD and 6 CDSMD; (v) special licensing schemes; (vi) public domain rules as well as (vii) SPR, where applicable. This will allow assessing the state of harmonisation in the field and determining the degree of flexibility of each Member State copyright law to accommodate OS policies, taking into account (a) the array of beneficiaries, (b) the spectrum of permitted uses/rights (i); (c) types of subject-matters; (d) other conditions of applicability (compliance with fair practice and/or the three-step-test, obligation to mention the source of the work/name of the author, qualitative and quantitative limitations as to the categories and amount of works that can be reused, the possibility for rightsholders to reserve their rights.

The functional analysis will be accompanied by **a synoptic chart** that reports, for each EU provision, the English translation (official or produced by the research team) of the national rule(s) transposing them. The charts also report the text of other provisions that Member States have independently introduced on top of the EU benchmark, which may also contribute to fostering OS goals.

### 1.2.1. AUSTRIA

In Austria, the regulation of copyright and related rights is contained in the Urheberrechtsgesetz (UrhG-A) (Copyright Act) of 1965, last amended in 2022[1638].

#### 1.2.1.1 Access to and reuse of computer programmes

Paragraphs 2 and 3 of Section 40d UrhG-A implements Article 5 Software. The Austrian provision covers only reproduction and adaptation but not translation or arrangement. Although this restricts the objective scope of the exception, it shall be noted that, at the same time, the national rule goes beyond the purpose required by the Directive by explicitly allowing adaptations to the “needs of the user”. This formulation was chosen by the Austrian legislator instead of the more restrictive "error correction" in the text of the Directive. Against the silence of the EU counterpart, the Austrian legislature opts not to permit contractual derogations of the exception.

The "backup copy exception" (Article 5(2) Software) is implemented in line with the EU text, and the same can be said for Article 5(3) Software (Section 69e UrhG-A). As mandated by the EU benchmark, none of these provisions can be waived by contracts. However, the Austrian provision permits agreements concerning the extent of the “intended use” of a programme.

Austria has transposed the interoperability exception provided in Article 6(1) Software, with minor variations, such as the lack of explicit mandatory compliance with the three-step test.

#### 1.2.1.2. Access to and reuse of databases

Section 40h(3) UrhG-A transposes Article 6(1) Database in line with the EU benchmark. However, the Austrian provision refers to "intended use" instead of "normal use" with a relatively restrictive approach.

The specific-purpose-limitations provided in Article 6(2) Database are implemented in Section 40h(1) UrhG-A and by reference to the corresponding E&L in the Austrian Copyright Act. Section 40h(1). In line with 6(2)(b) Database, reproductions for personal use are also permitted for scientific research and school and university use. Both exceptions are subject to the proviso that the reproductions are not for commercial purposes. Since there are no other special regulations in connection with free works, and databases are protected by copyright as collective works under Section 40f (2) UrhG-A, all other traditional free uses of works that come into question regarding content are also applicable to database works. This includes the free use of works in the interest of the administration of justice and administration (Section 41 UrhG-A), in line with Article 6(2)(c) Database.

1638 Bundesgesetz über das Urheberrecht an Werken der Literatur und der Kunst und über verwandte Schutzrechte (Urheberrechtsgesetz). StF: BGBl. Nr. 111/1936 (StR: 39/Gu. BT: 64/Ge S. 19.).

Section 76e UrhG-A closely corresponds to Article 8 Database, and Section 76d UrhG-A implements Article 9 Database with no major divergencies. Moreover, amendments following the implementation of the CDSMD extended the possibility of making extractions and reuse for digital learning (Article 5 CDSM), TDM purposes (Articles 3 and 4 CDSMD) and preservation uses of CHI (Article 6 CDSM).

#### 1.2.1.3. Research-specific E&Ls

Illustration for teaching and scientific research

Sections 42f, 45, 51, 54(1)(3), and 56c UrhG-A pertain to the use of illustrations for teaching or scientific research purposes. In 2015, Sections 42f and 56c UrhG-A underwent amendments. However, it is important to note that the approach taken by the Austrian legislator in these provisions is more specific to the type of works and uses covered, in contrast to the broader and more inclusive approach found in Article 5(3)(a) ISDISD. As a result, the regulation of teaching exceptions in UrhG-A is more restrictive than the ISD benchmark, for it covers a narrower range of works, beneficiaries or rights at traits.

Section 45 of UrhG-A introduces a specific provision governing the use of literary works in the context of teaching and research. According to this rule, literary works published in joint-authored collections or individual works designed for educational purposes, such as churches and schools, may be reproduced, disseminated, and made available to the public. Notably, the Austrian legislator only addressed schools. Absent a specific definition, a literal interpretation of the subjective scope would exclude universities, technical colleges and adult education institutes that are not included in school use. According to the rule, uses must be for non-commercial purposes and limited to what is necessary for the intended educational use. Additionally, Section 45(2) UrhG-A extends this exception to the non-commercial broadcasting of literary works designated for school use, as declared by educational authorities and designated school radios. The provision further ensures that rightsholders receive adequate remuneration, with related claims to be asserted exclusively by CMOs.

Similarly, Section 51(1) UrhG-A only covers works of musical art, i.e. in the musical part (excluding its text). The rule allows the reproduction, distribution, and public availability of musical works intended for school use but strictly for non-commercial use and within reasonable limits justified by the purpose. The provision distinguishes between works in collections intended for teaching singing and containing works by several authors, in particular, songbooks (cf. Section 51(1)(1) UrhG-A) and works in textbooks where they are used to explain or illustrate the content (cf. Section 51(1)(2) UrhG-A). Furthermore, Section 51(2) of UrhG-A ensures that rightsholders receive fair compensation, with related claims exclusively handled by CMOs.

Section 54(1)(3) UrhG-A also contains various types of use for works of fine arts in connection with literary work. According to this rule, individually published works of fine arts in language works intended for school or teaching use are permitted to explain the content or for art education for young people.

Section 56c UrhG-A covers screenings of film recordings of all kinds and presupposes that public performances only take place to an extent justified by teaching purposes. However, film works intended for school or teaching use, according to their nature and designation, are not covered by Section 56c UrhG-A. For all these provisions, the acknowledgement of the source, to the extent possible, is required (Section 57(2) UrhG-A).

In attempting to correlate and compare these rules with Article 5(3)(c) ISD, it becomes evident that, except for expanding the permitted acts, Austrian law imposes stricter conditions, a narrower objective scope, and more limited beneficiaries.

Three additional provisions might serve to achieve the objectives pursued by Article 5(3)(a) ISD, also broadening the scope of beneficiaries beyond “schools”.

The first one is Section 42f UrhG-A, which provides an exception for quotation, encompassing uses for public lectures, performances, and presentations.

The second provision, Section 42(2) UrhG-A, allows anyone to make digital or analogue copies of copyrighted works "for their own use for the purposes of research", provided that these copies are not used for commercial purposes. Thus, this provision benefits working researchers, teachers, and, among others, students who are pursuing research projects if they are not profit-oriented. In line with the EU benchmark, the national wording "insofar as this is ... justified" suggests that the reproduction shall be closely related to the research objective pursued, excluding research activities to make a profit.

The third provision, Section 42(6) UrhG-A, stipulates that universities, schools and “other educational institutions” may make and distribute copies for teaching and educational purposes to the extent justified by the course or class. However, if the reproduction is made on paper or similar media and other media, this is only possible if commercial purposes are not pursued. However, the exceptions do not include works intended for teaching use in their designation and nature, such as lecture notes, solution books or textbooks[1639].

Even before the adoption of the CDSMD, the Austrian legislator responded to the needs of digital teaching by introducing Section 42g UrhG-A, which was amended in 2021 to align it with Article 5 CDSMD. The provision covers all levels of education, including institutions that serve the purpose of continuing vocational training. Making extensive use of the suggestions of Recital 21 CDSMD, the Austrian legislator expressly states that “illustration of teaching” also encompasses uses to complement, enrich and support the learning process. In line with the EU provision, the national rule sets the conditions that use shall be non-commercial to the extent necessary to illustrate teaching purposes. The CDSMD does not contain any quantitative restrictions on the amount of work to be used, and the Austrian legislator follows suit.

Nevertheless, departing from the EU benchmark, the national rule sets additional limits. First, only works that have already been published can be used. Second, cinematographic works first distributed in Austria or German or a language of an ethnic group recognised in Austria no more than 2 years ago may be subject to the exception only if no license can be easily obtained for the same purpose. The same applies also to works intended for school and educational use. Section 42g(2) UrhG-A thus provides that "minor excerpts of such works or such works and representations" may not be used "to the extent that licences for use can be obtained on reasonable terms and conditions". The limit is set to 10% of the entire work, whereas individual representations and "works of fine arts", out-of-print ", or other works of small extent" may be used in their entirety.

Section 42g(4) UrhG-A uses the discretion offered by Article 5 CDSM to require that rightsholders are granted fair remuneration to the rightsholders, which CMOs can assert. Section 42g(5) UrhG-A reiterates the mandatory nature of the exception by prohibiting its overriding by contracts. While Section 57 UrhG-A requires the indication of the source of the work or other subject matter in use, including the author's name, in line with the EU model, there is no explicit indication mandating compliance with the three-step-test.

**1639 However, it would be permissible for pupils or students to make copies themselves within the meaning of Section 42 (1) UrhG.**

**Text and data mining**

Sections 42h(1) UrhG-A and 42h(6) UrhG-A are implemented in Austria Articles 3 and 4 of the CDSM Directive, respectively. Austrian TDM implementation stands out for its rather flexible approach to TDM for research. This can be observed regarding beneficiaries (Section 42h(1) UrhG-A), which is broadened compared to the EU model to include individual researchers who are occasionally involved in research activity or projects, provided that they pursue non-commercial goals. The same can be said for the range of authorised acts, which the Austrian rule extends to the making available of reproductions and extractions made within a specifically defined group of individuals for their joint scientific research or to anyone to review the quality of scientific research, provided that such making available is justified for the pursuit of non-commercial goals.

The provision also invites rightsholders, cultural institutions, and research organisations to voluntarily establish codes of conduct and best practices that define agreed procedures for TDM activities and states that TPMs to prevent unauthorised access to copyrighted works are considered acceptable only if they have been acknowledged within the framework of such codes.

#### 1.2.1.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Section 41a UrhG closely mirrors the provisions of Article 5(1) of the ISD Directive, with one notable difference - the national provision does not require compliance with the three-step test[1640].

**Quotation**

Article 5(3)(d) ISD is implemented in Section 42f UrhG-A in a slightly more flexible manner than the EU model. This can be said for the conditions of the application, as the national rule does not require compliance with fair practices or the three-step test, and for the uses allowed, since it covers reproduction, distribution, broadcasting, and making available to the public, use in public lectures, performances, and presentations of works and other subject matters.

1640 Although the three-step test was not expressly transposed into the Austrian Copyright Act, scholars consider that it must nevertheless be applied as a supplementary rule of interpretation for all exceptions. See: Guido Kucsko and Christian Handig, Urheberrecht - systematischer kommentar zum urheberrechtsgesetz (2nd edn, Manz Verlag Wien 2017). § 41a UrhG Rz 38.

The quotation is possible regardless of the nature of the quoted and the quoting work. In this sense, the national rule permits including quotations from works of visual art and scientific works expressed graphically, such as pictorial representations, models, or miniatures. The provision sets out an exemplificative enumeration, indicating the conditions under which certain works can be quoted. In this sense, it allows quotation if individual works are included, after their publication, in a scientific work or if published works of fine arts are publicly performed in a scientific or educative lecture (in both cases, the quoted piece must constitute the main subject matter of the derivative work). Other allowed purposes are the quotation of excerpts of a literary work in an independent work, passages from a musical work in a literary work, and, finally, if individual passages of a published work are cited in an independent work (Section 42f(1) UrhG-A). Quotations of other types of works and subject matter, while not explicitly mentioned in the demonstrative enumeration, are nevertheless permissible due to the cross-work general provision and its non-exhaustive listing. Departing from the EU baseline, the Austrian provision clarifies that the "publication" requirement requires the work to have been made accessible to the "general" public with the author's consent. This specification might have a restrictive impact on the exception's applicability, as it would exclude works available to a limited public (e.g. on an intranet).

Austria has not adopted a specific exception implementing Article 17(7) CDSMD.

**Private study**

There is no textual provision in UrhG-A that introduces the exception for private study purposes contained in Article 5(3)(n) ISD. Nevertheless, it shall be noted that Section 42(7) UrhG-A, which implements Article 6 CDSMD, permits CHIs to make reproductions also for their purposes of private study. Thus, a systematic reading of this provision, in conjunction with Section 56b UrhG, may fulfil the goals of Article 5(3)(n) ISD if with a narrower scope than the EU baseline. This is due to Section 42(7)(1) UrhG-A, which permits CHIs to make copies of works in their collection to use in accordance with Section 56b UrhG-A. In turn, Section 56b UrhG-A, titled "free use of works for the use of image or sound carriers in libraries", allows making such copies available to the public, but with a restriction that limits use to no more than two visitors at a time.

**Preservation of cultural heritage**

Until recently, Section 42(7) UrhG-A was based on Article 5(2)(c) and (3) (a) ISD. However, with the transposition of the CDSM Directive in 2022, the Austrian legislator has amended this provision to implement Article 6 CDSMD. The amendment extended the subjective scope of the exception in line with the EU model. Whereas the educational establishments have been excluded from the wording of Section 42(7) UrhG-A, it can be argued that the spectrum of copyright flexibilities that have been provided with UrhG-A for them already serve the purposes aimed by Article 6 CDSMD.

Mirroring the EU benchmark, Section 42(7) UrhG-A permits CHIs to reproduce or have reproduced works that are permanently held in their collections for preservation purposes, to the extent necessary for the purpose. Significantly, the effect of this amendment is that of expanding the permitted acts as well as the purposes enabling the exception. In fact, even if only for non-commercial purposes, CHIs are allowed to make a copy of each work in their permanent collections and to exhibit that copy, and to produce a copy of unpublished or out-of-print works and to exhibit, lend, and use the reproduction, also in accordance with Section 56b UrhG-A (with the limit of two visitors). Yet, the provision introduces a restriction to the medium of reproduction and does not permit reproduction on paper or similar materials. Lastly, the national provision does not explicitly require compliance with the three-step test.

#### 1.2.1.5. Licensing schemes

In line with Article 12 CDSMD, Section 25b of the Act on Collecting Societies (V*erwertungsgesellschaftengesetz*) regulates collective licensing with extended effect. This rule allows a collecting society to grant licenses to rightsholders who have not specifically granted these rights through a rights management agreement or a contract with another collecting society. To do so, certain conditions must be met, again in line with the EU text. It is worth noting that permissions for use under Section 25b UrhG-A can only be granted for domestic use.

Section 59 UrhG envisions compulsory licensing schemes to enable the organisers of a public event to communicate a broadcast to the public if a license from the competent CMO is obtained. The provision permits the use of broadcasts of literary and musical work for public lectures and the use of broadcasts by means of loudspeakers if the organiser has been authorised by the CMO. Authors who have not concluded a management agreement with the CMO and whose rights are not administered based on a reciprocity agreement with a foreign CMO also have the same rights and obligations as the beneficiaries of the CMO. The CMO must distribute the remuneration so collected in the same way as it distributes the remuneration it receives from a domestic broadcaster for the authorisation to broadcast literary or sound artworks.

In addition, under Section 56b UrhG-A, a collective license, only asserted through collecting societies, applies where facilities that are accessible to the public, such as libraries and image or sound carrier collections, use an image or sound carrier for public lectures, performances, and presentations of the works recorded on them, in the maximum amount of groups of up to two visitors, and for non-commercial purposes.

#### 1.2.1.6. Public domain

Section 7 UrhG-A identifies a number of “free works” excluded from copyright protection. They range from laws, ordinances, official decrees, announcements, and decisions to official works produced exclusively or predominantly for official use. However, Section 7(2) UrhG-A excludes certain works from the public domain by indicating that maps produced or edited by the Federal Office of Meteorology and Surveying and intended for distribution are protected by copyright.

#### 1.2.1.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

With the aim of ensuring broader dissemination of publicly funded research while balancing the interests of authors and publishers, in 2015, the Austrian legislator introduced SPRs into the copyright landscape under article 37a UrhG-A[1641].

1641 Bundesgesetz über das Urheberrecht an Werken der Literatur und der Kunst und über verwandte Schutzrechte (Urheberrechtsgesetz), StF: BGBl. Nr. 111/1936, zuletzt geändert durch BGBl. I Nr. 99/2015. See also, „Austria“, Section 1.1.3, I of this report.

This provision grants authors the right to make a scientific contribution publicly accessible after a 12-month embargo period following the initial publication. SPRs only apply to contributions that have been published in a collection appearing at least twice annually, such as newspapers and journals and have been at least 50% publicly funded. This means that individual publications, such as thematically collected works, contributions published in non-periodical journals, annual reports, or monographs, are not covered by the scope of this provision. In addition, SPRs can only be invoked by staff members of research institutions financed at least half with public funds – a condition that includes scientists at publicly funded educational and research but primarily excludes privately funded research and personnel in general employment relationships (i.e. non-academic staff or students who are not a member of academic staff). SPRs are subject to further conditions. First, the secondary publication shall not serve commercial purposes. This would allow, for instance, self-archiving in an institutional repository or on the open access publication platform of an institution. Second, authors must indicate the source of the initial publication when exercising the SPRs. Last, the contribution may only be published in the "accepted manuscript version" (AMV).

SPRs are of a mandatory nature. They apply even if the author had previously granted the corresponding rights to a publisher or an editor and cannot be overridden by contractual agreements.

**Conclusions**

The Austrian copyright landscape provides a favourable environment for accessing and reusing protected works. It implements the most relevant E&L in this regard, also with a rather flexible approach. Moreover, even where a textual implementation is missing, such as in the case of the private study exception, the same effect is obtained through a combination of other complementary provisions, albeit with a more limited scope. Moreover, Austria has introduced ECL schemes, which could facilitate the dissemination and access to content. Exceptions, such as for accessing and reusing computer programmes and databases, are quite harmonised with the EU benchmark. An aspect that could certainly enhance access is the prohibition of contractual overridability, also where the EU counterpart left a degree of freedom on the issue. The specific research exceptions are quite broad, also by the effect of the recent amendments to include TDM, digital uses and use for preservation. However, for digital and teaching purposes, confining the permitted uses to published works could exclude certain types of works from the scope of the exception. The lack of reference to the three-step-test as an additional filter in the application is, at least textually, missing. Finally, while the introduction of SPRs enhances the accessibility of publicly funded research, the possibility of involving SPRs is flawed with several restrictions, which diminish the subjective and objective scope of the right.

### 1.2.2. BELGIUM

In Belgium, the regulation of copyright and related rights is contained in the Code de droit économique (CDE); Loi relative au droit d'auteur et aux droits voisins (The Code of Economic Law; Law on Copyright and Related Rights), entered into force in December 2013.

#### 1.2.2.1. Access to and reuse of computer programmes

Belgium transposed Article 5 Software in Article XI.299, §§1-3 CDE and Article 6 Software in Article XI.300 CDE. Both provisions, implemented in 2014, mirror the corresponding EU rules verbatim.

#### 1.2.2.2. Access to and reuse of databases

In 1998, the CDE was amended to transpose Article 6(1) Database in Article XI.188 CDE verbatim. Similarly, the Article 8 Database has been transposed word-by-word in Articles XI.311 and XI.314 CDE in 2015. Article 87bis. §1er. CDE and Article 291 adopted Article 6(4) ISD, again without changes. Additionally, the scope of this provision was extended to related rights by Article 291, §4 CDE and Article XI.316, §2 CDE in 2014 and 2022, respectively.

#### 1.2.2.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Belgian copyright law incorporates several flexibilities that facilitate the use of databases, works, and performances for teaching or scientific research purposes.

Article XI.191/1, §1er 3° and 4°, as well as §2 CDE, which became effective in 1994 (LDA) and was later amended in 2017, directly transposes Article 5(3)(a) ISD, closely adhering to the provisions therein. According to this article, lawfully disclosed works, except for sheet music, can be reproduced and communicated to the public by natural persons and public authorities for illustration in teaching and scientific research. Such uses must comply with the three-step-test, and the source and author's name must be mentioned unless proven impossible.

Article XI.217/1, 3° and 4° CDE, in force since 1994 (LDA) and later amended in 2017, extends this rule to related rights of performers. While the exception in Article 10(1)(d) Rental has not been transposed to CDE, the exception within Article XI.217/1, 3° and 4° CDE aligns with its EU counterpart.

Article XI.191/2, §1ter 1° and 2°, and §2 CDE applies the original exception, explained above, to the right of reproduction and distribution of databases lawfully disclosed while implementing Article 6(2)(b) Database. This article, in force since 1998 (LBD) and later amended in 2015, directly transposes Article 9(b) ISD, adopting the text of its EU counterpart verbatim.

Article XI.240 CDE, which dates back to 1988 (LBD) and was later modified in 2015, grants authors and publishers of lawfully published works, authors of databases, performers, producers of phonograms, and producers of first fixations of films the right to remuneration for the reproduction and communication of their works, databases, and performances. This remuneration can be paid to an authorised CMO.

**Text and data mining**

In 2022, Articles 3 and 4 CDSMD were incorporated into Belgian copyright law, closely mirroring their EU counterparts. Article 3 CDSMD corresponds mainly to Article XI.191/1, §1, 7° CDE. The scope of this provision has been broadened to include databases protected by copyright, performances, computer programmes, and databases protected by sui generis rights through Article XI.191/2, §1, 3° CDE; Article XI.217, §1, 6° CDE; Article XI.299, §5 CDE; and Article XI.310, 3° CDE.

Likewise, Article 4 CDSMD has been transposed verbatim to Article XI.190, 20° CDE, and its scope has also been extended to other subject-matter, such as performances (Article XI.217, §1, 7° CDE), computer programmes (Article XI.299, §5 CDE), and databases protected by sui generis rights (Article XI.310, §3, 2° CDE).

#### 1.2.2.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Articles XI.189, § 3 and XI.217, 8º CDE implemented Article 5(1) ISD verbatim.

**Quotation**

The Belgian copyright law offers a wide range of flexibilities for quotation. Article XI.189, §1er CDE allows the quotation of lawfully published works for the purpose of criticism or review, adhering to fair, professional practices and justified by the purpose. In such cases, the source and author's name must be mentioned unless proven impossible. This provision came into force in 1886 and was last modified in 2015 (with CDE), closely following Article 5(3)(d) ISD. The provision is subject to the three-step test.

Similarly, Article XI.191/1, §1er, 1°, and §2 CDE apply the same rule to quotations made for teaching and scientific research purposes, while Article XI.191/2 §3 CDE (introduced in the LBD in 1998, later modified in 2019) does the same for databases, and Article XI.217, 1° CDE (introduced in the LDA in 1994, later modified in 2015) for performances.

Lastly, Article XI.217/1, 1° CDE, adopted in 1994 (with LDA) and later modified in 2017, permits quotations from a service provided for teaching and scientific research purposes, complying with fair, professional practices and justified by the purpose.

Article 17(7) CDSMSD has been implemented in Article XI.228/6, §1 in 2022, which extends the CDSMD provision to all E&Ls regulated by the CDE.

**Private study**

Article XI.190, 13° CDE reports word by word the language of Article 5(3)(n) ISD. It became effective in 2005 and was subsequently amended in 2015. Similarly, Article XI.217, 12° CDE, which came into force in 2005 (LDA) and was later amended in 2015, expands this flexibility to related rights. Both provisions are subject to the three-step-test.

**Preservation of cultural heritage**

The CDE includes two specific provisions aimed at facilitating the reproduction of lawfully disclosed works and other subject-matter, which were enacted in 2005 (LDA) and later amended in 2015 to transpose Article 5(2)(c) ISD.

Article XI.190, 12° CDE enables publicly accessible libraries, museums, or archives that do not seek any direct or indirect commercial or economic advantage to reproduce a limited number of copies of lawfully disclosed works for cultural heritage preservation purposes, subject to the three-step test. Authors may access such copies, ensuring strict compliance with the preservation of the work, and receive fair remuneration for such uses. Article XI.217, 11° CDE extends the same exception to related rights over performances. The acts allowed under this exception must also conform to the three-step test.

Article 6 CDSM was incorporated into Belgian copyright law in 2022 by Article XI.191/2, §1 CDE, which closely follows the EU rule. The exception has been extended to databases protected by copyright by Article XI.217, 11° CDE, to computer programmes by Article XI.299, §7 CDE, and to databases protected by sui generis rights by Article XI.310, §5 CDE.

#### 1.2.2.5. Licensing schemes

Belgium did not implement Article 12 CDMSD, and no special licensing schemes can be used to foster access and reuse in the context of research activities.

#### 1.2.2.6. Public domain

While there is no specific provision explicitly dedicated to the public domain, Article XI.172 CDE designates speeches delivered in deliberative assemblies, public hearings of jurisdictions, and political meetings without written form, along with the official acts of public authorities, as falling outside the scope of copyright protection. Furthermore, Article XI.295 CDE incorporates Article 1(2) Software, effectively excluding ideas and principles underlying the elements of a computer programme from the protection offered by the Directive.

#### 1.2.2.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

In Belgium, SPRs for scientific articles are governed by Article XI.196 § 2/1 CDE. This provision ensures that authors retain the right to freely disseminate their manuscripts to the public, even if they have assigned their rights to a publisher or placed them under a license, in accordance with Article XI.167. Specifically, authors of scientific articles resulting from research financed for at least half by public funds maintain this right. They can make their manuscripts available to the public in a periodical after a certain period following the initial publication, with acknowledgement of the original source. The timeframe for this secondary publication varies, with 12 months allotted for the humanities and social sciences and 6 months for other scientific fields. However, publishing contracts may stipulate shorter durations, and the King has the authority to extend the initially specified period. It is crucial to note that this right cannot be waived by the author and is considered mandatory as long as there is a connection point in Belgium. Additionally, this provision applies retroactively to works created before its enactment that were not yet in the public domain.

#### Conclusions

The Belgian copyright law closely aligns with EU regulations, incorporating provisions for accessing and reusing computer programmes, databases, works, and other subject-matters, including secondary publishing rights. It includes flexibilities for research, teaching, and preservation purposes and allows for quotation and private study. However, there is no direct transposition of Article 12 of the CDSM Directive concerning licensing schemes in Belgium. Certain materials are designated as public domain, and ideas underlying computer programmes are excluded from copyright protection.

### 1.2.3. BULGARIA

In Bulgaria, the regulation of copyright and related rights is contained in the *Закон За Авторското Право И Сродните Му Права, В сила от 01.08.1993 г. изм. Законът за изменение и допълнение на Закона за авторското право и сродните му права, приет от 49-ото Народно събрание на 23 ноември 2023 г* (Copyright and Neighbouring Rights Act of 01.08.1993, as last amended by Decree no. 211 in 01.12.2023) (Bulgarian Copyright Act).

#### 1.2.3.1 Access to and reuse of computer programmes

Article 5 Software Directive, which introduces exceptions to the economic rights over a computer programme, has been transposed to Articles 70 and 71 of the Bulgarian Copyright Act. Despite the difference in the structure of the EU and national provisions, the Bulgarian legislature has followed the letter of the EU rule without altering its content. Article 6 of the Software Directive finds correspondence in Article 71(3) of the Bulgarian Copyright Act. Whereas the Bulgarian provision closely resembles the EU rule, it departs from the letter of the EU provision in the identification of permitted acts, for it explicitly mentions only translation and not reproduction. Whereas the EU provision explicitly refers to the reproduction and translation of the code of a computer programme, the Bulgarian exception allows only the translation of such code. None of the three exceptions are subject to the three-step test.

#### 1.2.3.2. Access to and reuse of databases

Bulgaria has implemented only the exception envisioned under Article 6(1) Database, which allows lawful users to perform acts of reproduction, translation, adaptation, transmission, and distribution to access the contents of the database and enjoy the normal use of the contents, transposing it *verbatim* in Article 93e(1) of the Copyright Act. The same goes for the exception to the sui generis right provided for lawful users (Article 8 Database), implemented *verbatim* in Article 93e(2). Both provisions are subject to the three-step test, as their EU counterpart.

While no trace can be found of the optional exceptions enshrined in Article 6(2) Database, and particularly no reference is made to teaching and research purposes, the exceptions provided by Article 9 Database for the sui generis right in specific cases, including for illustration for teaching and research (see: Article 9(b) of the Database Directive), has been transposed to Article 93s of Bulgarian Copyright Act, by following the letter of the EU provision *verbatim*.

#### 1.2.3.3. Research-specific E&Ls

##### Illustration for teaching and research

Article 24(1)(3) of the Bulgarian Copyright Act implemented Article 5(3)(a) ISD, yet with a more restrictive approach to its subject-matter and additional criteria of applicability. In fact, the Bulgarian exception permits the use of parts of published works or a small number of short works to the extent necessary for analysis, commentary or other types of scientific research. The use is permissible only for scientific and educational purposes by referencing the source and the author's name unless this is proven impossible. This provision is extended to performances, phonograms, fixations of films, and broadcasts, respectively, by Articles 84, 90, 90v, and 93 of the Bulgarian Copyright Act.

##### Text and data mining

Article 3 of the CDSMD has been transposed to Article 26g of the Bulgarian Copyright Act by following the wording of the EU provision almost *verbatim*. In so doing, the provision enlists several other beneficiaries to whom the TDM exception for scientific research applies. These institutions are as follows: universities and their libraries; scientific and research institutes, as well as hospitals that conduct scientific research; publicly accessible libraries, museums and archive institutions; film and audio heritage institutions subject to the Law on the National Archive Fund; organizations whose main activity is conducting scientific research or conducting educational activities including scientific research, as well as associations including organizations that (a) carry out a non-profit activity for the public benefit, or (b) reinvest all profits from their activities in the scientific research they conduct, or (c) act in the public interest recognized by a Member State, including if they are financed with public funds or through public-private partnerships.

Article 4 CDSMD, likewise, has been transposed to Article 26f of the Bulgarian Copyright Act by closely following the EU provision.

#### 1.2.3.4. General E&Ls complementary to research-specific E&Ls

##### Temporary reproduction

Article 24(1)(1) of the Bulgarian Copyright Act holds a provision which implements the exception provided for temporary reproduction within Article 5(1) ISD almost *verbatim*. The provision is extended to performances, phonograms, fixations of films, and broadcasts, respectively, by Articles 84, 90, 90v, and 93 of the Bulgarian Copyright Act.

##### Quotation

Article 24(1)(2) of the Bulgarian Copyright Act holds a provision that corresponds to Article 5(3)(d) ISD, and it is extended to performances, phonograms, fixations of films, and broadcasts, respectively, by Articles 84, 90, 90v, and 93 of the Bulgarian Copyright Act. No implementation of Article 17(7) CDSMD can be reported up to date.

**Private study**

Article 24(1)(11) of the Bulgarian Copyright Act, as amended, transposed Article 5(3)(n) ISD almost *verbatim* and is extended to performances, phonograms, fixations of films, and broadcasts, respectively, by Articles 84, 90, 90v, and 93 of the Bulgarian Copyright Act.

**Preservation of cultural heritage**

Article 24(9)(1) of Bulgarian Copyright Act closely resembles Article 5(2)(c) ISD. Nevertheless, the Bulgarian exception is slightly more restrictive than its EU counterpart, as it carves out related rights from its scope and specifies the non-commercial purpose of the preservation. However, the Law amending the Bulgarian Copyright Act introduced a new provision, Article Article 26з, which implements Article 6 CDSMD. The provision permits the use of works and other subject matter in the permanent collections of and by or under the control and responsibility of publicly accessible libraries, educational institutions, museums, archival institutions, as well as film and audio heritage institutions subject to the National Archives Act. The provision does not require the remuneration of the rightsholders. As to the permitted uses, the provision stipulates that such works and subject matter can be reproduced, or in the case of the sui generis databases, can be reproduced, extracted or reused, in whole or in part, including by digital means, to the extent necessary for the preservation of cultural heritage.

### 1.2.3.5. Licensing schemes

Bulgarian copyright law does not feature any licensing scheme that can be leveraged by researchers in the pursuance of OS goals.

### 1.2.3.6. Public domain

The Bulgarian Copyright Act, as amended in 2023, contains one provision dedicated to the public domain. Article 4 enlists five categories of subject-matters that are excluded from the scope of copyright protection, which are **(1)** laws and other acts issued by the State and other authorities, judicial documents and official translations thereof; **(2)** ideas and concepts; **(3)** works of folklore (or, also known as, expressions of folklore), and last but not least, **(4)** news, facts, information, and data. As amended, Article 4(5) implements Article 14 CDSMD into the national law by providing an exhaustive list of works. Thus, it holds that reproduction of the following works, only if their copyright protection has expired, are excluded from copyright protection: works of fine art, including those of applied art, design, and folk arts and crafts; works of architecture and the layout plans thereof; photographic works and works created in a manner analogous to photography; approved projects of architecture, structural planning; maps, schemes and other documents related to the fields of architecture, topography; museum objects; typography of printed publications, and cadastral maps and topographic maps of the State.

Article 1(2) Software, which excludes copyright protection ideas and principles that underlie computer programmes, has not been transposed to the Bulgarian copyright law as a stand-alone provision. Nevertheless, the broad articulation of Article 4 of the Bulgarian Copyright Act may be used for the same aim, for it also includes concepts, facts, information, and data.

Last but not least, the amended Copyright Act also holds Article 34, which consolidates that works whose copyright protection has expired can be used freely, however, without any prejudice to the moral rights of the author.

#### 1.2.3.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

The Act to amend and supplement the Copyright and Related Rights Act has introduced a secondary publishing right into the Bulgarian copyright regime. Enshrined in Article 60(2) of the Bulgarian Copyright Act, this provision stipulates that the author of a work of scientific literature, which is the outcome of research that is publicly funded, in whole or in part, shall retain the right to make that work or parts thereof available to the public in educational or scientific repositories for non-commercial purposes after its acceptance for publication by a publisher. The author is required to mention the publisher while disseminating the work via such educational and scientific repositories. According to Article 60(3), any contractual arrangement preventing or restricting this right is null and void.

#### Conclusions

Apart from a few missing elements concerning the implementation of the CDSMD, the Bulgarian Copyright Act implemented most of the EU-relevant provisions for OS purposes. However, in several instances, the Bulgarian legislator has adopted a more restrictive approach – such as in the case of quotation, specific acts of reproduction by CHIs, private study, illustration for teaching and scientific research. In addition, and despite the pivotal importance they hold for OS goals, Bulgarian copyright law has not implemented Article 1(2) Software, contouring the borders of the public domain, and Article 6(2) Database, providing an exception to the exclusive rights of the database author for teaching and research purposes.

### 1.2.4. CROATIA

In Croatia the regulation of copyright and related rights is contained in the Zakon o autorskom pravu i srodnim pravima, NN 111/21, na snazi od 22.10.2021 (NN) (Copyright and Related Rights Acts, NN 111/21, in force from 22 October 2021).

#### 1.2.4.1. Access and reuse of computer programmes

**Articles 5 and 6 Software** are slavishly transposed within Croatian copyright law.

#### 1.2.4.2. Access and reuse of databases

The implementing provisions of **Articles 6 and 8 Database** replicate the language of the EU counterparts. Notwithstanding, it cannot go unnoticed that Article 209 NN, which implements Article 6 Database, additionally requires compliance with the three-step test. The scope of Article 176 NN, implementing Article 8 in Croatian law, is also extended to objects of related rights. However, it is relevant that **Article 9 Database** has been implemented through Article 211 NN with sole regard to the possibility of lawful users reusing the contents of a non-original database for private purposes, therefore excluding specific carve-outs for research and teaching.

#### 1.2.4.3. Research-specific E&Ls

#### Illustration for teaching and research

**Article 5(3)(a) ISD** is transposed in Article 198 NN. This highly articulated provision features two conditions of applicability: the non-profit aim of the activity and the limitation in purpose to uses directed to make examples in class. This specification of the concept of “illustration”, enshrined within the text of Article 5(3)(a) ISD, appear narrow in nature but leaves room for broader judicial interpretations. In fact, making examples to explain a concept is supposed to enrich teaching and research activities and thus take place outside the premises of an educational institution. This may also apply to activities conducted within research teams and projects, which usually run across the premises of the institutions involved.

Article 198 NN states that the type of structure or organisation of the beneficiary shall not play a role in determining whether the aim of the teaching or the research activity at stake is for-profit or not / a specification that may help offer an extensive reading of the provision. However, this potential opening is curtailed by the limited subjective scope of the norm, which applies only to publicly funded, state-led institutions running educational and research activities in compliance with national law.

**Text and data mining**

**Articles 3 and 4 CDSM** are transposed verbatim within Croatian law. The only difference, which is relevant for the scope of this study, concerns the specification of the notion of lawful access required for the applicability of Article 187 NN, which implements Article 3 CDSM.

The Croatian legislator, in fact, took the opportunity to channel into national law the guidance provided by the Recitals of the CDSMD Directive and clarified that "lawful access" should be read as including contractual relationships between rightsholders and user holders of copyright/related rights and open access policies, and other instances covered by codes of conduct and best practices to be agreed upon the parties involved.

The general exception for TDM (Article 4 CDSMD) is transfused in the text of Article 188 NN. Compared to the EU model, the Croatian provision contains a detailed articulation of the technical means through which rightsholders can reserve their rights, which brings more clarity and legal certainty with regard to the actual applicability of the exception.

#### 1.2.4.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

The exception has been implemented verbatim within the text of Article 182 NN.

**Quotation**

Article 5(3)(d) ISD is implemented within the text of Article 202 NN. This broad provision allows quotation for several purposes, also including research and teaching. In this sense, Croatia offers ample flexibility for the inclusion and quotation of copyrighted materials in other works for research purposes, which is advantageous for researchers leveraging existing creative works. However, going beyond the EU model, the provision limits the amount of work that can be quoted to short excerpts.

Article 17(7) has not been implemented through a specific provision, but online quotations can be shielded from infringement under Article 202 NN.

**Private study**

Article 5(3)(n) ISD has not been implemented within Croatian copyright law under a specific provision, but its rationale can be partially found in the wording of the exception for teaching and research purposes.

**Preservation of cultural heritage**

Article 6 CDSM is implemented verbatim through Article 191 NN.

#### 1.2.4.5. Licensing schemes

Croatian copyright law does not feature any licensing schemes that could be used to facilitate access and reuse of protected works for research purposes.

#### 1.2.4.6. Public domain

Article 18 NN establishes a paying public domain scheme, which requires certain cultural establishments to pay a fee in order to communicate works of folklore to the public, thus supporting cultural diversity. This is highly relevant as a form of publicly funded support to some key second-guessed areas of research, which might stem from the promotion, dissemination and reuse of cultural heritage objects and works of folklore.

#### Conclusions

EU provisions affecting the prerogatives of lawful computer programme users and database users are implemented verbatim in Croatia, and in some instances, they are extended to cover related rights. Yet, the three-step-test can also act as an additional filter, carrying with it the risk of encroaching the applicability of the exception in case law. The most relevant aspect, however, lies in the fact that no exception for sui generis rights has been specifically implemented in Croatia regarding teaching and research, thus negatively influencing the position of researchers.

Only a limited number of Croatian provisions may be useful for Open Science purposes. The open-ended wording of the exception for quotation and the lax boundaries of its limitation in purpose may be of help, but the provision is limited to short excerpts. The non-profit requisite of the teaching and research exception may extend the scope of the norm, but a restricted list of beneficiaries countervails it. At the same time, the lack of a specific exception for private study limits the room for flexibility available for research conducted individually in both educational and cultural establishments. As a positive note, detailing the concept of “lawful access” in the implementation of Article 3 CDSDM may prevent the misuse of TPMs and help foster the use of open access policies to stimulate TDM activities.

### 1.2.5. CZECHIA

In Czechia the regulation of copyright and related rights is contained in the 121/2000 Sb. Zákon ze dne 7. dubna 2000 o právu autorském, o právech souvisejících s právem autorským a o změně některých zákonů (ve znění zákona č. 50/2019 Sb.) (CzCA) [Act no 120/2000 Sb., on Copyright and Rights Related to Copyright and on Amendment to Certain Acts of 7 April 2000 (as amended by Act 50/2019)].

#### 1.2.5.1. Access and reuse of computer programmes

While compared to the EU model, Section 66(1)(a)-(c) CzCA implements **Article 5 Software** to extend the scope of the prerogatives of lawful users of computer programmes to every other purpose that is not prohibited by contract, Section 66(1)(d) CzCA transposes **Article 6 Software** verbatim.

#### 1.2.5.2. Access and reuse of databases

**Articles 6 and 8 Database** have been implemented by strictly adhering to the EU rule, and so is for **Article 9 Database.** All optional exceptions have been transposed, including those for teaching and research purposes.

#### 1.2.5.3. Research-specific E&Ls

**Illustration for teaching and research**

The Czechian Copyright Act does not contain a provision implementing **Article 5(3)(a) ISD**, but includes teaching and research purposes under Section 31(1)(c) CzCA, which allows quotation on a non-profit basis, and by mentioning the source of the work/author, unless the same is anonymous or the author uses some pseudonymous (see below). In this way, the array of permitted uses for research is limited to mere "quotation". However, it is worth noting that the very general wording used by the provisions may allow extensive readings by courts.

**Text and data mining**

**Articles 3 and 4 CDSM** have not been implemented yet, but the draft version of the transposition act does not show significant departures from the EU text, apart from extending the scope of the provisions to cover also computer programmes.

#### 1.2.5.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Apart from specifying that the act of making temporary copies should necessarily take place via a computer programme and similar means, it can be fairly said that Article 5(1) ISD has been implemented verbatim within the text of Section 38a(1) CzCA.

**Quotation**

**Article 5(3)(d) ISD** is transposed in Section 31 CzCA. This multi-functional provision is phrased to allow different kinds of activities. First, it does not distinguish on account of beneficiaries. Accordingly, everyone can use excerpts of already published works in accordance with fair practice and to the extent required by the aim. The limitation in purpose introduced by the provision is manifold, leaving room for an extensive reading in case law.

Uses for criticism, review, as well as scientific or professional purposes are allowed. In this respect, it is worth mentioning that the Municipal Court of Prague affirmed that the quotation of four out of nine paragraphs of the claimant's article in an art book regarding a painter's life falls under the definition of "small work" for the purpose of Section 31(1) CzCA, being also compliant with the three-step-test[1642]. Yet, in another case, the use of twelve drawings from another author in his book was held as a "major quotation" and exceeding the limitation in purpose enshrined in Section 31(1) CzCA, for the works were used without any real review or criticism[1643]. The case law remains swinging and does not effectively provide reliable guidelines to orient future behaviours.

To date, the implementation of Article 17(7) CDSMD is still missing.

**Private study**

**Article 5(3)(n) ISD** has been transposed in Czechian copyright law in Section 37(1)(c) CzCA, which goes slightly beyond the EU benchmark in the identification of beneficiaries since it explicitly includes also universities and other educational establishments among the entities that can make their collections available to the public via secured networks and dedicated terminals, provided that such subject-matters are not available for license or purchase elsewhere.

**Preservation of cultural heritage**

1642 Municipal Court of Prague, case no. 66 EC 76/2011–50 of 27 September 2011.

1643 Municipal Court of Prague, case no. 32 C 12/2011–56 of 22 June 2011.

**Article 5(2)(c) ISD** has been implemented by Section 37(1)(a) CzCA, which replicates the wording of the EU rule verbatim, apart from carving out related rights from its scope. Digital preservation is not part of the current Czechian copyright law since the transposition of Article 6 CDSM is still missing.

#### 1.2.5.5. Licensing schemes

Without referring to any EU rule as a benchmark, Czechian copyright law features a provision tailormade for schoolwork, including Section 60 CzCA. Educational establishments and related facilities can conclude licensing agreements for the purpose of allowing the use of schoolwork. In the case the author refuses to give permission, the same can still be obtained in court, thus encroaching on freedom of contract on the grounds of the public interest. This is relevant as it aims to foster teaching-related activities and the reuse of schoolwork at more affordable prices, increasing access to educational materials at all levels.

#### 1.2.5.6. Public domain

Section 2 CzCA excludes news, facts, ideas, principles, procedures, methods, discoveries, mathematical formulas, and similar subject-matters from copyright protection. Thanks to its articulated and all-encompassing formulation, this rule can be very effective in avoiding the misappropriation of knowledge and information as such.

#### Conclusions

The Czech copyright act features exceptions to software protection and copyright and sui generis protection for databases for teaching and research purposes, which fully exploits the possibilities offered by EU Directives. E&Ls, which can serve the purpose of incentivising research at various levels, both directly and indirectly, create a favourable legal background for researchers. In fact, the relaxed limitation in purpose enshrined in the exception for quotation can help with favouring research activities indirectly. Similarly, the broad formulation of the exception for research and teaching goals can be interpreted favourably in case law. It is also notable that the exception for private study goes slightly beyond the EU benchmark with regard to beneficiaries.

### 1.2.6. CYPRUS

In Cyprus the regulation of copyright and related rights is contained in the Ο περί του Δικαιώματος Πνευματικής Ιδιοκτησίας και Συγγενικών Δικαιωμάτων Νόμος του 1976 (Ν. 59/1976, όπως τροποποιήθηκε μέχρι το νόμο αριθ. 155 (Ι)/2022) [Law on Intellectual Property Rights and Related Rights (Law 59/1976) of 1976, as last amended by 155 (1)/2022] (Cypriot Copyright Act).

#### 1.2.6.1. Access and reuse of computer programmes

Article 7B(4) of the Cypriot Copyright Act transposes Article 5 Software by adopting the EU rule verbatim. Article 6 Software was also adopted verbatim.

#### 1.2.6.2. Access and reuse of databases

Articles 7C(2)(b) and 7C(3)(b)(ii) of the Cypriot Copyright Act implemented Article 6(1) and Article 8 Database verbatim. However, Cyprus decided not to transpose the optional exceptions to copyright protection enshrined in Article 6(2) Database, including the one for illustration for teaching and scientific research, while Article 9 Database, providing similar exceptions for the sui generis right, has been fully and slavishly implemented by Article 7(3)(b)(iii) of Cypriot Copyright Act.

#### 1.2.6.3. Research-specific E&Ls

**Illustration for teaching and research**

Article 7(2)(r) of the Cypriot Copyright Act, as amended in 2004, implements the exception provided by Article 5(3)(a) verbatim, with no further specifications. Additionally, Article 7(2)(e), in force since 1976, allows the inclusion of a work in a broadcast, sound recording, film, or collection of works for teaching purposes insofar as such uses are in compliance with fair dealing. The name of the author and the source of the work in use shall be indicated. The scope of this provision has been extended to phonograms and broadcasts, respectively, by Articles 9 and 10 of the Act. Both provisions require compliance with the three-step-test given the regulation within Article 7(6) of the Cypriot Copyright Act.

**Text and data mining**

Articles 3-4 CDSMD has been transposed verbatim into Articles 24-25 of the Cypriot Copyright Act, together with reference to the three-step test (Article 28(2), implementing Article 7(2) CDSMD)**.**

#### 1.2.6.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD was implemented in Article 7(5) of the Cypriot Copyright Act. Compared to the EU model, the Cypriot version is more restrictive, for it does not cover related rights, and it also introduces an additional condition of applicability, providing that the act shall not interfere with the lawful use of technology, vis-à-vis industry practices and standard, in order to obtain data on the use of the information.

**Quotation**

The Cypriot Copyright Act includes an exception for quotation (Article 7(2)(f)) since 1976. Although it preceded the adoption of Article 5(3)(d) ISD, it closely resembles the corresponding EU rule, save for the more restrictive objective scope. The Cypriot exception, in fact, does not cover related and allows only the use of ‘certain excerpts’ of works, including the citation of excerpts from newspaper and magazine articles in the form of a summary, as long as the act is in compliance with fair practices and does not go beyond the extent necessary for the purpose. Quotations shall always be accompanied by an indication of the source used. Just like the EU rule, compliance with the three-step test is required by Article 7(6) of the Cypriot Copyright Act.

Article 17(7) CDSMD has been verbatim transposed to Article 38(9) of the Cypriot Copyright Act in 2022. As a result, the online quotation exception, per contra to the general provision, covers both copyright and related rights.

**Private study**

Article 5(3)(n) ISD has not been transposed in Cyprus. However, Article 7(2)(a) of the Cypriot Copyright Act – corresponding to the press review and news reporting exception under Article 5(3)(c) IISD helps achieve the same goal, albeit to a limited extent, for it excludes some related rights from its scope.

According to this provision, which entered into force in 1976 and is still in force, it is permitted to use works in good faith and for purposes of research, criticism, review, and reporting of current events, as long as such use is made in public. The provision requires that the source and author are always mentioned, except where the work is incidentally included in a broadcast. Article 9 of the Cypriot Copyright Act extends the provision to phonograms and Article 10 to broadcasts, leaving uncovered performances and first fixations of films.

**Preservation of cultural heritage**

Article 7(2)(j) of the Cypriot Copyright Act implements Article 5(2)(c) ISD almost verbatim, and Articles 9-10 extend its scope to cover phonograms and broadcasts, leaving first fixations of films and performances out of the scope of the exceptions again. Similarly, Article 6 CDSMD has been slavishly transposed by Article 27 of the Cypriot Copyright Act.

### 1.2.6.5. Licensing schemes

Whereas the extended collective licensing scheme envisioned for out-of-commerce works within Article 8(1) CDSMD has been transposed to Article 29(1) of the Cypriot Copyright Act verbatim, along with the transposition of the general regulation concerning extended licensing schemes in Article 12 CDSMD into Article 33 of the Cypriot Act; there is no evidence to suggest that the Cypriot copyright landscape consists of any other special licensing schemes that may be of help for the research activities of research organisations.

### 1.2.6.6. Public domain

The Cypriot Copyright Act features two provisions drawing the boundaries of the public domain. Article 3(2) excludes from protection creations that have not been fixed on a tangible medium or by digital means and do not meet the originality threshold of constituting the author's own intellectual creation, which cannot be a copy or, a draft, or a prototype of an existing work. Article 3(3)(a) carves out ideas, processes, systems, methods (including operating methods), principles and elements expressed in the protected object. This regulation is complemented by Article 3(3)(b), which states that generic expressions of the same subject matter are also left unprotected.

Article 1(2) Software verbatim and Article 14 CDSMD are implemented verbatim by Articles 7B(2) and Article 35 of the Cypriot Copyright, respectively.

**Conclusions**

Last amended in 2022, mainly to transpose the CDSM Directive into the national legal sphere, the Cypriot Copyright Act is highly in line with the EU copyright acquis, apart from the scattered exclusion of some related rights from the scope of exceptions covered by this study. Nevertheless, this strong alignment with the EU model comes at the price of a scarce adaptation of the Cypriot copyright provisions to the country's needs, characteristics and expectations. The only EU provision missing in the Cypriot landscape is Article 6(2) Database and its reference to its use for illustration for teaching and scientific research, which represents an internal misalignment since the Cypriot Copyright Act contains the same exception for the sui generis right.

## 1.2.7. DENMARK

In Denmark the regulation of copyright and related rights is contained in the Lov nr. 741 af 25. juni 2014, Lov om ophavsret, som maned af Lov nr. 2607 af 28/12/2021, Lov om ændring af lov om ophavsret (Act n. 741 of 25 June 2014, Copyright Act, as amended by Act n. 2607 of 28.12.2021, Act amending the Copyright Act).

### 1.2.7.1. Access and reuse of computer programmes

Articles 5 and 6 Software have been transposed verbatim in Danish Law.

### 1.2.7.2. Access and reuse of databases

Article 6 Database has been implemented by granting database users the same prerogatives entitled to lawful users of computer programmes. Article 8 Database has not been implemented, thus creating a significant lacuna. Nevertheless, the implementation of Article 9 Database through the extension of the ISD-based exception for illustration for teaching and research (Article 71(5) DCA) substantially fills in the gap, at least with regard to research-oriented uses.

### 1.2.7.3. Research-specific E&Ls

#### Illustration for teaching and research

Article 5(3)(a) ISD is transposed in Section 23 DCA, showing no difference from the EU benchmark but for the fact that “connection with the text” is additionally required. Moreover, the limitation in the purpose of the national provision is articulated in a more specific way than the EU counterpart, as Section 23 DCA requires reproduction only within the context of critical and scientific presentations. Also, the subject-matter is specified, as the provision only refers to “works of art and of descriptive nature”. Furthermore, Section 23 only allows reproduction without explicitly referring to the possibility of making works available or communicating them to the public. In light of these stringent requirements in terms of subject-matter, limitation in purpose and permitted acts, Section 23 can be held as quite inflexible.

#### Text and data mining

Articles 3 and 4 of the CDSM have not been implemented yet, as the CDSM implementing act is still in draft version waiting for approval.

### 1.2.7.4. General E&Ls complementary to research-specific E&Ls

#### Temporary reproduction

Section 11a DCA implements Article 5(1) ISD quite verbatim. However, it is noteworthy that Section 11a(2) explicitly carves out the scope of the provision of computer programmes and databases.

#### Quotation

When transposing Article 5(3)(d) ISD, the Danish legislator chose an ambiguous, all-encompassing formula that mostly reflects the EU text. Accordingly, it is allowed to “quote” -– without specifying the array of permitted acts within the meaning of Article 2 InfoSocISDe subject matters, apart from prescribing before publishing –thus giving ample room for an extensive interpretation in the judiciary. The CDSMD implementation is still ongoing, also including the national transposition of Article 17(7).

**Private study**

**Article 5(3)(n) ISD** is implemented in Section 16a DCA, which restricts the array of beneficiaries to a closed list. In fact, the provision refers to publicly funded institutions listed within the national cultural heritage law. In addition, the provision allows the making available to the public through dedicated terminals of published works only, yet without distinguishing account of the subject-matter. Contrary to the EU rule, Section 16a does not condition the applicability of the exception to the fact that works should not be available for purchase in order to be covered by the exception, leveraging on the discretion left to Member States to go beyond the EU benchmark.

**Preservation of cultural heritage**

Article 6 CDSMD has not been introduced yet in Danish law. However, the national copyright law framework already encompasses an exception akin to the EU rule that transposes Article 5(2)(c) ISD within Danish law. Section 16b DCA provides that a closed list of cultural and educational establishments, in line with Danish law, can reproduce and distribute copies of any subject matter, computer programmes included, as long as such distribution does not concern works that are available for purchase on the market. Although this restriction downsides the applicability of the exception to a significant extent, the purpose limitation enshrined in the provision is phrased with open language. In fact, the provision allows the beneficiaries to replace the missing parts of their collections and also distribute such copies, going beyond the EU benchmark. Copies can also be made in digital format and lent to users. As a result, and also thanks to the fact that the provision explicitly states that national laws regulating the transfer of those works and the activity of the aforesaid institutions prevail over copyright, implying that such laws can also establish rules allowing the further distribution of the copies thereof, the Danish approach to the matter is highly flexible.

#### 1.2.7.5. Licensing schemes

Danish copyright law does not feature any licensing schemes that may directly or indirectly play a role in supporting research activities and access and reuse of protected works to that end.

#### 1.2.7.6. Public domain

As in other EU countries, the public domain rule of Danish law (Article 9 DCA) does not explicitly exclude information, processes, methods, data, and facts, leaving room for contractual practices that may result in de-facto appropriation of knowledge. The provision carves out from copyright protection only laws, administrative regulations, court decisions and other legal and official documents out from copyright protection.

**Conclusions**

The Danish copyright framework does not stand out for its flexibility vis-à-vis research purposes. Article 8 Database has not been directly implemented, while the only general exception that stands out for its flexibility is the one related to the preservation of cultural heritage. The provision that should play the most relevant role in fostering research, i.e. Section 23 DCA, is highly inflexible, and TDM exceptions have yet to be implemented in national copyright law.

### 1.2.8. ESTONIA

In Estonia, the regulation of copyright and related rights is contained in the Autoriõiguse seadus (RT I, 28.12.2021, 3 - jõust. 07.01.2022) [Copyright Act (RT I, 28.12.2021, 3 - entry into force 2022)].

#### 1.2.8.1. Access and reuse of computer programmes

Articles 5 and 6 Software have been respectively transposed in §§ 24 and 25 AutÕS verbatim. In particular, § 24, including prerogatives of lawful users of computer programmes, is overridable by contract, therefore allowing rightsholders to prevent secondary uses.

#### 1.2.8.2. Access and reuse of databases

Article 6 Database has been implemented to closely follow the EU model. The same can be said with regard to Article 8 Database, which also requires compliance with the three-step-test, neither is there a substantial difference between the text of Article 9 Database and that of § 75/6 AutÕS transposing it into Estonian law.

#### 1.2.8.3. Research-specific E&Ls

**Illustration for teaching and research**

Article 5(3)(a) ISD is implemented verbatim by §19AutÕS, which follows the EU model, but for the omission of the reference to “illustration”. This may lead to extensive interpretations with a positive impact on Open Science uses.

**Text and data mining**

Articles 3 and 4 CDSM have been implemented verbatim.

#### 1.2.8.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

There is no substantial difference between the Estonian implementation of Article 5(1) ISD and the text of the EU rule, but the fact that the requisite of lack of economic significance has been “translated” into a clear-cut non-commerciality requirement within the text of Section 181 AutÕS.

**Quotation**

The Estonian legislator implemented Article 5(3)(d) ISD in quite an original manner. In fact, the text of §19 AutÕS also allows summaries of the contents quoted, thus giving the impression that the necessity test featuring the EU exception is interpreted broadly. This is positive from the perspective of creators who rely on pre-existing copyrighted works and include them in new works. Yet, the national provision also adds another condition, which requires beneficiaries not to distort the idea and concept underlying the work – a specification that curtails the possibility of transformative uses.

Article 17(7) CDSM is implemented by §57/9 AutÕS with an open-ended formulation, which potentially extends the scope of the exception beyond online quotation, parody, and pastiche.

**Private study**

Article 5(3)(n) ISD is implemented by §20(4) AutÕS, which goes beyond the EU model by also including works potentially available for purchase. Interestingly, the provision is not overridable by contract.

**Preservation of cultural heritage**

Article 6 CDSM is implemented verbatim, but for the fact that the Estonian act limits the exception to non-commercial purposes.

#### 1.2.8.5. Licensing schemes

Estonia does not provide any licensing scheme directly or indirectly useful for Open Science goals.

#### 1.2.8.6. Public domain

The Estonian copyright legislation does not feature any provision drawing the boundaries of the public domain. This creates a dangerous legal uncertainty, to the detriment of free uses by risk-adverse individuals such as researchers – a circumstance which may severely hinder secondary innovation and research conducted over datasets, news, and press releases consistently, the status of which vis-à-vis copyright protection remains blurred.

#### Conclusions

In Estonia, the ISD-CDSMD sets of E&Ls have been implemented quite verbatim. However, some provisions have been articulated in an original manner, usually opening the door to extensive interpretations. This is the case of the E&L for teaching and research, where the requisite of "illustration" is omitted, with the effect of relaxing the limitation in purpose featuring the provision. It is also notable that the exception for private study is explicitly not overridable by contract.

In general, the Estonian approach to research-related exceptions shows more flexibility than its EU counterpart, save for limited instances. However, no additional provisions on top of EU-inspired rules can be traced.

### 1.2.9. FINLAND

In Finland, the regulation of copyright and related rights is contained in Tekijänoikeuslaki, 404/1961 (Copyright Act, 404/1961).

#### 1.2.9.1. Access and reuse of computer programmes

Sections 25j and 25k TL implement Articles 5 and 6 Software in Finnish copyright law without departing from the EU model, respectively.

#### 1.2.9.2. Access and reuse of databases

While the Article 6 Database has been implemented verbatim, there is no provision in the Finnish Copyright Act corresponding to the Article 8 Database, nor is it possible to find a Section directly corresponding to the Article 9 Database. In this sense, the Finnish system lacks exceptions for illustration for teaching and research in the field of database law.

#### 1.2.9.3. Research-specific E&Ls

**Illustration for teaching and research**

Article 5(3)(a) ISD is transposed in Section 14 TL in the form of an Extended Collective License (ECL), which allows to reproduce temporarily, also via sound recording or other technical means, already published copyrighted works, within the context of an educational activity. The provision is completely silent on research and is strictly teaching-oriented, although its heading mentions “scientific research”. As the limitation in purpose is specified to explicitly allow use in educational activities and exams, it may be inferred that no other purposes – including those relevant to research – can be covered. This limits the array of prerogatives granted to researchers to a significant extent. Moreover, the text of the Finnish rule does not permit more than one copy, and rights can be reserved, with the effect of frustrating the application of the provision (Section 14(4) TL).

**Text and data mining**

Articles 3 and 4 CDSMD are yet to be implemented in Finland, and there are no provisions that may currently be used as a valid alternative to allow TDM activities.

#### 1.2.9.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Unlike the EU model, the implementation of Article 5(1) ISD (Section 11a TL) does not require compliance with the three-step-test. In all other aspects, the two texts are identical.

**Quotation**

Article 5(3)(d) ISD has been implemented in Section 22 TL with a broadly worded text. Every sort of subject-matter, without even requiring before publication, can be quoted in accordance with fair practice and to the extent necessary for the purpose. In contrast with the EU model, no mention of the source of the work or of the name of the author is required. Since Finland has yet to implement the CDSMD, the Finnish Copyright Act does not feature an online quotation exception, although the broad wording of Section 22 TL may be understood so as to cover any format.

**Private study**

The Finnish counterpart of Article 5(3)(n) ISD is Section 16a-b-c TL, which provides that, once published, works can be lent and made available through dedicated terminals of a closed list of beneficiaries determined by law via appropriate security measures that prevent further distribution. In general, all the requirements present under national law reflect the EU model rule. Beyond that, Section 16 applies only if contractual restrictions do not prohibit digital use and further distribution of the copies, with the effect of substantially limiting the effectiveness of the provision. The most noticeable peculiarity of the Finnish rule, however, lies in the fact that beneficiaries are strictly prescribed by law, including libraries entitled to legally deposit a copy of works in compliance with specific rules, as well as the National Audio-visual Institute. It is noteworthy that Section 16c TL allows the use of the collection of the Audio-visual Institute in order to conduct research and teaching activities, with the exception of movies deposited by foreign producers.

**Preservation of cultural heritage**

Article 6 CDSM is yet to be implemented in Finland. However, its rationale is partially addressed through Section 16 TL, which implements Article 5(2)(c) ISD within Finnish copyright law. The preservation-related purposes for which copyrighted works within the collections of libraries, museums, and archives can be reused are numerous, further detailing the provision by comparison with the EU benchmark. In fact, according to Section 16, works contained in CHI collections can be reused for technical restoring, preservation and related safeguarding activities, internal organisation, and administration of the overall collection, replacing a missing or deteriorated item. This multifaceted limitation in purpose is likely to be read in a lax manner in case law, with the effect of bolstering research in the area of cultural heritage restoring and preservation.

#### 1.2.9.5. Licensing schemes

See above (Sections 14 and 16 TL).

#### 1.2.9.6. Public domain

As in many EU countries, the public domain rule enshrined in Finnish copyright law does not explicitly exclude facts, information, and data from copyright protection, with the effect of endowing rightsholders with the prerogative of monopolising knowledge. Rather, Section 9 TL excludes laws, decrees, regulations, and other documents, also including translations, produced by official and state authorities and published in accordance with national law prescriptions. Yet, independent works included therein are still potentially subject to copyright and related rights protection.

**Conclusions**

Finnish law if relatively deficient on the side of research-oriented exceptions to copyright and sui generis database protection, and also stands out for the fact that the national provision for illustration for teaching and research does not explicitly envisage any carve-out for research and submits uses for teaching purposes to requirements that are restrictive on many aspects (amount of work that can be reused, the number of copies that can be made, additional conditions of applicability). In addition, the private study exception features a closed list of beneficiaries. On the positive side, the quotation exception allows an extensive reading, while the provision on CHI preservation may be leveraged for multiple purposes. At the same time, ECL schemes offer additional room for flexibility for the pursuance of Open Science goals.

### 1.2.10. FRANCE

In France, the regulation of copyright and related rights is contained in the Code de la propriété intellectuelle, dernière modification le 22 mai 2020 (CPI) (Act of Intellectual Property, last amended on 22 May 2020).

#### 1.2.10.1. Access to and reuse of computer programmes

Article L. 122-6 and Article L. 122-6-1 CPI, enacted in 1994, transpose Articles 5 and 6 Software, respectively, by adopting these EU rules verbatim and subjecting them to the three-step test

#### 1.2.10.2. Access to and reuse of databases

Article L. 122-5-5° CPI transposes Article 6(1) Database without changes. However, there is no concrete evidence to suggest that Article 8(1) Database has been incorporated into French copyright law.

There is no evidence to suggest that Article 6(2)(b) Database has been incorporated into CPI. However, Article L. 342-3-4° CPI fully aligns with Article 9(b) Database. On the other hand, Article 9(a) Database has not been incorporated into French law. However, Article L. 122-5-2° CPI corresponds to Article 5(2)(b) InfoSoc. This provision was enacted in 1957 and later amended in 2011. Nevertheless, it significantly deviates from its EU counterpart while still requiring adherence to the three-step-test (Article L. 122-5 CPI). Furthermore, Article L. 122-5-2° CPI permits a "copyist" to reproduce a lawfully disclosed work solely for private use. This exception does not apply to the reproduction of artistic works, electronic databases, and computer programmes, except for back-up copies allowed by the exception for accessing and using a computer programme normally.

#### 1.2.10.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article L. 122-5-3° e) CPI directly transposes Article 5(3)(a) ISD, closely following the EU regulation. This provision has been effective since 2006 and was later amended in 2013. It is also subject to the three-step-test (Article L. 122-5 CPI).

Article L. 122-5-3° e) CPI allows the performance and reproduction of excerpts from lawfully disclosed works, with the exception of works designed for educational purposes and sheet music, for the purpose of illustration for teaching and research, including developing and disseminating subjects for examinations or competitions organised as an extension of lessons. Digital uses are also allowed as long as they target an audience primarily composed of pupils, students, teachers, or researchers directly involved in teaching, training, or research activities. The exception is subordinated to the payment of fair remuneration.

Similarly, Article 211-3-3° CPI includes a comparable provision for objects of related rights, such as performances, phonograms, fixations of films, and broadcasts, which can be considered a correspondence of Article 10(1)(d) RLD.

**Text and data mining**

Article L. 122-5-3 CPI incorporates Articles 3 and 4 CDMSD. This provision became effective in 2021 and closely mirrors the EU rules.

Article L. 122-5-3-1 CPI directly adopts the definition of TDM provided within Article 2(2) CDSMD.

Similarly, Article L. 122-5-3-2 CPI transposes Article 3 CDSMD, closely following the structure and wording of its EU counterpart, to create an exception for TDM purposes to CHIs (publicly accessible libraries and museums, archives, film and audio-heritage institutions, educational establishments), and research establishments that have lawful access to digital copies of works, as well as third parties acting on their behalf. Likewise, Article L. 122-5-3-3 CPI adopts Article 4 CDSMD verbatim.

The scope of these provisions is extended to computer programmes, databases protected by sui generis rights, performances, phonograms, and broadcasts, respectively, by Article L. 122-5-3-3 CPI, Article L. 211-3-8° CPI, Article L. 122-6-1-6 CPI, and Article L. 342-3-6° CPI.

#### 1.2.10.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article L. 122-5-6° CPI, which became effective in 2006, directly transposes Article 5(1) ISD, adopting the exact language of the EU regulation. Article L. 211-3-5 CPI expands this exception to related rights. The provision must comply with the three-step-test, as specified in Article L. 122-5 CPI.

**Quotation**

Article L. 122-5-3° a) CPI, enacted in 1957 and later amended in 1992, allows short quotations of disclosed works within permitted critical, polemic, educational, scientific, or informative works. The French exception takes an innovative approach by specifying the nature of the work that can incorporate the quotation instead of merely providing a list of permissible purposes. The quotation should be accompanied by the name of the author and the source of the quoted work. This provision is subject to compliance with the three-step-test, as outlined in Article L. 122-5 CPI.

Article 211-3-3° CPI contains a similar provision for the objects of related rights, such as performances, phonograms, fixations of films, and broadcasts.

Article L. 331-32-1 ARCOM[1644], which came into force in 2022, enacted Article 17(7) CDSMD, stating that OCSSPs should note deprive their users of the E&Ls provided by law.

**Private study**

Article L. 122-5-8° CPI contains an exception that came into effect in 2006, directly transposing Article 5(3)(n) ISD without modification, while also mandating adherence to the three-step-test. Similarly, Article 211-3-7° CPI includes a comparable provision for the objects of related rights, including performances, phonograms, fixations of films, and broadcasts.

**Preservation of cultural heritage**

Effective in 2021, Article L. 122-5-8° CPI transposes Article 6 CDSMD while also subjecting it to the three-step-test (Article L. 122-5 CPI). This exception allows CHIs (publicly accessible libraries and museums, archives, film and audio heritage institutions) to reproduce and communicate to the public a work for the purposes of preserving cultural heritage or maintaining the availability of the works for research or private study of individuals on the premises of the establishment and at dedicated terminals.

Compared to its EU counterpart, this provision has a narrower scope of beneficiaries as it does not include educational establishments and public broadcasting organisations. However, it provides more flexibility, for it allows not only the reproduction of works for the internal activities of CHIs but also the communication to the public of such copies, reinforcing the exception provided for public lending.

The scope of this provision is extended to computer programmes and databases protected by sui generis rights by Article L122-6-1-5 CPI and Article L342-3-5° CPI.

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1644 Autorité de régulation de la communication audiovisuelle et numérique (ARCOM), Légifrance https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000044259118/2022-01-01 accessed 11th August 2023.

#### 1.2.10.5. Licensing schemes

France did not implement Article 12 CDMSD, and there are no special licensing schemes that can be used to foster access and reuse in the context of research activities.

#### 1.2.10.6. Public domain

French copyright law does not include a specific provision that defines the boundaries of the public domain, nor does it contain legal provisions that exclude certain works or other subject-matter from copyright protection.

Adding to that, Article L. 113-10 CPI provides the definition of "orphan work," adopting Article 2(1) OWD verbatim. Article L. 135-1 CPI identifies the subject-matter of this exception, closely following Article 1(2) and Article 1(3) OWD. Accordingly, the scope of the subject-matter includes orphan works first published or broadcast in an EU Member State, such as works published in the form of books, journals, newspapers, magazines, or other writings in the collections of publicly accessible libraries, museums, archives, film and audio heritage institutions, and educational establishments; audiovisual or musical works which form part of these collections or were produced by public broadcasting organisations before 1 January 2003 and held in their archives.

#### 1.2.10.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

In France, SPR allows authors to disseminate their scholarly works through additional channels following initial publication. Specifically outlined in Article L533-4 CPI, these rights encompass various provisions and conditions. Authors retain the right to freely share their finalized manuscripts digitally, even after granting exclusive rights to a publisher, provided that certain criteria are met. These criteria include the manuscript's funding source, with works financed at least half by state grants, local authorities, public institutions, subsidies from national funding agencies, or funds from the European Union falling under this provision. Additionally, authors must secure agreement from any co-authors before proceeding with secondary publication. The SPR may be exercised if the publisher fails to provide digital access to the work. In this case, authors may proceed with secondary publication after a specified period from the initial publication date, with a maximum of 6 months for scientific, technical, and medical publications and 12 months for works in humanities and social sciences. However, the version made available under these conditions cannot be exploited for commercial publishing activities. Also, research data made public by the researcher, institution, or research organization can be reused freely, provided that specific rights or regulations do not protect them, and publishers cannot limit this prerogative. All provisions are mandatory, and any contractual clause to the contrary is deemed null and void.

#### Conclusions

French copyright law closely aligns with EU regulations, incorporating provisions for accessing and reusing computer programmes, databases, and works protected by TPMs. It includes exceptions for research, teaching, text and data mining, and preservation of cultural heritage while ensuring compliance with the three-step test and dealing with secondary publishing rights at the same time. However, there is no direct transposition of Article 12 CDSM Directive in France, and the law lacks specific provisions defining the public domain or excluding certain works from copyright protection.

## 1.2.11. GERMANY

In Germany, the regulation of copyright and related rights is contained in the Gesetz über Urheberrecht und verwandte Schutzrechte (Urheberrechtsgesetz – UrhG-G) (Copyright and Related Rights Act)[1645].

### 1.2.11.1. Access to and reuse of computer programmes

The exceptions provided by Article 5 Software have been implemented almost verbatim under Section 69d UrhG-G. Leveraging on the degree of freedom left by the EU counterpart, the German legislator permits contractual derogations. With a slight departure from the EU model, the backup exception – still not overridable by contract - is also envisioned for preservation purposes. The testing purpose exception is implemented in Section 69d UrhG-G, again in close alignment with the EU text, and the same can be said for the interoperability exception, transposed in Section 69e UrhG-G.

### 1.2.11.2. Access to and reuse of databases

Section 55a UrhG-G transposes Article 6(1) Database into the German copyright law. With a slight limitation compared to the EU model, the range of permitted acts in the national provision is set to encompass only the acts of reproduction and adaptation, but not the distribution or communication to the public. Moreover, the wording of the German exception deviates from the language used by the EU Database Directive, for it refers not to “normal” but to “customary” uses. The provision applies to both electronic and non-electronic databases. The specific purpose-limitations provided in Article 6(2) Database are not expressly listed in Section 55a UrhG-G, transposing Article 6(1) Database.

Germany has made extensive use of the discretion left by EU law by applying the general limitations rules of copyright law[1646]. The only limitation set in line with the EU benchmark is for private uses (Section 53 UrhG-G). Unlike the corresponding EU provision, the national rule does not mention the three-step-test as an additional filter to be taken into consideration in the application of the exception.

Article 8 Database is transposed by Section 87b UhrG-G, but the German provision extends the subjective scope of the exception, which is not confined to “lawful users”. Article 9 Database is implemented without major divergences by Section 87c UrhG-G. The extraction of a substantial part of a work is also permissible for teaching and research purposes, which should be non-commercial and limited to the extent necessary for the aim. In this context, the German legislator restricted the range of beneficiaries to specific groups of educational and research institutions.

In line with Article 5 CDSMD, Section 87c(4), UrhG-G allows making extractions and reuse for digital learning, and the same applies to TDM activities and the preservation of cultural heritage by CHIs (see below).

### 1.2.11.3. Research-specific E&Ls

#### Illustration for teaching and scientific research

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**1645 Urheberrechtsgesetz vom 9. September 1965 (BGBl. I S. 1273), zuletzt geändert durch Artikel 25 des Gesetzes vom 23. Juni 2021 (BGBl. I S. 1858).**

1646 According to Art. 6 (2) (a) of the EC Database Directive, an exception may be created for the reproduction of a non-electronic database for private purposes. This was implemented in Germany by Section 53 (1) in conjunction with Section 53 (5) UrhG; According to Art. 6(2)(b), "use" for illustration in teaching or for scientific research - always with reference to the source - is permissible, provided this is justified for non-commercial purposes. This was also implemented by Section 53(2)(1) and Section 53(3)(1) in conjunction with Section 53(5) UrhG; As Art. 6(2)(c) Database, which permits use "for purposes of public security or administrative or judicial proceedings", this limitation finds correspondence in Section 45 UrhG. Limits for Text and Data mining purposes and for digital learning are also applicable to database works.

Two provisions regulate separately the research and teaching exception provided by Article 5(3)(a) ISD. Section 60a UrhG-G covers uses for illustration and teaching, whereas Section 60c UrhG-G provides an exception for scientific research. At the same time, Section 60a UrhG-G has been amended to integrate the provisions of article 5 CDSM Directive (Section 60a(3a) and and Section 60b(2)) UrhG-G).

At the outset, it shall be mentioned that according to § 60a (4), UrhG-G early childhood education institutions, schools, universities as well as vocational training institutions or other educational and further training institutions fall under the educational institutions privileged under § 60a. Thus, German rule fully covers the institutions and forms of events, whether public or private. However, the use of the works at the beneficiary institutions is only permitted for non-commercial purposes.

The objective scope of the exception is regulated in a rather articulated manner. For the purposes of teaching and illustration, including presentations in class, exams and presentations of the results held by teachers, examiners, and third parties (UrhG-G § 60a), protected works may be reproduced, distributed and made available to the public. The scope of the exceptions and limitations encompassed within Division 6 (Sections 44a-63a UrhG-G), including the one enshrined in this provision, are extended to performances by Section 83 UrhG-G, to phonograms by Section 85(4) UrhG-G, and to broadcasts by Section 87(4) UrhG-G. The exception applies to original and sui generis databases (Section 87c UrhG-G.) and to computer programmes (Section 69d(5) UrhG-G), for these latter long as digital uses take place under the responsibility of an educational establishment on its premises, at other locations or in a secure electronic environment.

Nevertheless, unlike the EU benchmark, the German rule imposes a strict quantitative criterion. While illustrations, individual articles from the same journal or scientific periodicals, other works of small volume and out-of-print works may be used in their entirety (Section 60a(2) UhrG-G), the volume of other works is to only 15 % (Section 60a(1)). Whereas the EU model does not limit the application of the exception to published works, according to Section 60a, only "published" works may be used. Another restriction set by the national implementation is that it excludes live recordings, textbooks, and sheet music from the scope. Specifically, it excludes the reproduction of a work by means of recording onto video or audio recording mediums or communication to the public of a work whilst it is being publicly recited, performed or presented, as well as the reproduction, distribution and communication to the public of a work in schools which is exclusively suitable, intended and labelled for teaching in schools. Lastly, the reproduction of graphic recordings of musical works to the extent that such reproduction is not required for making content available to the public is also excluded. Additionally, the exception only applies where licences for such uses are easily available and traceable, and they meet the needs and specificities of educational establishments. This condition makes use of the degree of freedom left by Article 5 CDSMD.

Section 63 UrhG-G requires mentioning the source of the subject matter as well as the name of the author. If this is not proved impossible, there is no reference to the three-step test.

Along the same lines, Section 60c(1) of UrhG-G enables the reproduction, distribution, and making available to the public of up to 15 per cent of work, only for the purpose of non-commercial scientific research and for a specifically limited circle of persons, and third parties insofar as this serves for the evaluation of the quality of the research. Section 60c(2) UrhG-G, instead, allows the reproduction of up to 75 per cent of a work for personal scientific research, reiterating the possibility to copy specific works in their entirety (Section 60c(3) UrhG)-G, yet with the exclusion of the audio and video recording of public recitation, performance, or presentation of a work, and its subsequent making available to the public.

In addition, Section 60b UrhG-G facilitates the production of support teaching material. This rule permits producers of teaching and instructional media to reproduce, distribute and make

publicly available up to 10 per cent of published work within such collections. According to the definition of “media producers” (Section 60b UrhG-G), beneficiaries are both publishers or university lecturers who wish to offer their own teaching and learning media to the general public.

**Text and data mining**

Sections 60d and 44b UrhG-G are implemented in Germany articles 3 and 4 CDSM Directive, respectively. German implementation stands for its rather flexible approach to the TDM for research purposes. This can be observed regarding the beneficiaries for which the national rule (Section 60d(3) UrhG-G) broadens the range of beneficiaries to include individual researchers who are occasionally involved in research activity or projects, provided that they pursue non-commercial goals. The same can be said regarding the authorised acts. Again, the national provision covers reproductions and extractions but also permits making available those results within a specifically defined group of individuals for their joint scientific research or to anyone to review the quality of scientific research, provided that such making available is justified for the pursuit of non-commercial goals. The making available to the public must be terminated as soon as the joint scientific research or the monitoring of the quality of the scientific research has been concluded. As regards the type of work covered, the text of the national rule does not deviate from the EU model, including the exclusion of computer programmes for TDM for research purposes.

Germany follows the EU model in merely requiring copies to be stored with an appropriate level of security for as long as they are needed for the purposes of scientific research. The national rule additionally permits the storage for the monitoring of the quality of scientific findings. The German legislation remained silent to the Directive's call for rightsholders, cultural institutions, and research organisations to voluntarily establish codes of conduct and best practices that define agreed procedures for Text and Data Mining (TDM) to generate research and other data types.

There are no significant differences in the implementations of Article 4 CDSM, including the explicit statement that a machine-readable approach is the sole appropriate means for reserving rights. The national provision also aligns perfectly with the time limit to retain copies generated during TDM activities.

#### 1.2.11.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Section 44a UrhG-Gclosely mirrors Article 5(1) ISD without requiring adherence to the three-step-test, thereby offering a more flexible exception under German copyright law. The exceptions and limitations covered in Division 6 (Sections 44a-63a UrhG-G) are also extended to performances, phonograms, and broadcasts, as specified in Sections 83, 85(4), and 87(4) UrhG-G, respectively.

**Quotation**

**Article 5(3)(d) ISD** was transposed in German copyright law by Article 51 UrhG-G. The German version is slightly more flexible than the EU model, particularly as to the conditions of applicability (the national rule does not require compliance with fair practices) and the rights covered (reproduction, distribution, and communication to the public of a published work). Allowed purposes, however, are narrowly listed. They include excerpts used in scientific or literary works to explain their contents or passages from a musical work quoted in another musical work.

The scope of exceptions under Division 6 (Sections 44a-63a UrhG-G) extends to performances, phonograms, and broadcasts. Article 17(7) CDSMD has also been implemented in Section 5 of the German Act on Copyright Liability of Online Content Sharing Service Providers (UrhDaG) in 2021, permitting users to reproduce works protected by copyright for quotation, caricatures, parodies, and pastiches, with no significant divergences from the EU counterpart.

**Private study**

Section 60e(4) UrhG-G follows closely Article 5(3)(n) ISD. However, the German exception also, on top of making available to the public the collections on dedicated terminals, allows the reproduction of up to a maximum of 10% of work and isolated illustrations, articles from professional or scientific journals, other small-scale works and out-of-commerce works. The scope of the exceptions and limitations encompassed within Division 6 (Sections 44a-63a UrhG-G), including the one enshrined in this provision, are extended to performances by Section 83 UrhG-G, to phonograms by Section 85(4) UrhG-G, and to broadcasts by Section 87(4) UrhG-G. By specifying the possibility of reproducing works consulted on terminals, the German provisions appear more flexible than their EU counterpart, given that they are not subordinated to the three-step test. It shall be noted, however, that this clarification compensates, to a certain extent, the absence in the UrhG-G of a specific reprography exception. Nevertheless, the subjective scope is limited to libraries only. Unlike the Eu model, the German provision is not subject to licensing terms.

**Preservation of cultural heritage**

In implementing Article 6 CDSMD, Sections 60e(1) and 60f(1) UrhG-G allow publicly accessible libraries, archives, audio and film heritage institutions, publicly accessible museums, and educational establishments to reproduce (or have it reproduced by third parties) a work from their collections or exhibitions, to make available, indexing, cataloguing, preservation, and restoration of such works. The exception also covers subsequent reproductions and technically required alterations. Publicly accessible libraries pursuing a commercial purpose are also allowed to perform the same acts, but only for the purpose of the preservation of cultural heritage (Sections 60e(6) and 60f(3) UrhG-G). The German legislature has transposed Article 6 CDSMD in Section 60f(1) UrhG-G quite verbatim, extending the list of beneficiaries in line with the EU benchmark, and decided to require for this exception the payment of a fair remuneration to rightsholders while not demanding compliance with the three-step-test.

### 1.2.11.5. Special licensing schemes

In line with Article 12 of the CDSM Directive, Sections 51-51b of the German Act on Collecting Societies (VGG) regulates ECLs. According to this Section, if a collecting society reaches an agreement regarding the use of its repertoire, it may also grant corresponding rights of use in the work of non-member rightsholders. The latter may object to this grant of rights at any time by filing an objection with the collecting society. In such cases, the external rightsholders are entitled to the same rights and obligations as if their rights were being managed through a contractual arrangement with the collecting society.

Section 51a UrhG-G lays down the conditions for the effectiveness of the grant of rights in the work of an external rightsholder in line with the EU text. Additionally, the grant of rights must be limited to uses within Germany. The collecting society is also obligated to publish specific information on its website for at least 3 months before the grant of rights.

#### 1.2.11.6. Public domain

Section 5 UrhG-G excludes copyright protection acts, statutory instruments, official decrees, official notices, decisions, official head notes, and other official texts published in the official interest for general information purposes.

#### 1.2.11.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

SPRs, outlined in Section 38(4) UrhG-G, introduced in 2014[1647], grant authors of scientific contributions the right to make their work publicly accessible 12 months after initial publication, contributed has been produced in the context of a research activity that has been funded for at least half by public funds, and the contribution has been published in a collection appearing at least twice annually. This right overrides any exclusive use rights granted to publishers or editors, rendering invalid any contractual clause that limits or excludes SPRs. Additional conditions of applicability include the requirement of an acknowledgement of the original publication source, the non-commercial nature of the secondary publication and the requirement of making available only the manuscript form, i.e., the final version submitted by the author before the contribution was set and laid out by the publisher ("Accepted Manuscript Version").

#### Conclusions

The German Copyright Act (UrhG-G) implements most of the copyright flexibilities introduced by EU Directives, including those envisaged in the CDSM Directive that could significantly impact the access and reuse of protected content. Exceptions, such as for the access and reuse of computer programmes and preservation uses, are relatively consistent with the EU model. Moreover, Germany has introduced ECLs schemes and SPRs, which could facilitate the dissemination and access to content. Significantly, the exceptions regulating access and reuse of sui generis databases, at traits, present a higher degree of flexibility in the subjective scope and do not require compliance with the three-step test, thus enabling a more flexible judicial interpretation. However, specific research exceptions face significant limitations due to the strict quantitative limit established. By contrast, text and data mining for research purposes is quite broad in the permitted acts and subjective scope, thus fostering access and reuse of protected works in the context of research activities.

### 1.2.12. GREECE

In Greece, the regulation of copyright and related rights is contained in Law 2121/1993 (Πνευματική ιδιοκτησία, συγγενικά δικαιώματα και πολιτιστικά θέματα - Copyright, Related Rights and Cultural Matters - GCA), last amended in 2023[1648].

#### 1.2.12.1. Access to and reuse of computer programmes

The GCA contains multiple provisions that allow lawful users to access and use protected works, including computer programmes, databases and works protected by TPMs.

Article 42(1)-(4) and Article 43 GCA implemented Articles 5 and 6 Software in 1994, closely following the standards and adopting the text of their EU counterparts almost verbatim. Article 43(3) GCA complements this regulation by requiring the application of the three-step-test to these exceptions but does not provide remuneration for righstholders.

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1647 Gesetz zur Nutzung verwaister und vergriffener Werke und einer weiteren Änderung des Urheberrechtsgesetzes, G. v. 01.10.2013 (BGBl. I S. 3714). See also, „Germany", Section 1.1.3, IV and fn. 66.of this report

1648 Law 2121/1993 (Copyright, Related Rights and Cultural Matters), Official Journal A 25 1993 - Entry into force: 04.03.1993, last amended by Law 5043/2023 (Official Government Gazette (FEK) A' 91/13.04.2023).

#### 1.2.12.2. Access to and reuse of databases

Articles 3(3) and 45A(5) GCA transposed Articles 6(1) and 8 Database in 2000, adopting the verbatim. Once again, these exceptions mandate the application of the three-step-test regulated within Article 28C.

While the exception provided within Article 6(2)(b) Database has not been transposed to the GCA, Article 45A(6)(a) of the GCA has implemented Article 9(b) Database verbatim.

Both Article 6(2)(a) Database and Article 9(a) Database have not been implemented in the Greek copyright law. On the contrary, Article 3(4) of the GCA explicitly prohibits the reproduction of a non-electronic database for private purposes.

#### 1.2.12.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

The GCA includes several provisions that allow for flexibility in teaching and research purposes.

Article 20 paragraphs (1) and (3) GCA, in effect since 1993 and later amended in 2002, regulate the use of school textbooks and anthologies. It permits the reproduction of published literary works containing contributions from several authors in educational textbooks approved for use in primary and secondary education by competent authorities. No remuneration is due to rightsholders, but reproductions should be limited to only a small part of each author's work. The exception covers reproduction only and is subject to the three-step-test outlined in Article 20(3) GCA, along with the obligation to mention the source and author, unless it is impossible. Article 22 GCA extends this rule to excerpts of works of fine arts, visual or photographic works, and excerpts of musical, cinematographic, audio, and audio-visual works, if necessary, for teaching/educational materials approved for use in teaching and free distribution by official authorities. The source and title of the work must always be mentioned unless proven impossible.

Similarly, Article 21 GCA, in effect since 1993, allows the reproduction of articles published in newspapers or periodicals, short extracts of a work, or parts of a short work, and published works of fine art exclusively for teaching or examination purposes in an educational establishment. This provision also requires the application of the three-step-test and the mention of the source unless impossible, with no remuneration due to rightsholders. Article 52(b) GCA extends the scope of exceptions and limitations to copyright to include performances, phonograms, and broadcasts as well.

With the regulation within Article 52(b) GCA, the scope of both provisions mentioned above is extended to performances, phonograms, and broadcasts as well, and they are subordinated to the three-step-test outlined in Article 28C GCA.

In addition to the GCA provisions, Ministerial Decision 24505KB/2006, effective since 2006, provides certain flexibilities for using works for teaching and research. According to this Decision, foreign language certificate tests published on the official website of the Ministry of Education can be freely reproduced, stored, or copied in whole or in part only for private or educational uses. Indicating the source of the information is required. Commercial uses or including the text in another work are not permitted under any circumstances. Furthermore, reproduction, publication, and dissemination of such content for educational or scientific purposes require written authorisation from the Ministry of Education.

**Text and data mining**

Greece has implemented Articles 3 and 4 CDSM, respectively, within the texts of Articles 21A and 21B GCA. There is no substantial difference between the EU benchmark and the Greek transposition.

### 1.2.12.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD was incorporated into the GCA in 2002 by Article 28B, which adopts the EU text verbatim. To qualify for this exception, beneficiaries must adhere to the three-step-test, as specified in Article 28C. Additionally, Article 52(b) of the GCA extends the scope of exceptions and limitations **to copyright to include performances, phonograms, and broadcasts as well.**

**Quotation**

Article 19 GCA encompasses the quotation exception. The provision came into effect in 1993, preceding the adoption of Article 5(3)(d) ISD. However, it aligns with its EU counterpart. Article 52(b) GCA extends the scope of subject-matter to include performances, phonograms, and broadcasts as well. The three-step-test enshrined in Article 28C is applicable here as well.

**Private study**

Article 5(3)(n) ISD has not been transposed into Greek copyright law.

**Preservation of cultural heritage**

Article 22(1) GCA, which came into effect in 1993, corresponds to Article 5(2)(c) ISD, despite being enacted before the adoption of the Directive. This provision permits non-profit libraries and archives to make an additional copy of works in their permanent collection for the purpose of preservation or transfer to another non-profit library or archive. The reproduction is allowed only if obtaining another copy from the market promptly and under reasonable terms is not feasible. No remuneration is required. It should be noted that the scope of this exception includes performances, phonograms, and broadcasts, as specified in Article 52(b) GCA. Additionally, compliance with the three-step-test, as outlined in Article 28 GCA, is mandatory for this provision.

Meanwhile, Article 22A GCA, via the reform performed by Law 4996/2022, incorporates Articles 6 and 7 of the CDSM by allowing cultural heritage institutions to create copies of works or other subject-matters of protection that are permanently in their collections in any form or medium, for the purpose of their preservation, being deemed void any contractual provision that may contradict this norm.

### 1.2.12.5. Licensing schemes

Greece did not implement Article 12 CDMSD, and there are no special licensing schemes that can be used to foster access and reuse in the context of research activities.

#### 1.2.12.6. Public domain

Article 2(3)-(5) GCA, in effect since 1993, excludes certain elements from copyright protection., such as ideas and principles underlying computer programmes, interfaces (as in Article 1(2) Software), official legislative, administrative, or judicial texts, works of folklore, news, facts, and data. Additionally, Article 3(3) GCA establishes that the first lawful sale of a copy of a database within the EU leads to the exhaustion of the distribution right within the EU. This rule is similarly applicable to sui generis database rights according to Article 45A(2) GCA, and to computer programmes as per Article 41 GCA.

#### Conclusions

The GCA incorporates provisions that allow access and reuse of protected works, including computer programmes, databases and works with TPMs. It closely follows EU regulations, transposing the Software and Database Directives verbatim. The GCA also includes flexibilities for teaching and research purposes. However, it lacks a holistic approach compared to Article 5(3)(a) ISD. The focus on specific works and uses, along with the introduction of additional fragmented criteria, may result in more rigidity compared to the corresponding EU rule. In addition, all provisions have a clear focus on teaching and leave out research, with obvious negative consequences on the pursuance of Open Science goals.

The exceptions for temporary reproduction, quotation and preservation of cultural heritage also recall the EU text verbatim, while the Greek legislator did not implement the private study exception under Article 5(3)(n) ISD.

### 1.2.13. HUNGARY

In Hungary, the regulation of copyright and related rights was contained in 1999. évi LXXVI. törvény. a szerzői jogról (SZJT) (1999 LXXVI. Law about Copyright).

#### 1.2.13.1. Access and reuse of computer programmes

Article 5 Software has been implemented in Section 59 SZJT, and Article 6 Software has been implemented in Section 60 SZJT paragraphs (1)-(3), in both cases verbatim.

#### 1.2.13.2. Access and reuse of databases

Articles 6(1) and 8 Database have been implemented, respectively, in Section 62(1) SZJT, which entered into force in 2012, and Section 84/B SZJT, which entered into force in 2018. Both provisions closely follow the EU text. The only slight difference lies in the necessity benchmark, which is set to include all acts that are necessary to gain access and exercise “proper use” of the database.

Article 9(a) Database has been implemented verbatim in Section 84/C(1) SZJT by adopting the language of its EU counterpart verbatim. The same goes for Section 84/C(2) SZJT, which transposes Article 9(b) Database, and for Article 9(c) Database, which has been implemented in Section 84/C(3) SZJT[1649].

1649 For related case law, see: Győri Törvényszék P. 20.137/2013/21; Fővárosi Bíróság P. 20.568/2007/43; Fővárosi Bíróság P. 26.166/2009/17; Fővárosi Ítélőtábla Pf. 21.836/2009/3; Fővárosi Ítélőtábla Pf. 21.038/2018/6, Debreceni Ítélőtábla Pf. 20.567/2012/6.

#### 1.2.13.3. Research-specific E&Ls

**Illustration for teaching and research**

Section 34(2) SZJT[1650] implemented the exception provided by Article 5(3)(a) ISD in 2009 by largely following its text. Still, compared to the EU provision, the Hungarian rule is slightly more restrictive with regard to the works covered by the exception and their quantity. The provision allows the use of a range of works for the purpose of teaching in educational institutions and scientific research. These works comprise excerpts from literary works, musical works, films that have been made public or small works, pictures of works of fine art, architectural works, works of applied art and designs, and photographic works. Section 68(2) SZJT enables the use of pictures of fine art, architectural, and applied art works, as well as pictures of industrial designs and photographic works for scientific lectures without remunerating the author. Section 83(2) SZJT extends the scope of these provisions to related rights.

Sections 34(2) and 68(2) SZJT keep the array of beneficiaries unspecified, but it is worth mentioning that there are other national exceptions for teaching and research purposes which contain a list of beneficiaries. An example is Section 35(4)(5) SZJT, which shelters use made by both CHIs and educational establishments under the umbrella of the same exception for teaching, research, and private study.

**Text and data mining**

Articles 3-4 of the CDSM were implemented almost slavishly in Section 35/A and 84/D SZJT in 2021.

As to beneficiaries, a limited departure from the EU lies in the definition of “research organisations” within Section 33/A(2)(2) SZJT, which covers non-commercial scientific activities of university hospitals and laboratories and other research sites, as well as individual researchers who conduct research under a contract. The objective scope covers works, performances, phonograms, broadcasts, audiovisual recordings and databases.

#### 1.2.13.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD has been implemented to replicate the EU wording under Section 35(6) SZJT.

**Quotation**

The quotation exception is featured in Section 34 SZJT, which entered into force in 1999. This provision was complemented by Section 34/A(1) in 2009, following the adoption of Article 5(3)(d) ISD, which the Hungarian provision follows almost verbatim. Section 83(2) SZJT extends the scope of copyright E&Ls to related rights.

**Private study**

Section 38(5) SZJT, which entered into force in 2003 and was later amended in 2008 and 2019, implements Article 5(3)(n) verbatim, with Section 83(2) SZJT extending it to related rights.

1650 For related case law, see: BDT2015. 3392; EBH2003. 947 Gyulai Törvényszék P. 20.213/2017/22.

**Preservation of cultural heritage**

Article 6 CDSM has been implemented by Section 33/A(1)(2) and Section 35(4)(b) SZJT in 2021 in line with the EU model. The same goes for Article 5(2)(c) of the ISD Directive.

Section 35(4)(b) SZJT provides for a slightly narrower exception compared to that of Article 6 CDSM, mainly for two reasons. On the one hand, the Hungarian rule does not include public broadcasting organisations (Recital 13 CDSM) among its beneficiaries; on the other hand, permitted acts should conducted for non-commercial purposes.

As to the objective scope, the provision departs from the CDSMD model as to works and uses/rights covered, for it does not mention that works must be permanently located in CHI-collections. Also, Section 35(4) SZJT goes beyond reproduction and also permits distribution of the copies made.

### 1.2.13.5. Licensing schemes

In Hungary, there are no licensing schemes which may play, even indirectly, a role for research-driven use of copyrighted works and the like.

### 1.2.13.6. Public domain

Section 1(4)-(7) SZJT, which entered into force in 1999, excludes a wide range of works from copyright protection. They range from laws and other regulations to court rulings, regulatory resolutions, other official communications and documents, standards prescribed as mandatory by law and other similar regulations (Section 1(4) SZJT); facts and daily news items released in press (Section 1(5) SZJT); ideas, principles, theories, procedures, operating methods, mathematical operations (Section 1(6) SZJT); and works of folklore (Article 1(7) SZJT)[1651]. Nevertheless, Section 1(7) SZJT clarifies that whereas the expressions of folklore are allocated to the public domain, original and individualistic works deriving from folklore can be protected by copyright.

Section 58(1) SZJT implements Article 1(2) Software verbatim.

**Conclusions**

The Hungarian Copyright Act is mostly harmonised with the EU copyright acquis, for it has implemented the vast majority of the E/Ls provided by EU Directives, including those of the CDSMD. Still, a number of flexibilities have not been implemented in Hungarian copyright law, such as the exceptions for online parody/quotation, the exception for copyright over databases for private copy, and the exception for illustration for teaching and scientific research**.**

Hungarian copyright law features all the EU E/Ls addressed to lawful users of computer programmes and databases.

1651 For related case law, see: Győri Ítélőtábla Pf.I.20.116/2015/6/I, Kúria Pfv.IV.20.071/2015/10; BDT2006. 1319, BH1978. 471; SzJSzT 18/2007, SzJSzT 13/2016; SzJSzT 19/2002, SzJSzT 9/2001; SzJSzT 27/2001, SzJSzT 25/2000; SzJSzT28/2003

### 1.2.14. IRELAND

The Irish copyright law is governed by two major pieces of legislation: Copyright and Related Rights Act n.28 of 2000 (as amended by Act n. 18/2004, Act n. 39 of 2007 and Act n. 19/2019 - CRRA) and SI No 567 of 2021 European Union (Copyright and Related Rights in the Digital Single Market) Regulations of 2021 (hereinafter CDSM Regulations of 2021).

#### 1.2.14.1. Access to and reuse of computer programmes

Article 5(1)-(2) Software has been implemented by very closely following the text of the EU rule in Section 82(1)-(2) CCRA, while Article 5(3) Software in Section 80(1) CRRA. The Irish implementation departs from the letter of the EU rule only in two instances. First, Section 80(2) CRRA defines the notion of 'lawful user' but repeats the notion enshrined in Article 5(1) Software, concerning a different exception. Second, the Irish provision does not require compliance with the three-step test. Article 6 Software has been transposed to Section 81 CRRA *verbatim*, again with no reference to the three-step test.

#### 1.2.14.2. Access to and reuse of databases

Section 83 CRRA implements the general exception of Article 6(1) Database without the application of the three-step-test. Article 6(2) Database has not been transposed in Irish law. However, Section 50(1) CRRA contains a general fair dealing clause, stating that "[f]air dealing with a literary, dramatic, musical or artistic work, sound recording, film, broadcast, cable programme, or non-electronic original database, for the purposes of research or private study, shall not infringe any copyright in the work".

Article 8 Database is implemented verbatim by Section 81 CRRA, declaring the exception mandatory and thus not overridable by contract.

Article 9 Database finds its correspondence in Section 329 CRRA, which, however, is formulated as an open, fair dealing clause, and states that the sui generis right over a non-electronic database which has been re-utilised is not infringed by fair dealing with a substantial part of its contents by a lawful user of the database where that part is extracted for the purposes of research education, research or private study. This provision, according to Section 57C CRRA, does not apply where there is a licensing scheme certified under Section 173 CRRA, and the person making use of the work knew or ought to have been aware of the existence of the licensing scheme. Aside from these differences, the Irish provision meets the standards set by the EU provision, as in its Section 330 CCRA, it states that the sui generis right is not infringed by fair dealing with a substantial part of its contents by a lawful user of the database, where that part is extracted for the purposes of illustration in the course of education or of preparation for education, the extraction is done by or on behalf of a person giving or receiving education, and the source is indicated. It shall be highlighted that for the purposes of this Section, "lawful user" includes an educational establishment.

#### 1.2.14.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Section 57 CRRA contains a provision for educational establishments which is more restrictive than Article 5(3)(a) ISD. Beneficiaries are defined in a narrower manner since educational institutions are listed in Section 2 CRRA as any school, any university to which the Universities Act, 1997, applies, any relevant provider within the meaning of Section 2 of the Qualifications and Quality Assurance (Education and Training) Act 2012, and any other educational establishment prescribed by the Minister. The provision covers reproductions, display, and communication of protected works for the sole purpose of illustration for education, teaching, scientific research, or preparation thereof, to the extent justified by the non-commercial purpose and with acknowledgement of the source. Different from the EU provision, Section 57 CRRA permits only up to 5 per cent of any work to be copied in any calendar year.

Whereas any contractual provisions contrary to this Section are unenforceable (Section 57(5) CRRA), Section 57C declares the exception not applicable if a licensing scheme for the same purpose is available, and the person making use of the work knew or ought to have been aware of the existence of the licensing scheme.

Additionally, and as already indicated above, Section 50(1) CRRA holds that '[f]air dealing with a literary, dramatic, musical or artistic work, sound recording, film, broadcast, cable programme, or non-electronic original database, for the purposes of research or private study, shall not infringe any copyright in the work.' This general clause has been extended to performances and recordings by Section 221(1)(c) CRRA, but again, it does not apply in the case of the availability of licensing schemes for the same purpose.

**Text and data mining**

Section 53A CRRA transposes Article 3 CDSMD but adopts a broader approach to beneficiaries, which are not limited to ROs and CHIs. On the contrary, the provision has a narrower subject matter in articulating its beneficiaries due to not limiting it to the CHIs. The source of the work subject to TDM shall be acknowledged, and reproductions made cannot be transferred without the authorisation of the rightsholder. All other elements of the provision recall the EU model verbatim.

The exception therein has been extended to performances amongst the objects of related rights by Section 225A CRRA.

Article 4 CDSMS has been transposed almost verbatim by Sections 53B and 225AA CRRA, along with the implementation of the three-step test. The provision specifies that the reservation of rights by the copyright owner shall be made in a manner that is machine-readable in the case of content made publicly available online, including metadata and terms and conditions of a website or a service, and should there be content not made publicly available online, is clearly communicated to all persons who have lawful access to it. Section 83 CRRA extends the provision to computer programmes, subject to the same conditions.

#### 1.2.14.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Section 87(1) CRRA implements Article 5(1) ISD verbatim. Section 244(1) CRRA introduces the same exception for performances. Different from the EU model, the provisions are not subject to the three-step test.

**Quotation**

Section 52(4) CRRA implements Article 5(3)(d) ISD with a slightly more restrictive approach. In fact, the Irish rule allows quotations only where such use does not prejudice the interests of the rightsholder and does not cover objects of related rights. In addition, Section 51 CRRA contains a general fair dealing clause holding that '[f]air dealing with a work for the purposes of criticism or review of that or another work or of a performance of a work shall not infringe any copyright in the work where the criticism or review is accompanied by a sufficient acknowledgement'. As explained in Section 51(3) CRRA, sufficient acknowledgement implies the indication of the title or other description and of the author unless 'in the case of a work which has been lawfully made available to the public, it was so made available anonymously, or in the case of a work which has not been made available to the public, it is not possible for a person without previous knowledge of the facts to ascertain the identity of the author of the work by reasonable enquiry'. The provision has been extended to press publishers' rights by Section 13(4) of the CDSM Regulations of 2021 and to performances and recording by Section 221(1)(a) CRRA.

Section 21 of the CDSM Regulation of 2021 implemented verbatim Article 17(7) CDSMD, but it refers to all E&Ls encompassed in Parts II and III of the CRRA.

**Private study**

The exception provided for private study purposes within Article 5(3)(n) ISD has not been implemented within the Irish copyright law as is. However, Sections 69A and 235A CRRA introduce a fair dealing clause for private study purposes. Differently from the EU provision, the Irish rule does not require compliance with the three-step-test, and it limits beneficiaries to the librarian or the archivist of a prescribed library or archive. They are allowed to communicate to members of the public copies of works in the permanent collection of the library or archive by dedicated terminals on the premises of the library or archive for the sole purpose of education, teaching, research or private study, and accompanied by a sufficient acknowledgement.

Along the same line, Section 69A(2) CRRA stipulates that, without prejudice to fair dealing, the brief and limited display of a copy of a work in a library or archive, by a librarian or archivist, or during a public lecture in the same premises, for the sole non-commercial purpose of education, teaching, research or private study, constitutes fair dealing with the work. The provisions have been extended to performances by Section 235A CRRA.

**Preservation of cultural heritage**

Article 5(2)(c) ISD has been implemented by Section 65 CRRA. However, the Irish provision is more restrictive with regard to beneficiaries and subject matter, and it introduces additional conditions of applicability.

As to beneficiaries, Section 65 CRRA limits them to librarians and archivists, who are allowed to make a copy of a work in the permanent collection of the library or archive in order to preserve or replace that work in their library/archive or in another premise, if the work has been lost, destroyed or damaged, without infringing the copyright in the work, in any illustrations accompanying the work or in the typographical arrangement. The exception applies only when it is not reasonably practicable to purchase a copy of the work in the market.

Section 68A CRRA, adopted in 2019, already addressed digital preservation purposes before the entry into force of the CDSMD. To fully align the provision to Article 6 CDSMD, the CDSM Regulations of 2021 slightly amended its text, adding a third paragraph to declare the contractual non-overridability of the provision and extend the range of beneficiaries to cover all the CHIs included under Article 2 CDSMD (publicly accessible libraries, educational establishments or archives, museums, and film and/or audio heritage institutions). It is worth noting that the subject matter of Section 68A CRRA is narrower than the one of its EU counterparts, for it does not cover objects of related rights, databases and press publishers' rights, and it excludes the application of the exception if the work copied was an infringing copy, and the beneficiary did not have reasonable grounds for believing the contrary.

#### 1.2.14.5. Licensing schemes

Uses undertaken by educational establishments are managed by an agreement involving the Irish Licensing Agency for the use of copyrighted works for their teaching activities and related examinations. However, the text of Section 168 CRRA does not explicitly encompass uses for research or set a similar regime for these purposes.

#### 1.2.14.6. Public domain

Article 17(3) CRRA is the only legal provision in Irish copyright law that tackles the public domain. It corresponds to Article 9(2) of the TRIPs Agreement, for it excludes from protection ideas and principles which underlie any element of a work, procedures, methods of operation or mathematical concepts. It also embeds Article 3(2) Database, stating that the copyright protection over databases does not extend to its content. Article 14 CDMSD has not been transposed into the CRRA.

#### Conclusions

The CRRA, especially after the transposition of the CDSM Directive, is capable of corresponding to the E&Ls that stem from the EU acquis, particularly to those that are analysed for the purposes of this study. Nevertheless, it shall be kept in mind that whereas some of the EU provisions are formulated as exceptions and limitations to copyright, some others comprise general or specific provisions on fair dealing with works for certain uses. That said, except for Article 6(2) of the Database Directive and Article 14 of the CDSM Directive, the CRRA is in line with the research-related E&Ls of the EU copyright *acquis*. Yet the Irish provision concerning the illustration for teaching and research, quotation, and certain acts of reproduction by CHIs, as well as private study, offer more restrictive legal solutions to the research community. On a different note, it shall be indicated that the Irish CRRA does not consist of any stand-alone provisions regarding the "three-step-test". Therefore, it is not possible to refer to the implementation of Article 5(5) of the ISD Directive into the Irish copyright law. However, especially in implementing the CDSM Directive, the CRRA also subjected certain E&Ls to the three-step-test by including paragraphs dedicated to regulating this matter.

### 1.2.15. ITALY

In Italy the regulation of copyright and related rights is contained in the Law no.633 of 21 April 1941 – Protezione del diritto d'autore e di altri diritto connessi al suo esercizio (l.aut.) (Protection of copyright and related rights)[1652].

1652 Legge 22 Aprile 1941, n. 633, Protezione del diritto d'autore e di altri diritti connessi al suo esercizio, con le successive modificazioni ed integrazioni, da ultimo dai DD.Lgs. 8 Novembre 2021, n. 177.

### 1.2.15.1. Access to and reuse of computer programmes

Article 64-ter l.aut. implements Article 5 Software by closely aligning to the EU benchmark. The same can be said for the transposition of Article 5(1) Software ("backup copy") and Article 5(3) in Article 64-ter (3) l.laut. (testing purposes) However, Italian courts have interpreted this exception restrictively, excluding any commercial aim[1653].

Along the same lines, the exception for interoperability, enshrined in Article 6 Software, is slavishly transposed into Italian law under Article 64 quarter l.aut, with strict adherence to the three-step test. Italian courts have recognised that the licensee holds the “right” to interoperability by law[1654], thus rejecting the possibility for rightsholders to claim compensations.

### 1.2.15.2. Access to and reuse of databases

The Italian implementation of Article 6(1) Database closely follows the EU benchmark. The same applies to the optional exceptions under Article 6(2) Database, with some differences worth remarking. First, the provision does not embed the exception of private copies for non-electronic databases, but only those for illustration for teaching or scientific research and uses for public security. As to the former, the Italian legislation departed from the EU model, for it allows only acts of access and visualisation and specifies that any permanent reproduction or all or substantial part on the part of the content on another medium is subject to the authorisation of the righstholder. The remaining part of the provision is strictly in line with EU rules. Against the silence of the EU on contractual overridability, the Italian provision has implemented this safeguard for both sets of exceptions.

The same adherence to the EU baseline features the Italian implementation of Article 8 Database Directive. By contrast, Italy has not implemented the Article 9 Database, which mirrors the optional exceptions to copyright protection of databases for the sui generis right.

**1653 Milan Court, Judgement No.9549/2016 of 01/07/2016.(Ruling that analysis, aimed at understanding the mechanisms of programme operation to understand and determine underlying ideas and principles is permitted as long as it serves the typical use and purpose of the programmes, but it is strictly prohibited for commercial purposes (i.e. developing a competing app). Contractual clauses cannot override these limits, as doing so would result in their nullity. In the case at hand, the court considered immaterial the absence of access to the source code for finding copyright infringement because, to establish the elaboration or derivation of a programme used by a third party, copying the source code is unnecessary. According to the court, analysing the competitor's programme is sufficient, especially if facilitated by the proven possession of a prototype copy and the sharing of technical data related to its functioning)**

**1654 Milan Court, Judgement No. 850/2014 of 21/01/2014. On the other hand, in Italian literature, there are contrasting views regarding the applicability of the exception to encompass decompiling software to achieve hardware interconnection. In this regard, see: P. Galli, in Ubertazzi, “Commentario breve alle leggi su Proprietà Intellettuale e Concorrenza” – sub art. 64 – quater, VI ed., 2016, pag. 1679.**

### 1.2.15.3. Research-specific E&Ls

#### Illustration for teaching and research

The Italian Copyright Act lacks an explicit implementation of Article 5(3)(a) ISD. However, the quotation exception (Article 70(1) l.aut.) regulates educational and scientific research uses alongside quotations for the purposes of criticism and discussion. According to commentators, the formulation of the quotation exception hinders its applicability to distant learning settings[1655]. Article 70(1) l.aut adopts a restrictive approach allowing only abridgement, quotation or partial reproduction of works to be communicated to the public for education or scientific research purposes[1656]. Moreover, Italian courts have historically construed strictly the notion of educational uses[1657].

In 2008, the legislator introduced Article 70(1-bis) l.aut, which allows the free publication on the internet of low-resolution or degraded images and music for educational or scientific purposes, as long as such uses are not-for-profit. However, due to the absence of the corresponding ministerial decree regulating its conditions of applicability, this provision has not enjoyed much success so far[1658].

With the implementation of the CDSMD (D.lgs. 8 November 2021, n. 177), the newly introduced Article 70-*bis* transposes almost *verbatim* the conditions set under Article 5 CDSM, including its non-overridability by contract. The rule also stipulates the obligation to acknowledge the source, yet with some differences compared to the EU benchmark. Whereas the EU model requires the indication of the source, including the author's name, the Italian implementation lacks the provision of "unless citing the source turns out to be impossible". This imposes an additional hurdle on beneficiaries, with a negative impact on the operativity of the exception[1659].

**1655 See in this regard: Eleonora Visentin, 'Le nuove eccezioni di cui agli artt. 68, comma 2-bis e 70-bis l. aut.' (2022) V Giurisprudenza Italiana 2022 1273.; Margoni, E-Learning, Corsi On-line e Diritto d'Autore, Diritto dell'Internet, 2007, VI, 611; Mansani, Le eccezioni per estrazione di testo e dati, didattica e conservazione del patrimonio culturale, in AIDA, 2019, 18-19; Mezzanotte, Francesco Le «eccezioni e limitazioni» al diritto d'autore UE (parte II: Le libere utilizzazioni nell'ambiente digitale, in AIDA 2017, p. 309.**

**1656 This is also the approach taken by the most recent and prevailing jurisprudence. See: ibid.**

**1657 See, for instance: Italian Supreme Court, civil section I, (Corte di Cassazione, sez. Civile), No. 8597 of 29/05/2003 (Ruling that the mere educational purpose is not sufficient to establish the freedom of use of the work. It is essential to verify not only this purpose but also the complete absence of any profit-driven intention in the use of the work. Additionally, any economic use of the artwork, involving its incorporation into a production process of a business, where selected musical works are employed for teaching another art, should be considered as having a profit-oriented nature by definition. Lower courts have followed the same approach, giving relevance to the "additional" element of the economic competition relationship. See: Bari Court, ordinance No. 1145/2 of 9/12/2005 (ruling out the exception in the case of the inclusion of an article published in a law journal in the context of a book written for scientific and illustrative purposes, as the book's publication also aims at realising economic profits from the publication); Milan Court, n. 975/2 of 3/03/2003 (Excluding the exception in the case of inclusion of a painting work in a book for educational purposes on account of the for-profit purposes, thus excluding the illustrative purposes). Similarly has been maintained by Italian scholarship, see, indicatively ibid. and . Giuseppe, Mazziotti, Diritto d'autore, libere utilizzazioni e licenze per attività didattiche: l'insostenibile leggerezza della legge italiana in una prospettiva europea e comparata, in Dir. Autore, 2011, II, 207, according to which the requirement of "non-commercial purposes" for educational uses under Article 70, paragraph 1, of the Copyright Law, when interpreted literally, could lead to considering, for example, the use of a protected work by a private university that offers educational services for a fee, as illegitimate. For a detailed analysis of the provision, see: Cristiana Sappa, commento all'art. 70 l.a., in Commentario breve alle leggi su proprietà intellettuale e concorrenza, a cura di L. C. Ubertazzi, VII ed., Milano, 2019, 1914.**

**1658 In this sense: ibid.**

**1659 Montagnani, M L, and Aime, G (2018), 'Il text and data mining e il diritto d'autore', Annali Italiani di Diritto d'Autore, Vol. 26**

The rule permits carrying out acts of reproduction in the form of summaries, translations, adaptations, and public communication, by digital means, of "excerpts" or "parts of works and other materials". In fact, the Italian provision diverges from the EU model by significantly narrowing the amount of work that can be used. Specifically, it allows the summary, quotation, reproduction, translation and adaptation of passages or parts of works and other subject matter and their communication to the public by digital means. These uses are permitted in so far as made "exclusively for illustrative purposes for educational use" and for non-commercial purposes, "under the responsibility of an educational institution", and in a secure physical or electronic environment controlled by the institution. While the Italian rule, likewise the EU benchmark, does not delineate the subjective scope, it has been contended that the necessity of a secure electronic environment, accessible only to the institute's teachers and enrolled students through password authentication, would exclude all uses made on the internet outside e-learning platforms, virtual classrooms, institutional email addresses, and any other forms of "reserved" digital spaces from the applicability of this exception[1660].

Works intended principally for the educational market and sheet music and musical scores are excluded from the scope of the exception when suitable voluntary licenses are available on the market and, provided that such licenses answer to the needs and special characteristics of educational establishments and are readily available and accessible. However, as noted by Italian scholarship[1661], this verbatim implementation leaves room for interpretative issues to the extent that it does not specify the criteria by which voluntary licenses should be considered "appropriate," meaning they meet the needs and specificities of educational institutions and are easily known and accessible to them.

**Text and data mining**

Italy has implemented the TDM exceptions with some variations from the EU counterpart. Beneficiaries are in line with Articles 2(1) and 2(3) CDSMD (Article 70-ter (3)(4) l.aut). The national solution exhibits a higher level of flexibility as it encompasses additional exclusive rights not covered by the EU provision. However, its degree varies significantly, and at times, it is overshadowed by the introduction of additional requirements. For instance, Article 70-ter (1) l.aut. – corresponding to Article 3 CDSM – also covers the act of communication to the public of the reproductions and extractions made. Still, such acts are permitted only if the resulting extractions and reproduction of works are expressed in a new work in an original manner[1662].

As in the CDSMD, the Italian provision requires that the content to be mined has been "lawfully accessed" yet without specifying the meaning of the concept. Commentators have interpreted the notion as involving the payment of fees, such as by subscription contracts. This may entail restrictions having a negative impact on research activities, as it risks excluding potential beneficiaries with limited resources, such as individuals without affiliations to institutions or entities with no access to the information sector[1663].

The Italian rule follows the EU model in requiring copies to be stored with an appropriate level of security and in encouraging CHI and Ros to adopt codes of conduct and best practices that define agreed procedures for TDM (Article 70-ter(8) l.aut.).

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**1660 Visentin (n 497).**

**1661 ibid.**

**1662 In the same sense, See Massimiliano Granieri, 'Il Data Mining Nella Disciplina Del Diritto d'autore e La Strategia Europea Sui Dati' (2022) XXXI Annali Italiani Del Diritto d'Autore della Cultura e dello Spettacolo 20.**

**1663 In this regard: Montagnani, M L, and Aime, G (n 437); Roberto Caso, 'Il Conflitto Tra Diritto d'autore e Ricerca Scientifica Nella Disciplina Del Text and Data Mining Della Direttiva Sul Mercato Unico Digitale' (2020) 2 Il Diritto Industriale 118.; Granieri (n 504).**

There are no significant differences in the implementations of Article 4 CDSM, and so there is a high level of harmonisation regarding the retention of copies generated during TDM activities, with no major divergencies from the EU model.

#### 1.2.15.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 68-bis l.aut. introduces an exception to the right of reproduction, permitting the creation of temporary copies of protected works, closely mirroring Article 5(1) ISD. An interesting aspect is that the Italian provision explicitly states that intermediary service providers' liability remains unaffected, meaning that the rules regarding ISP involvement in content transmission continue to apply, even under this exception.

**Quotation**

The Italian exception for quotation stands out due to its broader list of purposes allowed compared to Article 5(3)(d) ISD. Criticism and discussion, in fact, are coupled with illustration for teaching and research (non-commercial) purposes. While the EU provision does not impose quantitative limitations, the Italian legislator set rather vague limits, allowing the abridgement, quotation or partial reproduction of a protected work and its communication to the public. The prevailing interpretation reads this requirement strictly, excluding the complete reproduction of the cited work[1664].

Furthermore, it is required that the title of the work and the name of the author are always mentioned, and the quotation should occur "within justified limits".

A dedicated exception for parody, limited to the use of providers of online content-sharing services, has been introduced by D.Lgs. n.177 of 8 November 2021, which implemented Article 17(7) CDSM by including a new Article 102-nonies(2) l.aut. The provision recalls almost verbatim the EU text, including the OCSSP's duty to inform their users of the possibility of benefiting from specific L&Es.

**Private study**

Article 71-ter l.aut transposes Article 5(3)(n) ISD by closely following its identification of beneficiaries and uses allowed. However, the Italian provision covers only works "permanently" in the collection of publicly accessible libraries, educational establishments, museums or archives, seemingly excluding materials that are subject to licensing schemes[1665]. Article 71-decies l.aut extends the scope of this provision to related rights. As per the EU model, the exception does not apply where the works are subject to purchase or licensing terms. Another divergence with the EU counterpart is that the Italian model does not require adherence to the three-step test.

**Preservation of cultural heritage**

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1664 In this sense, see: Italian Supreme Court (Corte di Cassazione) n. 4038 of 8/02/2022 (excluding from the scope of the quotation exception the entire reproduction of works of figurative art); Milan Court No. 1797 of 2/07/2023 (to the full reproduction of a photograph of Silvio Berlusconi on television); Reggio Emilia Court ruling of June 14, 2004, in IDA 2005, 255, on photographs of artworks reproduced in an exhibition catalog). See also: Eleonora. Visentin, Rigidità e flessibilità nella disciplina dell'eccezione di citazione: quale direzione?, commento referato a Cass. 8 febbraio 2022 n. 4038, in AIDA 2022, 833 ss.; Giulia Dore, Le riproduzioni fotografiche in scala di opere dell'arte figurativa tra finalità illustrative, critica artistica e mercato. L'art. 70 l.d.a. e il bilanciamento fantasma. Nota a Cass. 8 febbraio 2022, n. 4038, LawTech Research Paper n.49.

1665 Cfr. Mansani, Le eccezioni per estrazione di testo e dati, didattica e conservazione del patrimonio culturale, in AIDA, 2019, 18-19 (Advocating for an exstensive interpretation of the norm though within the limits of the three-step-test).

Article 5 (2)(c) ISD partially overlaps with the Italian reprography exception (Article 68 (2) l.aut.), which allows publicly accessible libraries or school libraries, public museums or public archives making copies of protected works "for their own services." There is consensus in scholarship that the exception permits the making of photocopies for internal use, i.e., for the conservation or cataloguing of the owned works, but it does not allow libraries and other specified bodies to digitalise the works in their collections[1666].

The newly introduced Article 68-*bis* (2) l.aut implements into Italian law Article 6 CDSM Directive, following almost slavishly the text of the directive. By adopting the new definition of CHIs offered by the CDSMD, which also encompasses institutions responsible for the preservation of cinematographic and sound heritage and public broadcasting organisations, the new provision significantly widens the range of beneficiaries originally covered by Article 68(2) l.aut. As in the EU text, the Italian provision covers acts of reproduction of works contained in the collections of the beneficiaries but seems to exclude works obtained through licencing systems since they cannot be understood as being permanently held in the collection of a particular institution. Another divergence with the EU counterpart is that the Italian model does not require adherence to the three-step test.

### 1.2.15.5. Licensing scheme

No licensing schemes relevant to fuelling research activities have been enacted in Italy. It shall be mentioned, however, that the lack of implementation of ECLs (Article 12 CDSMD) to facilitate the implementation of digital learning (Article 5 CDSMD) was a deficiency subject to criticism in the literature[1667].

### 1.2.15.6. Public domain

Article 5 l.aut. excludes from the scope of protection texts of official acts of the State or public administrations, whether Italian or foreign. In line with Article 1(2) Software, Article 2(8) l.aut carves out ideas and principles underlying any element of a programme, including those underlying its interfaces. This has been recently confirmed by Italian courts, which denied copyright protection to the methodological approach of a scientific laboratory when it is not expressed in a tangible and identified manner[1668].

The implementation of the CDSMD has introduced into the Italian Copyright Act a new Article 32-quarter, transposing Article 14 CDSMD. The provision states that, upon the expiration of the term of protection of a work of visual arts, the material resulting from an act of reproduction of such work is excluded from copyright protection unless it constitutes an original work and without prejudice to the provisions on the reproduction of cultural goods set out in the Cultural and Natural Heritage Code. This specification severely curtails the potential of the provision since it allows CHIs to retain control over works in their collection, thus limiting the breadth of public domain, as testified by recent contested decisions and by a wide range of commentators[1669].

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**1666 Servanzi, R, commento all'art. 68 l.a., Commentario breve alle leggi su proprietà intellettuale e concorrenza, a cura di L. C. Ubertazzi, VII ed., Milano, 2019, 1899.**

**1667 Visentin (n 497). And the literature therein cited.**

**1668 Florence Court, Judgement No. 1519/2023 of 15.05.2023. (In reinforcing the principle according to which simple ideas are not protected, the court also stated that for an intellectual work to receive protection, it must possess a completed, defined, and identifiable external form through which the work can be perceived as such by external observers. In the court's view, intellectual work is eligible for protection when it exhibits a creative act, even if minimal, capable of being manifested in the external world, irrespective of whether it is published or unpublished, provided that it meets the criteria of tangible expression—a form that can be recognised and attributed to the author.).**

1669 Florence Court, judgment No. 1207 of April 20, 2023, published on May 15th (Condemning the unauthorised use of image of the David of Michelangelo, by a publishing house that had published the Michelangelo masterpiece on the cover of their magazine for advertising purposes. Moreover, the sculpture's image had been altered and overlaid using lenticular printing with that of a model, resulting in a complete distortion) The Florence Court had also condemned a Tuscan training centre for young sculptors

### 1.2.16. LATVIA

In Latvia the regulation of copyright and related rights is contained in the Latvian Copyright Act, (LaCA) Law n. 148/150, in force since 11 May 2000, as last amended in 2023[1670].

#### 1.2.16.1. Access to and reuse of computer programmes

Latvia has adopted the mandatory exception that allows the lawful user to perform temporary or permanent acts (including reproduction, translation, adaptation, arrangement and any other alteration) necessary for the use of a computer programme against the reproduction right and the translation, arrangement, and alteration rights, including for the correction of mistakes (Article 5(1) Software) consistently with the EU model.

Accordingly, the Latvian provision restricts the subjective scope of the provision to lawful users and permits them to perform acts of reproductions, translations, adaptations and or any other arrangement of computer programmes. The sole difference is that the national provision additionally allows for the "reproduction of the results of the permitted acts", thus showcasing greater flexibility than the EU provision. Besides this, the provision fully adheres to the necessity benchmark to permit acts necessary for the intended use of the computer programme, which also encompasses rectifying errors. As per the EU benchmark, the national provision can be contractually overridden.

The "back-up exception" has been implemented quite verbatim with no significant differences with the EU benchmark. It requires the user to be *lawful in making* backup copies if necessary to use the computer programme. The exception is mandatory and thus cannot be excluded by contract.

The "testing purpose exception" is implemented in a similarly consistent fashion. The national implementation allows lawful users, while performing any of the acts they are entitled to, to examine, study and test the programme as a whole or in its components, with the purpose of finding out what are the principles and the main ideas that support the functioning of the software.

Not differently than for the other provisions on lawful uses, Latvia has implemented the interoperability exception introduced by Article 6(1) Software verbatim, with minor divergences worth noting. The Latvian implementation, for instance, does not include the possibility of performing the reproductions and translation by third parties, thus offering a slightly more restrictive transposition of the EU provision.

for reproducing Michelangelo's David on their website without authorisation (Florence Court, Court Order of April 14, 2022). In the past, the Florence Court also condemned the unauthorised reproduction of cultural asset by a travel agency to promote their services (Florence Court, order of October 26, 2017). See in this regard: Enrico Bonadio and Magali Contardi, 'How Could an Italian Gallery Sue over Use of Its Public Domain Art?' (The Conversation, 30 July 2021) <http://theconversation.com/how-could-an-italian-gallery-sue-over-use-of-its-public-domain-art-164976> accessed 4 August 2023; Magali Contardi and Enrico Bonadio, 'Arte, porno y derechos de autor en Galeria Uffizi ¿Se puede demandar por la reutilización del arte en el dominio público? | LVCENTINVS' (2 September 2021) <https://www.lvcentinvs.es/2021/09/02/arte-porno-y-derechos-de-autor-en-galeria-uffizi-se-puede-demandar-por-el-reutilizo-de-arte-de-dominio-publico/> accessed 4 August 2023. In a similar vein, the Venice Court issued a ruling prohibiting a well-known puzzle company from using, for commercial purposes, the image of Leonardo da Vinci's "Vitruvian Man" artwork and its name without the authorisation of the Gallerie dell'Accademia in Venice. The Venice Court also clarified that the provisions of the Cultural Heritage Code apply to the defendant company, which is based in Germany, without any specific limitation of effectiveness within national borders (Venice Court, Order 24 of October 2022).

1670 Autortiesību Likums (Ar Grozījumiem: 23.03.2023.) Publicēts: "Latvijas Vēstnesis", 148/150 (2059/2061), 27.04.2000., "Ziņotājs", 11, 01.06.2000. likums Pieņemts: 06.04.2000. Stājas spēkā: 11.05. 2000.Attēlotā redakcija: 14.06.2017.

#### 1.2.16.2. Access to and reuse of databases

Section 31 LaCA, by adopting Article 6(1) Database, allows the lawful user of a database to perform acts necessary for the access and normal use of the database or its content. The necessity benchmark in the Latvian provision is set to simply include “use and access the database” of the database the user has lawful access to. Against the silence of the EU on contractual overridability, the Latvian transposition provides that any contractual clause intended to prevent the lawful user from performing any acts needed to access and properly use the database shall be considered void.

Another EU provision allowing the lawful use of databases lies in Article 8 of the Database Directive. This flexibility appears to be codified by the Latvian provision (Section 58) in the form of a *right.* Aside from this, all key elements of the provision are recalled in the national implementation, including the reference to the three-step test, with almost verbatim language.

Section 59 LaCA implements Article 9(1) Database Directive with no major divergencies. The provision permits the extraction or reuse of a *sui generis* database for several codified purposes. The only aspect worth remarking on is that, unlike the EU baseline model (article 8(1)(b) Database), the Latvian implementation permits not only the extraction but also the reuse of significant” parts of the contents of the database for (digital) illustration for teaching, as well as the extraction of “significant” parts of the same for research purposes. A greater level of flexibility compared to the EU benchmark also lies in the fact that the national implementation does not require the indication of the source. These amendments followed the Latvian transposition of Article 5 of the CDSMD Directive. Other amendments introduced to transpose the CDMSD are the carve-out of extraction rights for TDM purposes (in line with Articles 3 and 4 CDSMD) and, to the same extent, for the preservation uses of CHI (in line with article 6 CDSMD).

#### 1.2.16.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Until recently, Section 21 of the Copyright Act of 6 April 2000 envisaged the optional exception referred to in Article 5(3)(a) ISD. This provision has been amended in 2023 to include the mandatory exception introduced in Article 5 CDSMD. As a result, Latvia contains an all-encompassing provision for both digital learning and “traditional” teaching and research purposes.

The national provision is silent regarding the beneficiaries. This might entail a greater degree of flexibility than the EU benchmark, at least regarding “traditional” teaching purposes. The provision then adopts almost verbatim the condition laid down in Article 5 CDSMD with regard to the necessity of implementing a secure electronic environment for digital teaching, also specifying how that secure environment shall be accessed by requiring appropriate authentication procedures.

The Latvian implementation is also silent on permitted acts. Except for the reference to the use of sui generis databases, for which extraction and reuse are permitted (Article 59 of the Copyright Act), the Latvian provision simply states that the "use of works" is allowed. The purpose of the use is, to a certain extent, more flexible than the EU benchmark. By encompassing both Article 5 CDSMD and Article 5(3)(a) ISD in one single provision, the Latvian implementation extends the objective scope of the original ISD rule as it permits the same broad uses also for research purposes, "traditional" teaching, and the use of illustration, intended as uses to support, enrich, or supplement the learning process. In line with the EU model, such uses are permitted to the extent justified by their non-commercial purpose. Whereas the EU model does not impose any quantitative limitation, the Latvian model refers to "an amount appropriate to the purpose of use". This additional condition might be interpreted by courts to set a quantitative limitation.

While the Latvian provision does not specify the type of work covered by the exception, it shall be mentioned that the amendment of 2023 eliminated the exclusion of computer programmes. Article 54(3)(2) LaCA also extends the scope of this exception to databases and to the subject matter of related rights (performances, phonograms, film fixations and broadcasts), in line with the EU benchmark. Nevertheless, the Latvian provision adds a restrictive element, for it indicates that the exception is applicable only with regard to "published" works or other subject matter.

As per the EU benchmark, the indication of the source is required for the use of works or other subject matters. Yet, the Latvian model does not include the "unless this turns out to be impossible", which may be read as excluding the possibility that the source acknowledgement is omitted.

Finally, Latvia decided not to subordinate the operation of the provision to the non-availability of commercial licenses.

**Text and data mining**

Latvia has implemented the TDM exceptions closely following the EU baseline model. The same can be said regarding the beneficiaries of Article 3 CDSMD, for the transposition defines the notions of cultural heritage institutions and research organisations in line with Articles 2(1) and 2(3) CDSMD, with minor variations. Specifically, the definition of CHIs also encompasses libraries and archives of educational institutions and research organisations, as suggested by the recitals of the CDSM Directive.

Regarding permitted acts, the Latvian solution continues to adhere in full to the EU baseline model by only allowing the reproduction of works and other subject matters and the extraction of the content of sui generis databases for research purposes. As per the EU model, those acts are not permitted with regard to computer programmes.

Similar is the adherence to the EU model in merely requiring copies to be stored for research purposes and verification of results, with an appropriate level of security while ensuring rightsholders the possibility of taking measures aimed at guaranteeing the integrity of data networks and databases used to store works, to the extent appropriate for this purpose.

There are no significant differences in the implementations of Article 4 CDSMD, except that the law explicitly states that the right to perform TDM should be reserved via machine-readable means incorporating metadata.

#### 1.2.16.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD is implemented verbatim in Section 33 LaCA. However, a minor variation lies in the absence of any mention of the three-step test as a condition for applying the exception.

**Quotation**

The Latvian quotation exception builds up Article 5(3)(d) ISD by adding scientific research and teaching purposes. Moreover, the purpose of criticism is accompanied by the use for polemical purposes. This broad exemplificative list reinforces the flexibility of the exception.

By not mentioning any kind of work specifically, the national implementation seems to provide users with the possibility to quote *any type* of protected work made available to the public. The only exclusion is the express prohibition of quoting computer programmes.

While, however, the EU benchmark does not impose quantitative limitations, the corresponding Latvian provision seems only to allow partial quotations or uses of work. This results from the wording that permits its use "in the form of quotations and fragments".

It is on the side of the permitted act that the Latvian provision adopts a rather restrictive approach compared to the EU model. Whereas the latter includes acts of reproduction and making it available to the public, in fact, the Latvian transposition only permits reproduction.

Article 5(3)(d) ISD also requires that quotations comply with fair practices, a condition absent in the Latvian rule.

As per the EU model, the Latvian quotation exception requires compliance with the three-step-test and the indication of the source. Also, in this case, the statement "unless this turns out to be impossible" is absent.

Latvia implemented Article 17(7) CDSMD to make sure that users of OCSSPs can rely on the quotation exception. The transposition is very broad in language, as it does not link the quotation to any specific purpose, which is different from the general national quotation exception.

**Private study**

The Latvian exception for private study has been amended following the implementation of the CDSMD. This change has come with a significant broadening of the array of beneficiaries. While the corresponding Article 5(3)(n) ISD by reference to Article 5(3)(c) ISD encompassed publicly accessible libraries, educational establishments or museums, and archives, the Latvian provision extends the list to encompass CHIs of the state, municipalities, or other derived public entities. According to Section $12^2$ LaCA, the notion of CHIs comprises a publicly accessible library or museum, archive, including the library and archive of educational institutions, research organisations or public broadcasting organisations, as well as an institution for the preservation of audiovisual heritage.

As per the baseline EU model, the Latvian provision permits the reproduction and making available of works and other subject matters (including computer programmes) available in the collection of said CHIs on dedicated terminals located at their premises for the benefit of individuals and for the purposes of private study and research having no commercial nature. Article 54(2) LaCA extends the scope of this exception to related rights (performances, phonograms, film fixations and broadcasts). On top of the EU requirements, Latvia requires CHIs to use adequate technical protected networks, but it does not subordinate the exception to the content of purchasing or licensing terms related to works in their collections, nor does it refer to the three-step test.

**Preservation of cultural heritage**

By amending Section 23(1)(3) LaCA, the Latvian legislator introduced the exception featured in Article 6 CDSMD.

Following the baseline model, the transposition defines the notions of CHIs in line with Articles 2(1) and 2(3) of the CDSM Directive, with minor variations, such as the inclusion of libraries and archives of educational institutions and research organisations, as suggested by the CDSMD Recitals. Both public and private entities, as well as those engaging in for-profit activities, are covered by the exception.

Beneficiaries are allowed to perform acts of reproduction, including in the digital format, of works, sui generis databases (Article 59(6) LaCA) and other subject matter permanently in their collections for preservation purposes. However, compared to the EU model, the Latvian legislator opted to exclude software from the scope of the provision.

By contrast, the Latvian implementation shows a higher level of flexibility with regard to the purposes enabling the exception. The national provision specifies that preservation purposes also encompass reproducing works whose data carriers are technologically obsolete and permit some uses for informatory purposes, although limited to the reproduction of fragments of works in posters, flyers, brochures, and similar informational materials. As per the baseline EU model, the Latvian transposition confines the application of the exception to acts lacking commercial purposes.

### 1.2.16.5. Licensing schemes

No licensing schemes relevant to fuelling research activities have been enacted in Latvia.

### 1.2.16.6. Public domain

Section 6 LaCA, as amended in 2004, excludes protection laws, regulations, administrative rulings, documents issued by State and local government institutions, court decisions, and other official documents, as well as their official translations and consolidated versions. Moreover, symbols and signs (e.g., flags, coats of arms, anthems, and awards), including maps approved by the State or internationally recognised, the use of which is subject to specific laws and regulations, are not covered by copyright. The same applies to facts, ideas, methods, processes, mathematical concepts, and information provided in the press, radio or television broadcasts or other information media concerning news of the day and various facts and events. The law implementing the CDSMD added to the list of excluded subject matters the copies of works of visual art whose copyright has expired if they are not the result of creative activity, in line with Article 14 CDSMD.

**Conclusions**

Latvian copyright law shows some differences from the model. Still, the overall degree of flexibility offered by Latvian provisions does not appear higher or lower than the EU E&Ls.

The main differences can be found with regard to ISD exceptions. The exception for quotation encompasses limitations in relation to the amount of subject-matter that can be quoted but broadens the purposes allowed by including also teaching and research. The exception for illustration for teaching and research is wider than the EU counterpart, although the limitation in purpose may be read restrictively by courts. Also, the exception for private study has been implemented with a more expansive approach by carving out one restrictive condition present in the EU provision.

### 1.2.17. LITHUANIA

In Lithuania, the regulation of copyright and related rights is contained in the Autorių teisių ir gretutinių teisių įstatymas 1999 m. gegužės 18 d. Nr. VIII-1185 (LiCA) (Copyright and Related Rights Act of 18 May 1999 No. VIII-1185).

#### 1.2.17.1. Access and reuse of computer programmes

Article 5 Software has been implemented almost verbatim in Article 30 LiCA, which, however, is far more articulated than the EU counterpart. The provision explicitly states that the lawful user is entitled to make a backup copy, and every form of adaptation of the programme is allowed. This gives more room for reuse than the necessity-based formulation of Article 5 Software. Rather, Article 30 also allows use when the computer programme gets lost, deteriorates, or becomes unusable, also going beyond the CJEU stance in this regard.

However, these differences between the EU model and the national implementation play little role in fostering research. In this respect, the most relevant provision is Article 30(2) LiCA, which allows lawful uses for the purpose of testing and observing the functioning of the computer programme, as well as for running, displaying, transmitting, loading, and storing the programme. The provision slavishly follows the EU benchmark, and he same can be said for the interoperability exception. In this respect, it is only worth mentioning that the national provision does not mention the three-step-test as an additional filter to be taken into consideration in the application of the exception, leaving room for an extensive judicial interpretation.

#### 1.2.17.2. Access and reuse of databases

Article 6 Database has been transposed expansively into Lithuanian copyright law.

Articles 15(1) and 31 LiCA broaden the rights covered by the exception compared to the EU provision and are declared not overridable by contract. However, the Lithuanian legislator has not implemented Article 6(2) Database, thus missing the cover of uses for the purpose of illustration for non-commercial teaching and scientific research. Yet, Article 30(1) is devoid of such carve-outs in such a way preventing further use of databases undertaken by lawful uses thereof for research goals.

Articles 8 and 9 Database are slavishly transposed in Articles 63 and 62 LiCA, respectively, with the effect of fulfilling the gaps of Article 31 LiCA, albeit only with regard to sui generis rights. As a result, lawful users can freely reuse only insubstantial parts, but such use should always be compliant with copyright and the terms of the license.

#### 1.2.17.3. Research-specific E&Ls

Two provisions transfuse Article 5(3)(a) ISD into Lithuanian copyright law. Whilst the EU rule is slightly generic in terms of permitted uses and does not make any distinction in terms of subject matter, Articles 22(1) and 58 LiCA are formulated in a more articulate manner.

Article 22(1) LiCA contains an exception under which it is allowed to reproduce, communicate to the public and make available short works or fragments or bigger ones, as well as their translations, for the purpose of illustration for teaching and research. The uses should be justified by adherence to the educational programme and the studies specifically pursued by the students and promoted by the teaching staff and should not exceed the extent necessary for achieving the teaching-oriented purpose.

Although replicating the wording of the EU base-rule in a lot of aspects, it is notable that the amount of work that can be used is reduced under Article 22 LiCA. Worsening the situation and further lowering the level of flexibility, the Court of Appeal of Lithuania held that this is a fundamental requisite to correctly apply the exception and that the provision cannot be applied if the amount of work used is overly "substantial", also considering the commercial purpose of the use[1671]. On another occasion, the Supreme Court of Lithuania decided to apply the exception to allow the use of fragments of protected works published in limited editions[1672].

The Lithuanian legislator envisages another provision that may play a role in fostering secondary creativity. Article 58(5) LiCA allows the use of small works or extracts of specific categories of works (performances, electronic press releases, recordings of audio-visual works and broadcasts). Although this provision seems to add another layer of flexibility, the effect is likely to be the opposite. In fact, the provision reduces the number of permitted uses in comparison with Article 22(1)(2) LiCA, as it only allows reproduction and communication to the public. In addition to that, the necessity test is subject to a higher threshold, as it allows reuses only if they have some relevance within the study plan, thus revealing the genuinely education-cantered character of the provision. This confirms the general attitude of the Lithuanian legislator, which privileges educational goals while paying little attention to the need to introduce specific exceptions to facilitate research activities.

**Text and data mining**

Articles 2, 22(1), 32(7) and 63(6) LiCA implements Article 3 CDSMD within Lithuanian law. No substantial difference can be found in relation to the EU text. Articles 22[(2),] 58(15), 32(8), and Article 63(7) transpose Article 4 CDSMD, again in line with the EU benchmark. Less flexibility compared to the EU model can only be inferred from Article 58, which subordinates the exception to additional conditions of applicability.

#### 1.2.17.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD has been slavishly implemented under Article 29(1) LiCA.

**Quotation**

Article 5(3)(d) ISD is transposed in Article 21 LiCA, which specifies permitted uses compared to the EU model, by including the possibility to reproduce, translate, communicate, and make available to the public (also via the internet and in translated) protected works, in compliance with fair practice and to the extent necessary for the purpose, with the indication of the name of the author/source of the work. This rule also implements Article 17(7) CDSMD verbatim.

Article 21 LiCA, however, should be read in conjunction with Article 58(1)(14) LiCA, which limits the quotation of performance, phonograms, electronic press releases, broadcasts, and audio-visual works to small works or excerpts, adopting a more restrictive approach compared to the EU counterpart.

**Private study**

Article 5(3)(n) ISD is implemented in Articles 22 and 58 LiCA, following the same two-fold differentiation per subject matter as highlighted above (see "Quotation"). While Article 5(3)

1671 Court of Appeal of Lithuania, case n.2A – 250 of 29 July 2002.

1672 Supreme Court of Lithuania, case n. 3K-3-28/2007 of 30 January 2007.

ISD does not explicitly include research organisations among the premises where protected works can be made available for private study, Article 22(3) LiCA includes them, thus empowering researchers to a significant extent. Yet, some limitations are present. Only the making of a single copy available is allowed, and technical protection measures shall ensure that such copies are not disseminated elsewhere. A general right of use is attributed with regard to performances, phonograms, electronic press releases, recordings of audio-visual works and broadcasts (Article 58 LiCA) without the indication of a limitation in purpose. This provision seems to grant more flexibility for such categories of work and may play a significant role in stimulating research activities.

**Preservation of cultural heritage**

Article 6 CDSM has been implemented by amending the text of Articles 2(31), 23 and 58 LiCA, which were introduced to implement Article 5(2)(c) ISD. The EU provision has been implemented verbatim.

### 1.2.17.5. Licensing schemes

No licensing schemes with a role in fuelling research activities have been enacted in Lithuania.

### 1.2.17.6. Public domain

Article 5 LiCA excludes from copyright protection legal acts and their drafts information about current events and reporting materials, official insignia, works of folklore and ideas, operations, processes, facts, and data. This latter area is key for research activities, as it abstractly prevents the endeavours to monopolise ideas, data, and facts. Moreover, the lack of copyright over works of folklore and information can also give an impulse to further reuse for secondary creativity, including journalistic activities.

**Conclusions**

The Lithuanian regime of exceptions and permitted uses for the benefit of lawful users of database and software works is quite inflexible from the perspective of researchers. In fact, Article 31 does not contain any reference to a specific exception for illustration for teaching and research. The only step forward lies in the fact that Article 5 Software is transposed to allow the making of back-up copies of computer programmes when the original copy has deteriorated, lost, or is unusable for whatever reason. Yet, the step made by the Lithuanian legislator is far from fuelling research by allowing access and reuse of database and computer programmes, except for a slavish implementation of Article 9 Database.

General research and complementary E&Ls depict a “mild” scenario. General exceptions for illustration for teaching and research purposes are quite inflexible and highly education-cantered, with strict necessity tests and quantitative limits in the amount of work that can be copied. Exceptions for text and data mining have been implemented in a way that falls slightly below the EU threshold. The quotation exception is relatively flexible compared to the EU model, but this only concerns the categories of work mentioned by Article 58 LiCA. The same can be said for the national exceptions for private study, which can offer broad room for research-related activities conducted within the premises of specific establishments on an individual basis. Yet, such flexibilities are conditioned to the fact that rights have not been reserved. A positive note comes from the exceptions for CHI preservation, which may play a role in offering greater access to protected works. Still, these provisions do not go beyond the boundaries set by EU law.

## 1.2.18. LUXEMBOURG

In Luxembourg the regulation of copyright and related rights is contained in the Loi du 18 avril 2001 sur les droits d'auteur, les droits voisins et les bases de données (LuDA) (Copyright, Database and Related Rights Law of 18 April 2001).

### 1.2.18.1. Access and reuse of computer programmes

Articles 5 and 6 Software have been implemented verbatim in Luxembourg.

### 1.2.18.2. Access and reuse of databases

Article 6 Database has been implemented verbatim through the text of Article 10bis(1) LuDA.

**Article 9 Database** has been transposed in Article 68 LuDA, which allows only extractions or reutilisations of non-electronic databases for private purposes but does not implement the teaching and research exception. Researchers can always rely on Article 67bis LuDA, which implements **Article 8 Database** and permits the reuse of insubstantial database contents for whatever purpose. Compliance with the three-step test is always required.

### 1.2.18.3. Research-specific E&Ls

#### Illustration for teaching and research

Article 10(2) LuDA implements Article 5(2)(a) ISD within Luxembourgish copyright law. The rule has been amended as to insert implement Article 5 CDSM, also eliminating the limitation in the amount of work that can be used that was present in the older text of the provision. Thanks to this amendment, it can be fairly said that the text of Article 10(2) LuDA slavishly replicates the corresponding EU provision but for inserting the requisite of compliance with fair practices.

#### Text and data mining

Articles 3 and 4 CDSMD are implemented verbatim in Luxembourg.

### 1.2.18.4. General E&Ls complementary to research-specific E&Ls

#### Temporary reproduction

Article 5(1) ISD has been implemented by closely following the EU model through Article 10(9) LuDA.

#### Quotation

Luxembourg implemented Article 5(3)(d) InfoSoc in Article 10 LuDA. The provision, which relates to all works but databases, is more restrictive than its EU counterpart, for it only allows short quotations and refers to mere excerpts, with a strict limitation in purpose (information, also implying scientific research-related goals). The non-commerciality criterion is detailed in a far more restrictive way than in the EU model since Article 10 prescribes that no harm shall be caused to rightsholders and to the commercial exploitation of the works quoted. The same exception covers performers and phonogram producers' rights (Article 46 LuDA), applying to broadcasts (Article 55 LuDA) as well. Article 17(7) CDSMD has been slavishly implemented by Article 70bis LuDA.

#### Private study

Article 5(3)(n) InfoSoc is implemented through Article 10(14) LuDA with no departure from the EU benchmark.

**Preservation of cultural heritage**

Article 6 CDSM is implemented through several provisions, also extending the exception to phonogram producers' rights and databases, very closely to the EU model. These flexibilities, enshrined in Articles 10(10), 46(8), 10bis, 35, 55 and 68 LuDA, build on the pre-existing implementing provisions of Article 5(2)(c) ISD. It is worth noting, however, that Article 10bis LuCA offers the possibility of reusing CHI collections not only for preservation purposes but also for exhibiting and increasing acknowledgement about cultural heritage.

#### 1.2.18.5. Licensing schemes

Luxembourg does not feature any special licensing scheme that specifically addresses research-specific needs.

#### 1.2.18.6. Public domain

Article 1(1) LuDA does not protect methods of operation, concepts, ideas, and information as such, thus formally prohibiting unfair appropriation of pure knowledge and leaving room to secondary creativity for the ultimate benefit of researchers and innovators. However, there is no mention of "data" as such, which should be intended as comprised within the concept of "information".

**Conclusions**

The Luxembourgish copyright law landscape does not substantially detach from the standard of harmonisation set by the ISD-CDSMD. In fact, all provisions slavishly replicate the EU benchmarks without adding nor lowering the degree of flexibility, but for very few differences. In this respect, it is worth noting that the exception for quotation is far more restrictive than the EU counterpart. Rather, the national transposition of Article 6 CDSM extends the scope of the exception to encompass purposes other than preservation.

### 1.2.19. MALTA

Maltese copyright law is governed principally by *Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009 and VIII of 2011)* (hereinafter Maltese Copyright Act). Whereas this Act constitutes the last consolidated version of the Maltese Copyright Act, it is worth noting that the Maltese legislature has recently implemented the CDSMD into the national law by the *Copyright and Related Rights in the Digital Single Market Regulations of 2021* (hereinafter DSM Regulation), which has not yet been consolidated into the main copyright Act.

#### 1.2.19.1. Access to and reuse of computer programmes

Article 5 Software has been transposed verbatim to Article 9(2) of the Maltese Copyright Act, particularly in paragraphs (a) and (c). The same can be said for Article 6 Software by Article 9(2)(b). The mere differentiation of the Maltese provision from the EU rule is the articulation of the beneficiaries of the national exception as 'licensed users' rather than "lawful users".

#### 1.2.19.2. Access to and reuse of databases

Article 9(1)(w) of the Maltese Copyright Act transposes the exception of Article 6 Database verbatim. The sole difference between the Maltese provision and the EU rule consists in the articulation of the beneficiaries of the national exception as 'licensed users' rather than 'lawful users'. The same applies to Article 8 Database (Article 26(1) of the Maltese Copyright Act) and to Article 9 Database (Article 26(2)).

#### 1.2.19.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 9(1)(h) of the Maltese Copyright Act implements verbatim the exception envisioned for the illustration of teaching and research by Article 5(3)(a) ISD. The only difference lays in the fact that the Maltese provision enlists the categories of works (literary works, artistic works, musical works, and audio-visual works as well as databases protected by copyright) covered rather than using a broad terminology, such as 'works and other subject-matters', as preferred by the EU rule. Article 21 of the Act extends the exception to cover also related rights.

**Text and data mining**

Articles 3 and 4 of CDSMD have been transposed quite slavishly by Articles 4 and 5 of the DSM Regulation, respectively. As in the general Copyright Act, the subject matter of the exceptions is defined through an exemplificative list (literary works, artistic works, musical works, audio-visual works, databases protected by copyright and by sui generis right, and to the press publishers' rights).

#### 1.2.19.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) of the ISD Directive has been implemented in Article 9(1)(a) of the Maltese Copyright Act. The Maltese exception closely follows the letter of its EU counterpart, again with a broad exemplificative list of subject matters covered. The provision applies also to related rights (Article 21 of the Maltese Copyright Act).

**Quotation**

Malta has implemented Article 5(3)(d) ISD verbatim in Article XXXX of the Copyright Act, which also covers related rights according to Article 21. Article 16(7) of the DSM Regulation transposed Article 17(7) CDSMD fully in line with the EU text.

**Private study**

Article 5(3)(n) ISD Directive is slavishly copied by Article 9(1)(v) of the Maltese Copyright Act, again with the extension to related rights under Article 21.

**Preservation of cultural heritage**

The exception provided for CHIs under Article 5(2)(c) ISD has been implemented almost *verbatim* in Article 9(1)(d) of the Maltese Copyright Act, with the usual extension to related rights by Article 21. Article 6 CDSMD has been transposed by Article 7 of by the DSM Regulation by closely following the EU text and its criteria.

#### 1.2.19.5. Licensing schemes

In Maltese law, there are no licensing schemes that might be fruitful as to boost reuse for research and indirectly serve to prompt the goals of Open Science.

#### 1.2.19.6. Public domain

Article 3(2) of the Maltese Copyright Act requires originality and fixation of the work in order to grant protection and excludes from the scope of copyright ideas, procedures, methods of operations or mathematical concepts as such, also in line with Article 1(2) Software. Article 14 of the CDSMD has been transposed verbatim by Article 14 of the DSM Regulation of 2021.

#### Conclusions

As last amended in 2021, the Maltese Copyright Act is perfectly aligned with the EU copyright *acquis*. However, this success is mostly the outcome of the *verbatim* implementation of relevant EU provisions. Whereas this approach may help in being in line with the EU standards, it may cast a shadow on the capacity of the Maltese copyright regime to respond to the nation-specific needs and expectations as well as priorities.

### 1.2.20. THE NETHERLANDS

In the Netherlands, the regulation of copyright and related rights is contained in the Wet van 23 September 1912, houdende nieuwe regeling van het auteursrecht (Auteurswet 1912) (AW) [Act of 23 September 1912, containing new regulations on copyright (Authors' Act 1912)].

#### 1.2.20.1. Access to and reuse of computer programmes

There is no substantial difference between the text of Articles 5 and 6 Software and the correspondent provisions under Dutch copyright Law. The only divergence lies in the possibility of overriding by contract the prerogatives entitled to lawful users of computer programmes as enshrined in Article 45j AW and Article 5 Software.

#### 1.2.20.2. Access to and reuse of databases

Articles 8 and 9 Database have not been implemented in the Netherlands, but with the CDSMD implementation, the introduction of Article 4a AW now allows the reutilisation of database contents also for the illustration of teaching having no commercial purpose. Yet, there is no specific mention of the possibility of undertaking the same acts for scientific research purposes.

#### 1.2.20.3. Research-specific E&Ls

#### Illustration for teaching and scientific research

Article 5(3)(a) ISD is transposed in Article 16 AW. This provision is less flexible than the EU counterpart, for it requires the payment of remuneration to authors and their successors in title. However, the exception also applies to digital teaching whilst, in the case of reuse in compilations, it should be limited to short extracts or works. Furthermore, the reproduced copy has to substantially differ from the original work, and, in the case two or more of such works have been communicated to the public, only one copy can be made. All these provisions cannot be overridden by contract.

In general, the Dutch provision reflects the EU model but for reuse in compilations, which is restricted both in terms of permitted use and the number of copies which can be made. It is important to note that Article 16 AW cannot be used for research-related goals.

**Text and data mining**

Articles 3 and 4 CDSMD have been implemented verbatim in Dutch copyright law. The only slight difference from the EU text lies in the fact that Dutch provisions expressly refer to works of literature, science, and art, thus possibly limiting the array of subject matters covered under the umbrella of the exceptions for TDM.

#### 1.2.20.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 13a AW transposes the rationale of Article 5(1) ISD within Dutch law. Although the function and the practical implications of the provision are likely to be the same as those mandated by the EU rule, it is noteworthy that Article 13a AW has been shaped as an exclusion rather than a clear-cut exception. This might be perceived as more flexible than the EU counterpart.

**Quotation**

Adhering to the EU text, Article 15 AW excludes infringement when an artistic, scientific, or literary work is quoted in a review, a pamphlet, a scientific work, as well as other similar kinds of works, also including press releases and newspapers. The requirements imposed by the national provisions are the same as prescribed by Article 5(3)(a) ISD, but for the fact that the type of subject-matter covered within the scope of the exception is spelt out explicitly in Article 16 AW. This can lead to the assumption that there are some restrictions in this regard. Article 17(7) CDSM has been slavishly transposed within the text of Article 19 AW.

**Private study**

**Article 5(3)(n) ISD** is implemented verbatim in Article 15h AW, thus allowing research and private study through dedicated terminals of specific institutions.

**Preservation of cultural heritage**

Article 6 CDSM is implemented in Articles 16 and 16n AW, which had already transposed Article 5(2)(n) ISD in the past. The implementation follows the EU benchmark without significant differences but for specifying the kind of subject-matters covered by the provision, which specifically refers to literary, scientific, and artistic works. Although the list is ample and open, this specification may be used by courts in order to reduce the scope of the provision.

#### 1.2.20.5. Licensing schemes

No licensing schemes with a role in fuelling research activities have been enacted in the Netherlands.

#### 1.2.20.6. Public domain

Dutch copyright law does not include a provision excluding copyright protection that concerns data, operations, methods, and information as such. Taking the *Ryanair* doctrine into account, this is highly problematic for both researchers and secondary creators, who cannot rely on a public domain rule that prevents the monopolisation of facts, information, and data. Rather, Article 11 only excludes judicial, administrative, and legislative acts from copyright protection, also excluding all acts produced by public authorities.

#### 1.2.20.7. Beyond the EU copyright *acquis*: Secondary Publishing Right

In Dutch copyright law, the SPR is enshrined in Article 25fa AW. It is regarded as an author's exclusive prerogative and thus does not follow the logic of E&Ls nor causes any risk of contradicting the exhaustive list of Article 5 ISD. According to the Dutch provision, the author of a scientific article of limited extent, whose research has been at least partially publicly-funded, retains the right to make the work available on a free-of-charge basis within "a reasonable period" after the first publication. The exercise of this right is conditioned to the fact that the source of the first disclosure should be clearly expressed. Furthermore, Article 25h AW states that the SPR applies if the contract is regulated under Dutch law and the acts of exploitation take place at least predominantly in the Netherlands. Yet, the weak point of the provision lies in the true meaning and extent of the term "reasonable period", which is left to undetermined parameters and set on a case-by-case basis. The higher the share of public funding in the research work at stake, the shorter is the embargo period, also taking into account the version of the work and the author's interest in recouping subscription and access fees. The rationale of this flexible approach is clear and based on the goal of limiting the freedom of contract of authors and publishers to a degree that is proportionate to the share of public funds sustaining the research. The SPR cannot be overridden by contract (Article 25h AW).

**Conclusions**

The Dutch legal framework with regard to the reuse of software and database works is quite deficient. In fact, Articles 8 and 9 Database have not been adequately implemented, and some room for reuse for teaching purposes has been only recently introduced by Article 4a AW. Moreover, Article 45j, one of the provisions transposing Article 5 Software, includes the caveat that the exception does not apply if copyright owners have reserved their rights. All in all, the prerogatives of lawful users and licensees of protected databases and computer programmes are overly limited, with the risk of paralysing secondary innovation and research activities based on their reuse.

The Dutch panorama of E&Ls for research is also quite meagre. Article 5(3)(a) ISD is implemented as limited to teaching activities. Moreover, the specification in the subject-matter, which is frequently juxtaposed within the text of the provisions implementing several flexibilities, can leave room for restrictive interpretations in the judiciary.

### 1.2.21. POLAND

In Poland, the regulation of copyright and related rights is contained in the Ustawa z 4 lutego 1994r. o prawie autorskim i prawach pokrewnych (Act on Copyright and Related Rights of 4th February 1994 [Act on Copyright and Related Rights of 4th February 1994).

#### 1.2.21.1. Access to and reuse of computer programmes

The Polish implementation of Article 5(1) Software does not present significant divergencies from the EU benchmark, and it allows the contractual exclusion of this exception. The backup exception closely aligns with the EU model, but the Polish version also permits the simultaneous use of the copy made unless a contractual agreement establishes otherwise. The same can be said for the testing purpose exception and for the interoperability exception.

#### 1.2.21.2. Access to and reuse of databases

The Polish implementation of Article 6(1) Database follows closely the EU benchmark. Unlike the EU model, however, Poland does not require compliance with the three-step test in applying this exception, allowing for a broad judicial interpretation.

It is worth mentioning that the Polish regulation does not include any reference to the purpose-specific exceptions enshrined in Article 6(2) Database, thus leaving research and teaching uses uncovered.

Article 9 Database is implemented verbatim (Article 8 UPA), but for the fact that the Polish provision does not specify that the exception applies only to "extractions", adopting instead the broader term "use".

#### 1.2.21.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 27 UPA implements Article 5(3)(a) ISD in an articulated manner. Against the silence of the EU benchmark, the Polish exception refers only to specific beneficiaries appointed by law. Already before the entry into force of the CDSMD, which has yet to be implemented in Poland, the Polish rule envisages specific uses for digital learning (27(2) UPA) by allowing the making available of works digitally, exclusively for the benefit of a restricted group of teachers and students from educational institutions identified by the law.

The exception restricts its objective scope to works already made available to the public, a condition that is absent in the EU benchmark, but broadens the permitted acts (reproduction, making available and translation), and Article 100 UPA also covers related rights. Moreover, while the EU model does not impose any quantitative limitation, the Polish exception limits the use of minor works and extracts of larger works for illustration and scientific research purposes.

On top of the EU copyright acquis, Article $27^1$ UPA allows the dissemination of short works or excerpts from longer works – database excluded (Article $30^1$ UPA) - in textbooks, excerpts, and anthologies for the purposes of illustration in teaching and scientific research, subject to payment of fair remuneration.

**Text and data mining**

Currently, the UPA does not include any text and data mining provisions, and Poland has yet to implement the CDSMD.

#### 1.2.21.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 231 UPA has adopted Article 5(1) ISD verbatim, including the exception for temporary reproductions that are transient or incidental and an integral part of a technological process. The national provision mirrors the same conditions and requirements, including compliance with the three-step test.

**Quotation**

The Polish exception for quotation stands out due to its broader purpose compared to Article 5(3)(d) ISD, also covering explanation, teaching and a wide-ranging justified purpose encompassing "other types of creative activity". While the EU benchmark does not impose quantitative limitations, however, the Polish provision only allows the use of fragments of disclosed works, but works of visual art, photographic works, and small/minor works can be quoted in their entirety. Compared to the EU model, there is no reference to the need to comply with fair practices. Article 100 of the UPA extends the scope of the exception to related rights.

Article 17(7) CDMSD has not been implemented yet.

**Private study**

Article 28(1)(3) UPA transposes Article 5(3)(n) ISD almost verbatim but adopts a more restrictive approach to beneficiaries, which are identified in educational institutions, universities, research institutes, libraries, museums, and archives explicitly defined in a separate law. Article $30^1$ UPA excludes database works from the objective scope, while Article 100 UPA extends the provision to related rights. As in Article 5(3)(n) ISD, the Polish provision is subject to purchase or licensing terms. It shall be noted that the Polish rule imposes the additional condition of indicating the source unless this is proven impossible (Article 34 UPA).

**Preservation of cultural heritage**

Article 28(1)(2) UPA implements Article 5(2)(c) ISD with slight departures from the EU model. It adopts a more restrictive approach to beneficiaries, limiting them to educational institutions, universities, museums, archives, and research institutes appointed by a separate law. It does not limit the application of the exception to acts lacking commercial purposes but requires reproductions not to result in an increase in the number of copies or the expansion of collections. Absent a specification in the EU model, Article 28(1)(2) UPA features a wide list of purposes justifying the exception, such as supplementing, preserving, or protecting the reproduced works or other subject matters. The Polish rule also adds the requirement of indicating the source unless it is impossible (Article 34 UPA).

Waiting for the implementation of the CDSDM, the Polish Copyright Act does not allow digital preservation for CHIs.

### 1.2.21.5. Licensing schemes

Poland does not feature any special licensing schemes that can be directly or indirectly used for the pursuance of Open Science goals.

### 1.2.21.6. Public domain

Article 4 UPA excludes legislative acts and their official drafts, official documents, materials, logos and symbols, published patent specifications, industrial design specifications, and simple press information from the scope of protection. Similarly, Article 1(21) UPA (2003) specifies that copyright does not cover inventions, ideas, procedures, methods, principles of operation, or mathematical concepts. In line with Article 1(2) Software, Article 74(2) UPA clarifies that ideas and principles that underlie any element of a computer programme, including those that underlie its interface, are not protected.

**Conclusions**

In Poland, ISD-CDSMD implementing provisions are often slightly more restrictive than the EU counterparts, mostly setting limits on the amount of work that can be used. This is the case of the exceptions for quotation and teaching, and research. However, other provisions show the opposite approach. A broader formulation characterises the national transposition of the Article 9 Database. Also, Articles 6 Database and 5(1) Software have been implemented in a slightly more flexible manner than the EU counterparts, with specific regard to the conditions of applicability.

The list of beneficiaries is closed, thus falling below the EU threshold both in the case of the exception for private study and in that for teaching and research. In line with what was observed before, apart from the more relaxed limitation in purpose, the Polish E&L for teaching and research is less flexible than the EU model rule, as it sets limitations in the amount of work that can be used and in the subjective scope. However, the number of permitted acts is higher than in the EU corresponding provision.

### 1.2.22. PORTUGA*L*

In Portugal the regulation of copyright and related rights is contained in the *Codigo do direito de autor e dos direitos conexo (CDA)* (Copyright and Related Rights Code) n. No. 63/85 of 14 of March, in force since 14 March 1985.

#### 1.2.22.1. Access to and reuse of computer programmes

The CDA, under the title "Direitos do utente" ("User rights"), incorporates the exceptions outlined in Article 5 Software. The allowed acts and the operational conditions of the Portuguese provision are in accordance with those specified in the EU source. Article 7 CDA implements the mandatory exception described in Article 6 Software, closely adhering to its language.

#### 1.2.22.2. Access to and reuse of databases

Article 9 CDA transposes Article 6(1) Database, while Article 14 CDA corresponds to Article 8 Database. None of the national provisions deviate from their EU counterparts. Furthermore, Article 15(b) CDA permits the extraction and reutilisation of substantial parts of a database for the purposes of illustration for teaching or scientific research, and to the extent justified by the non-commercial purpose, in accordance with Article 9(b) Database. A similar provision is found in Article 10(b) CDA, which pertains to original databases, as defined in Article 6(2)(b) Database. In both cases, the acknowledgement of the source is required.

#### 1.2.22.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 75(2)(f) CDA includes an exception that allows for the reproduction, making available, and distribution of published works or their parts solely for teaching and education purposes and without any economic or commercial advantage. It is mandatory to acknowledge the source as stated in Article 76(1) CDA. These provisions implement Article 5(3)(a) ISD, adopting a flexible approach towards permitted acts, as they also cover the distribution of the works in accordance with Article 5(4) SD.

**Text and data mining**

The transposition of the CDSM Directive into Portuguese law was recently published in the Portuguese Official Journal (Diário da República) on June 19, 2023. The approved Decree-Law 47/2023 largely corresponds to a legislative project (Project 52/XV), which itself was a modified version of a previous project (Project 114/XIV) that was previously not passed as law. The transposition closely follows the text of the Directive, similar to other implementations of the kind, without opting for a more innovative or different legislative design, such as the one seen in other jurisdictions.

In the context of the Portuguese legal framework, Article 75.°2-v and -w introduce two exceptions pertaining to text and data mining. These exceptions closely mirror the provisions of the CDSM Directive, exhibiting no significant divergences. The first exception (v) enables research organisations or institutions responsible for cultural heritage to legally reproduce works or protected material for scientific research purposes. The second exception (w) permits the reproduction of legally accessible works or protected material for text and data prospecting as long as the respective rightsholders have not expressly reserved such use, particularly in publicly available online content made accessible through optical reading. It must be stated that the implementation of Article 3 of the CDSM Directive represents the first instance where the purpose of scientific research is mentioned in Portuguese legislation. Additionally, these exceptions do not specify the allowed "extraction" from databases; they exclusively pertain to the reproduction of works. Moreover, there is no specific defined duration for the retention of the copies. Instead, it is indicated that the retention should last "as long as necessary for the text and data mining activities, including their verification."

#### 1.2.22.4. General E&Ls complementary to research-specific E&Ls

#### Temporary reproduction

Article 75(1) CDA, which has been in effect since 2004, implements Article 5(1) ISD not through an exception but by excluding certain acts from the scope of the right of reproduction. Specifically, temporary acts of reproduction that are transient, incidental, or accessory and form an integral and essential part of a technological process are exempted. This exclusion applies as long as the temporary reproduction is made for the exclusive purpose of enabling transmission over a network between third parties by an intermediary or to allow a legitimate use of a protected work. Additionally, it is required that the reproduction complies with the conditions set out for acts enabling navigation on networks and temporary storage and that the intermediary does not alter the content of the transmission nor interfere with the lawful use of the technology in accordance with recognised fair market practices.

Furthermore, Article 189(3) of the CDA extends the scope of the copyright exceptions and limitations to the objects of related rights.

#### Quotation

Article 75(2)(g) CDA (2004) permits the inclusion of quotations or summaries of protected works for the purpose of supporting one's own positions, criticism, discussion, or teaching within the extent justified by the purpose. Regarding acknowledgement of the source, Article 76(1)(a) CDA requires it when possible. However, Article 76(2) CDA imposes additional conditions on the exception. It states that the citation must not create confusion with the cited work and prohibits extensive reproductions or citations that could prejudice the interests of the rightsholders. The Portuguese Supreme Court has strongly emphasised the importance of these conditions, clarifying that quotations are lawful only if they are occasional, brief, and do not exceed the limits imposed by law in a manner that undermines the interests of the rightsholders[1673].

Similarly, Article 189(1)(b) CDA envisions the same exception for extracts from a performance, phonogram, video, or broadcast.

1673 Portuguese Supreme Court, Case n.103/04.2TVLSB.L1. S1 of 17.11.2011.

These provisions transpose Article 5(3)(d) ISD with a greater level of flexibility than the EU counterpart as it extends the purposes for which quotation is allowed. However, the operational conditions of the exception are more stringent than those of the EU counterpart, as it introduces the condition of not creating confusion with the original work.

**Private study**

Article 75(2)(o) CDA (2004) implements Article 5(3)(n) ISD, following its standard. Additionally, Article 189(3) of the CDA extends the scope of the copyright exceptions and limitations to the objects of related rights. The rule allows libraries, museums, public archives, and schools to communicate and make protected works permanently held in their collection available to the public on dedicated terminals located within their premises for the benefit of their patrons and for individual research and study purposes. However, this exception does not apply in cases where such uses are already covered by specific purchase or licensing agreements.

**Preservation of cultural heritage**

Article 75(2)(f) CDA contains an exception that allows for the reproduction, making available, and distribution of published works or their parts exclusively for teaching and education purposes and without any economic or commercial advantage. Acknowledgement of the source is mandatory under Article 76(1) CDA. These provisions align with Article 5(3)(a) ISD and adopt a flexible approach towards permitted acts, which includes the distribution of the works as defined in Article 5(4) ISD. Additionally, Article 15(b) CDA permits the extraction and reutilisation of substantial parts of a database for illustration in teaching or scientific research, adhering to the conditions specified in Article 9(b) of the Database Directive. A similar provision can be found in Article 10(b) CDA for original databases, as stated in Article 6(2)(b) Database Directive. In both cases, acknowledgement of the source is required.

The provision in Article 75.°2-y CDA regarding the cultural heritage preservation exception gives rise to two significant concerns. Firstly, there is redundancy, as the Portuguese Copyright Code already includes an exception (Article 75.°2-e) that permits cultural heritage institutions to reproduce works for preservation purposes. Secondly, this provision might be incompatible with EU law. The CDSMD does not allow for exceptions related to cultural preservation to mandate fair compensation to be paid to copyright holders. However, Article 75.°2-e in the Portuguese Copyright Code does require the payment of equitable remuneration, as stated in Article 76.°1-b.

### 1.2.22.5. Licensing schemes

In Portugal, certain rights are subject to mandatory collective management. These rights include the right to retransmission of broadcasts (Articles 7(1)(2) and 8 DL. n. 333/97), the right for communication to the public by satellite simultaneously to a terrestrial broadcast by the same broadcaster (Article 6 Decree-Law 333/97), the right of performers to an annual supplementary remuneration (Article 183-A (7) CDA), and the rights of performers and/or phonogram producers to remuneration for broadcasting and communication to the public of phonograms (Article 178(2) CDA). Additionally, the compensation for private copying and reprography is also subject to mandatory collective management (Article 75(2)(a) and Art. 6(1) of Law 62/98).

On the other hand, licensing schemes for the use of copyrighted works or other protected materials are governed by specific legal provisions. One such provision is Article 36-A, introduced by Decree-Law No. 47/2023 of 19 June. This article deals with collective licenses with extended effects, allowing collective management entities to grant licenses for certain uses of works or protected materials, even on behalf of rightsholders who have not given them a mandate. Its content is in line with Article 12 CDSMD.

#### 1.2.22.6. Public domain

Article 7(1) PJDB (1985) explicitly exempts news of the day and reports of various events with purely informative characteristics from copyright protection. Likewise, it excludes requests, allegations, complaints, and other texts presented in written or oral form before public authorities or services, texts and speeches delivered before assemblies or other collegial, political, and administrative bodies, or in public debates on matters of common interest, including political speeches.

#### Conclusions

The Portuguese copyright law now closely aligns with EU regulations, presenting a legal framework that takes into account the access to and reuse of computer programmes and databases. The recent 2023 transposition of the CDSM Directive into Portuguese law was done in a way that mirrors the Directive's provisions without significant divergences. Specific exceptions have been introduced for text and data mining, allowing research organisations and institutions to reproduce works for scientific research purposes and permitting the reproduction of legally accessible works for text and data prospecting. Portuguese law also includes exceptions for temporary reproduction, quotation, private study, and preservation of cultural heritage. Licensing schemes for copyrighted works are subject to mandatory collective management, and licensing with extended effects is governed by specific legal provisions. Certain materials are explicitly exempted from copyright protection in the public domain, such as news of the day and reports with purely informative characteristics and texts presented before public authorities or services on matters of common interest.

### 1.2.23. ROMANIA

In Romania the regulation of copyright and related rights is contained in the Lege nr. 8 din 14 martie 1996 privind dreptul de autor si drepturile conexe (Law No. 8 of 14 March 1996 on Copyright and Neighbouring Rights) (RDA).

#### 1.2.23.1. Access to and reuse of computer programmes

While Article 78(1) RDA implements Article 5(2) Software verbatim, Article 78(2) RDA does the same for Article 5(3) Software. Article 5(1) Software is transposed in Article 77 RDA, also in full adherence to the EU model. Only Article 77 RDA is not overridable by contract.

Articles 79 and 80 RDA transpose Article 6 Software slavishly but mention the three-step test as an additional filter to be taken into consideration in the application of the exception.

#### 1.2.23.2. Access to and reuse of databases

Article 142(5) RDA implements Article 6(1) Dabasase almost verbatim. The same can be said for Article 8 Database, which is followed closely by Article 142(1)-(3) RDA, as amended in 2018, except for the missing reference to the fact that the insubstantiality of the portion of the database shall be evaluated “evaluated qualitatively and/or quantitatively”.

Article 9(a)-(c) Database are all transposed slavishly by 142(4)(a)-(c).

#### 1.2.23.3. Research-specific E&Ls

#### Illustration for teaching and scientific research

The RDA contains two provisions implementing Article 5(3)(a) ISD.

Article 35(1)(c) RDA (republished in 2018) allows public education and social welfare institutions to reproduce and communicate to the public isolated articles or brief excerpts from works, television or radio broadcasts or sound or audio-visual recordings for teaching purposes, and to the extent justified by the purpose.

Article 35(2)(1)(d), RDA permits the reproduction, distribution, broadcasting or communication to the public of works, in so far as these acts are done for the sole purpose of illustration for teaching or scientific research. The act shall lack commercial or economic advantage. Uses should conform to fair practices and comply with the three-step test. Acknowledgement of the source is required unless proven impossible. Article 120 RDA extends the scope of this provision to the objects of related rights. Beneficiaries and works covered are not specified, but Article 35(1)(2) RDA restricts the purpose of the exception to acts that are necessary to identify and organise the subject matter of a specific lesson.

A provision that does not correspond to any rule part of the EU copyright *acquis* is Article 37(d) RDA, which allows the transformation of a work without the consent of the author and without payment of remuneration if the result is a summary presentation of the works for teaching purposes, provided that the author and source used are cited.

**Text and data mining**

Articles 36^1 and 36^2 RDA, introduced by Law n. 69/2022, transpose verbatim the TDM exceptions contained in Articles 3 and 4 CDSM. However, unlike the EU model, in the case of reproductions made under Article 36^1 (corresponding to Article 3 CDSM), Article 36^5 allows rightsholders to limit the number of copies that can be made. Beneficiaries correspond to those enshrined in Article 2(1) CDSMD and related Recitals. According to the definition provided in Article 2^1(1)(e) RDA, research organisations refer to "a university, including its libraries, a research institute or any other entity whose main purpose is to carry out scientific research or to carry out educational activities that also include carrying out scientific research, without profit or by reinvesting all profits in scientific research or on the basis of a mission of public interest, recognised by law, so that access to the results generated by such scientific research cannot preferentially benefit an entity that exercises a decisive influence on to such an organisation"; while Article 2^1(1)(g) RDA defines cultural heritage institutions as "a library open to the public or a museum, an archive or an institution for the conservation of cinematographic or sound heritage, as well as any other public cultural institutions carrying out activities in the field of education, organised outside the national system of formal education, aiming to preserve and promote national culture".

As to the additional conditions of applicability, Article 36^5(2) RDA explicitly requires compliance with the three-step-test, whilst Article 36^5(4) RDA allows rightsholders to limit the number of copies that can be made under the general TDM exception.

### 1.2.23.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD has been implemented verbatim under Article 35(3) RDA. Unlike the EU model, the Romanian provision also prescribes compliance with fair practices.

**Quotation**

Article 35(1)(b) RDA (amended in 2018) closely follows Article 5(3)(d) ISD but adopts a more restrictive approach towards the amount of work that can be quoted (“brief quotations”) and expands the purposes of the quotation cover any analytical, commentative, or illustrative aim.

Article 128^2 RDA implemented Article 17(7) CDSMD verbatim but extended its reach to cover any E&Ls mentioned in the Act.

**Private study**

Article 5(3)(n) ISD was not implemented in Romania. However, Article 35(1)(d) RDA, as amended in 2018, allows the reproduction of brief excerpts from works for information or research within the framework of libraries, museums, film archives, sound archives, and archives of non-profit cultural or scientific public institutions. Uses should conform to fair practices and comply with the three-step test. Acknowledgement of the source is required unless proven impossible. No possibility for rightsholders to reserve their rights is envisaged, and neither is it required that the acts are performed within the premises of the beneficiaries through dedicated terminals.

Uses for private study may also be covered by flexibilities concerning uses for illustration for teaching and scientific research.

**Preservation of cultural heritage**

Preservation of cultural heritage is partially possible by leveraging the exception provided by Article 35(1)(d) RDA, which allows the reproduction of brief excerpts from protected works present in Cultural Heritage Institutions (CHIs) for private study and research purposes. The same provision also allows CHIs to reproduce in full works held in their permanent collections to replace them if they have only one copy in the event of their destruction, severe deterioration or loss. Article 120 RDA extends the scope of this provision to related rights.

As to beneficiaries, Article 35(1)(d) RDA address a vast number of entities, such as CHIs libraries, museums, film and/or audio heritage institutions, archives, and scientific organisations.

Compared to the EU model (Article 5(2)(c) ISD), Article 35(1)(d) RDA limits the scope of the provision by allowing only the reproduction of brief excerpts of protected works for informatory or scientific research purposes, and the reproduction in full only for the purpose of restoration or replacement.

Article 36^4 RDA, introduced by Law n. 69/2022, transposes verbatim Article 6 CDSMD, but rightsholders may limit the number of copies that can be made.

### 1.2.23.5. Special licensing schemes

In Romania, there are rules for mandatory collective licensing concerning aspects that are unlikely to play some role in the goals of Open Science. The only two which can be deemed indirectly useful for these purposes are the licensing schemes set as to administer remuneration rights within the field of private copy/preprogaphy (Articles 114 and 145(1)(a) RDA) and lending (Article 145(1)(b) RDA).

#### 1.2.23.6. Public domain

Article 9 RDA, amended in 2018, excludes protection ideas, theories, concepts, scientific discoveries, proceedings, functioning methods or mathematical concepts as such, and inventions contained in a work, whatever the mode and form of expression. The same can be said for official texts of a political, legislative, administrative or judicial nature, official symbols of the State, public authorities and organisations, such as armorial bearings, seals, flags, emblems, shields, badges and medals, means of payments, simple facts and data. The law also excludes news and press information.

Notably, works of folklore are not in the public domain but protected by law no. 26/2008 on the protection of the intangible cultural heritage. According to the Romanian Supreme Court[1674], this right is "a form of ownership over the elements of traditional cultural expression, which belongs to the community in which they were created. Ownership is exercised collectively and is inalienable, the legislator expressly providing for the impossibility of individual appropriation of these elements through copyright, both by individuals belonging to that community and by third parties. […]". The presence of this entitlement does not exclude, in principle, copyright protection of works elaborating on elements of traditional cultural expression, provided that they are original in the sense that they represent the author's own intellectual creation, bear their touch, and are thus sufficiently distant from the original folkloristic source.

Article 73(2) RDA implements Article 1(2) Software by stating that the ideas, processes, methods of operation, mathematical concepts and principles underlying any element of a computer programme, including those underlying its interfaces, are not protected.

#### Conclusions

The Romanian Copyright and Related Rights Law (RDA), in force since 1996 and last amended in 2022, is quite well harmonised with the EU copyright acquis, given that it contains the great majority of the E&L envisaged in the EU Directives, including the ones introduced with the CDSM Directive. Still, while many of the Romanian flexibilities are in line with the EU standard, some E&Ls covered in this report are more restrictive than the corresponding EU regime (private copy and illustration for teaching and research, text and data mining).

### 1.2.24. SLOVAKIA

In Slovakia, the regulation of copyright and related rights is contained in the Copyright Act (Act No. 185/2015 Coll), amended in 2018, in force since 2016 (ZKUASP), and last amended in 2022.

#### 1.2.24.1. Access to and reuse of computer programmes

Article 5 Software has been implemented by Section 89 ZKUASP. The Slovakian provision does not specifically list the permitted acts but simply limits the rights of computer programmes for the benefit of lawful users, subject to the "proper use" benchmark, including correcting errors. Leveraging on the degree of freedom left by the EU provision, the Slovakian legislator permits contractual derogations of the exception. For backup and testing purposes, exceptions have been implemented almost verbatim. The same can be said for the interoperability exception where, however, some minor divergences can be observed. The Slovakian implementation also allows reproductions and translations by third parties, going beyond the EU benchmark.

1674 Decision no. 597/2013 from February 8, 2013, of the High Court of Cassation and Justice of Romania, 1st Civil Section.

#### 1.2.24.2. Access to and reuse of databases

Section 134 ZKUASP implements Article 6(1) Database verbatim. While Article 6(2) Database is not expressly transposed, the same effect is reached by declaring that all exceptions and limitations envisaged within the ZKUASP, including those provided for teaching and research, are applicable to database works. The only provision recalled by the Slovakian legislator related to private copy is confined to non-electronic databases.

Article 8 Database if codified in Section 138(1)-(3) ZKUASP, which closely follows the EU text. Also, Section 138(4) ZKUASP implements Article 9(1) Database with no major divergencies. As to the specific exception allowing extractions for the purpose for teaching or scientific research (Article 8(1)(b) Database), the Slovakian implementation does not deviate from the EU benchmark. The provision has been recently amended to include the possibility of making extractions and reuse for digital learning, for TMD purposes and for preservation uses by CHIs (Articles 3-6 CDSMD).

#### 1.2.24.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Section 44 ZKUASP (2016) implements Article 5(3)(a) ISD almost verbatim. However, the Slovakian rule sets a more restrictive standard on beneficiaries. Compared to the EU model, which remains silent on the issue, the Slovakian rule covers educational establishments such as schools, higher education institutions, and facilities for children under 3 years. The provision allows the reproduction, public performance or communication to the public of published works (a requirement not present in the EU model) as background materials for educational or research purposes. The scope is extended to performances by Section 103(1) ZKUASP, to phonograms by Section 121 ZKUASP, to broadcasts by Section 127(1) ZKUASP, and to databases by Section 134(2) ZKUASP and Section 138(4)(d) ZKUASP.

Section 44(2) ZKUASP implements Article 6 CDSMD verbatim, with the same extension to performances, phonograms, broadcasts, and databases. However, the Slovakian provision introduces a limitation absent in the EU counterpart, stating that the exception applies exclusively to "published" works or other subject matter. It should also be noted that the notion of educational establishments under Section 44(4) ZKUASP is again more restrictive than the one provided by the CDSMD, for it defines educational establishments as schools, higher education institutions, and childcare facilities for children under 3 years. Finally, Slovakia decided not to subordinate the operation of the provision to the non-availability of commercial licenses.

Section 45 ZKUASP introduces a rule outside the scope of the EU copyright acquis, which permits the use of published works by educational institutions such as schools and universities, as well as their employees and individuals engaged in educational services or social and educational activities, in the context of school performances organised exclusively by the school and not aimed at generating any economic benefit.

**Text and data mining**

Sections 51b and 51c ZKUASP implemented Articles 3-4 CDSMD. The most remarkable variation from the EU model relates to beneficiaries for the TDM exception for scientific research since the Slovakian legislator did not follow the wide-encompassing notions of cultural heritage institutions and research organisations offered by Articles 2(1) and 2(3) CDSMD, but it only mentions “libraries, archives, museums, schools or legal depository according to a special regulation as beneficiaries of the exception”. The Slovakian legislator is also silent on the call for rightsholders, cultural institutions, and research organisations to voluntarily establish codes of conduct and best practices.

### 1.2.24.4. General E&Ls complementary to research-specific E&Ls

#### Temporary reproduction

Article 5(1) ISD finds its implementation in Article 54 ZKUASP (2015), closely following the EU text and adhering to the three-step test as stated in Section 34 ZKUASP. This provision's scope extends to performances (Section 103(1) ZKUASP), phonograms (Section 121 ZKUASP), broadcasts (Section 127(1) ZKUASP), and databases (Section 134(3) ZKUASP). However, it's important to note that under the general rule of Section 35(2) ZKUASP, the exception mandates attributing the name of the author to the used work to the extent possible, thus rendering the application of the exception subject to stricter conditions than those laid in the EU counterpart.

#### Quotation

Section 37 ZKUASP implements **Article 5(3)(d) ISD** by permitting “uses” by means of “quotation” of any type of protected work (Section 37 ZKUASP). The scope of this provision is extended to performances by Section 103(1) ZKUASP, to phonograms by Section 121 ZKUASP, to broadcasts by Section 127(1) ZKUASP and to databases by Section 134(2) ZKUASP. The addition of the word “primarily” [for criticism or review] suggests that the list of permitted purposes is a non-exhaustive and only exemplary list of permitted uses. Sticking to the baseline structure of Article 5(3)(d) InfoSocISD requires quotation to comply with “fair practices”, Section 37 ZKUASP prescribes to comply with “social customs”. Likewise, acknowledgement of the source is mandatory to the extent possible (Section 35 ZKUASP).

Slovakia implemented Article 17(7) of the CDSM Directive in Section 64d ZKUASP to make sure that users of OCSSPs can rely on the quotation exception. However, the national implementation stands out for the great flexibility in the solution envisaged. In fact, the Slovakian implementation is not restricted to quotation and parody but covers all E&Ls included in the ZKUASP.

#### Private study

Section 48 ZKUASP implements Article 5(3)(n) ISD almost verbatim. The scope of this provision is extended to performances by Section 103(1) ZKUASP, to phonograms by Section 121 ZKUASP, to broadcasts by Section 127(1) ZKUASP, and databases works by Section 134(3) ZKUASP. As to permitted acts, the Slovakian provision allows beneficiaries to make copies of protected works, thus going beyond the mere making available to the public of Article 5(3)(n) InfoSocISDn line with the CJEU decision in *Ulmer*. The applicability of the exception, however, is conditioned to the purchase or licensing terms under which each work has been acquired and to the requirement of indicating the source to the extent possible (Section 35(2) ZKUASP).

#### Preservation of cultural heritage

Section 49 ZKUASP transposes Article 5(2)(c) ISD, following the EU text closely as to beneficiaries and permitted uses. While the EU Directive remains silent on specific purposes however, the Slovakian legislation incorporates a broad range of purposes for the exception, such as substitution, archiving, or securing the original work against loss, destruction, or damage. Article 6 CDSMD was implemented by adding a new Section 49a ZKUASP. The national transposition closely mirrors the EU text, with one notable difference concerning the scope of beneficiaries, for the Slovakian provision restricts it to museums, libraries, archives, or statutory depositories regulated by special legislation.

### 1.2.24.5. Special licensing schemes

Since 2016, Slovakia has featured an ECL scheme, which has been recently amended to bring the act in line with Article 12 CDSMD. Under Section 79(1) ZKUASP, normal CMO licenses extend to non-members, provided that the CMO is the most representative organisation of the given category of rightsholders. In line with the EU benchmark, rightsholders have the possibility to opt-out with respect to certain works or the whole repertoire. Under the national ECL scheme, licences can be granted for a maximum period of 1 year, with automatic annual renewal, if neither of the parties objects (Section 79(4)(a) ZKUASP). The ECLs are broadly applicable to different uses and works (Section 80 ZKUASP).

In addition, Section 93(2) ZKUASP regulates a non-exclusive and non-commercial, royalty-free compulsory licensing scheme for works produced by students of an educational establishment in the context of their educational activities.

#### 1.2.24.6. Public domain

Section 5 ZKUASP excludes from copyright protection ideas, systems, methods, concepts, principles, discoveries or information that have been expressed, described, explained, depicted or incorporated into a work. Similarly excluded are legislative texts, judicial or administrative decisions, technical norms, including draft materials and translations thereof, land-use planning documents, and speeches delivered in discussions on public affairs, irrespective of whether the latter may qualify for copyright protection. Copyright does not cover either state symbols, municipality symbols, symbols of self-governing regions (but may apply to works used to create them), nor does it protect daily news, intended as information on events or circumstances, and the result of the activity of expert, interpreters or translators acting under special laws. Notably, works of folklore are also expressly excluded from protection. In line with Article 1(2) Software, Section 87 ZKUASP excludes from the scope of protection the ideas and principles underlying any element of a programme, including those underlying its interfaces.

In addition, Section 9 ZKUASP frees works from copyright protection (a) when the term expires and (b) when the author of the work has no heirs or if the heirs decline to accept the inheritance, even before the expiration of the term of rights.

#### Conclusions

Slovakia implemented most of the copyright flexibilities introduced by EU Directives, including those envisaged in the CDSMD. Exceptions, such as for the access and reuse of computer programmes and databases, are relatively harmonised with the EU benchmark. Moreover, Slovakia makes broad use of ECLs, which could facilitate the dissemination and access to content. Significantly, the Slovakian transposition of Article 17 CDSMD covers all E&L envisaged in the act. However, both specific research exceptions and those in favour of CHIs are subject to several limitations as to beneficiaries and conditions of applicability, making the Slovakian approach stricter than the average EU model.

### 1.2.25. SLOVENIA

In Slovenia, the regulation of copyright and related rights is contained in the Zakon o avtorski in sorodnih pravicah (1995) (ZASP) [Copyright and Related Rights Act (1995)].

#### 1.2.25.1. Access to and reuse of computer programmes

Going beyond the array of permitted uses enshrined in Article 5 Software, Article 114(1) ZASP also allows the distribution and rental of a copy of the software. Although, in principle, some of the uses permitted under this provision can be overridden by contract, the Ljubljana High Court excluded it in 2017[1675]. Yet, it must be noted that Article 114(2) ZASP limits the number of backup copies that can be made to a maximum of two.

Article 6 Software has been implemented verbatim.

#### 1.2.25.2. Access to and reuse of databases

Article 6 Database is implemented in Article 53a ZASP, which allows lawful users to reproduce or alter database contents. The Slovenian legislator did not benefit from the possibility provided by Article 6(2) Database of introducing E&Ls also for teaching and research purposes. The provision is not contractually overridable.

Article 8 Database is implemented quite slavishly. Instead, Article 9 Database is transposed without the inclusion of the exception for teaching and research purposes. In addition, the text of Article 141g ZASP delimits the number of copies that can be made to three.

#### 1.2.25.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 5(3)(a) ISD is implemented in Article 49(1) ZASP. In contrast with the EU rule, the Slovenian provision does not contain any limitation in purpose related to “illustration”, and there is no necessity test. Yet, the text does not encompass any reference to research. The array of permitted uses is as broad as to comprise the rights of public performance and communication and making available to the public, but the provision limits the types of activities in the context of which such acts can be undertaken (during school events and direct teaching activities, and in broadcasting at school radio and tv shows). The non-commercial nature of the activity is required only vis-à-vis the rights of performers.

**Text and data mining**

Articles 3 and 4 CDSM are implemented with no significant detachment from the EU counterpart in Articles 57a and 57b ZASP. The only notable divergence can be found in Article 57a(4) ZASP, which transposes Article 4 CDSMD and states that if TPMs are implemented to prevent TDM activities, they must be edited to allow access within 72 hours.

#### 1.2.25.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD has been implemented verbatim in Article 49a ZASP.

1675 Ljubljana High Court, Judgement of 12 October 2017, VSL Sodba V Cpg 697/2017.

**Quotation**

Article 5(3)(d) ISD is transposed in Article 51 ZASP. Accordingly, already published works can be used in excerpts for illustration, criticism, or review. Only photographic works, works of fine art, and architectural or industrial design works can be quoted. However, Slovenian courts have progressively enlarged the objective scope of the exception, also relaxing its conditions of applicability. In fact, in 2008 and then again in 2013, the Supreme Court explicitly allowed the quoting of audio-visual works and movies[1676]. Along the same lines, the scope of the flexibility was also extended in 2008 to include musical works[1677], but the Court specified Section 51 ZASP could not be held as a lawful ground to allow adaptations of an existing copyrighted work[1678]. Nevertheless, a door was left open in 2016, with a decision that held that the purpose of the quotation as to be held within the umbrella of Section 51 should be evaluated on a case-by-case basis, with the effect of increasing the level of flexibility of the provision[1679].

The Slovenian Supreme Court also intervened on the amount of work that can be quoted. In 2008, it affirmed that, in line with the Slovenian Constitution, the work in question can be quoted in its entirety in some specific circumstances[1680]. Despite formally falling under the EU threshold, the Slovenian quotation exception has been interpreted broadly by courts, leaving room for extensive readings, especially with regard to its limitation in purpose. This can lead to exploiting quotations as open-ended, purpose-unspecific provisions.

Article 17(7) CDSM has also been implemented almost verbatim by Article 163e ZASP.

**Private study**

Article 5(3)(n) ISD has been transposed verbatim by Article 49b ZASP.

**Preservation of cultural heritage**

Article 6 CDSM has been slavishly transposed by Article 57d(1) ZASP. To the contrary, Article 50(1) ZASP, which implemented Article 5(2)(c) ISD, is much more restrictive as to subject-matter, permitted uses and number of copies allowed. CHIs can make no more than three copies of already published works for mere internal and non-commercial purposes, with the exclusion of books, graphic versions of musical works, electronic databases, computer programmes and architectural works unless agreed otherwise.

1676 VSL II Cp 1392/2013, 27.9.2013. Previously, in the same sense: VSL II Cp 4863/2008, 24.6.2008.

1677 VSRS II Ips 213/2008, 26.2.2009.

1678 VSL V Cpg 362/2015, 17.6.2015.

1679 VSL V Cpg 200/2016, 1.6.2016.

1680 VSL II Cp 4863/2008 of 24.6.2008.

#### 1.2.25.5. Licensing schemes

Outside the scope of the EU copyright acquis, Article 101(1) ZASP states that, unless agreed otherwise, when an employee creates a copyrightable work while executing his duties and following the instructions given by the employer, the economic rights thereof are assigned to the employer for 10 years from the completion of the work. After that period of time, the rights are reverted to the employee, whilst the employer can claim an exclusive assignment in exchange for adequate remuneration. This rule can be considered a fruitful model to be transposed within the field of open access, behaving as a paradigm and a guideline for university policies in this respect. In fact, regulations on the relationship between research institutions and individual researchers with regard to the assignment of economic rights over protected works vary. Article 101(1) ZASP can be heralded as a model rule, potentially playing a fruitful role in incentivising research organisations to embark on research projects while, at the same time, helping research staff with getting fair remuneration and administering its own economic rights through a reversion rule. In this sense, this provision is paradigmatic as a possible way of regulating the interplay between Open Science and Access policies on one hand and copyright rules on the other.

#### 1.2.25.6. Public domain

Article 9 ZASP is a flexible public domain rule that carves out official texts, works of folklore, ideas, principles, and discoveries from copyright protection. This latter category of works is usefully excluded, as it can behave as an effective blockage against attempts to contractually monopolise information to the detriment of researchers.

#### Conclusions

Slovenian E&Ls for the benefit of lawful users of databases and software are quite restrictive compared to the EU model and do not feature any specific provisions for teaching and research purposes. Similarly, E&Ls directly or indirectly related to research do not contribute to the promotion of research activities. In fact, the exception that should formally address both teaching and research activities, apart from being unequivocally teaching-oriented, has a narrow scope and is fraught with a strict two-fold limitation in purpose. Moreover, the exceptions for quotation and uses by CHIs, respectively transposing Articles 5(3)(d) and 5(2)(c) ISD, are more restrictive than the EU benchmark, especially with regard to the amount and type of works that can be used, although the Supreme Court has repeatedly intervened to broaden their scope.

### 1.2.26. SPAIN

In Spain, the regulation of copyright and related rights is contained in the *Texto Refundido de la Ley de Propiedad Intelectual, TRLPI*, by Royal Decree n. 1/1996, subsequently amended by Royal Decree n. 24/2021[1681].

1681 Royal Decree 1/1996, 12 April 1996, which approves the organised text of the Spanish Intellectual Property Law.

#### 1.2.26.1. Access to and reuse of computer programmes

The TRLPI contains various exceptions to facilitate access and use of computer programmes. Article 100.1 TRLPI, effective since 1996, implements the exception found in Article 5(1) Software, fully adhering to the EU model. Article 100.2 TRLPI transposes Article 5(2) Software verbatim, while Article 100.3 does the same for Article 5(3) Software, with the addition that, unless otherwise agreed, the rightsholder may not prevent assignees/licensees who hold the exploitation rights from creating new versions of the programme or derived programmes. Article 100.5 TRLPI adopts the same wording and conditions of the mandatory exception contained in Article 6 Software.

#### 1.2.26.2. Access to and reuse of databases

Articles 34 and 134 TRLPI implemented verbatim Articles 6(1) and 8 Database, respectively. The same can be said for the teaching and research exceptions by Articles 34.2(b) TRPLI (Article 6(2)(b) Database) and Article 135.2(b) TRLPI (Article 9(b) Database).

#### 1.2.26.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 5(3)(a) ISD is transposed in Spain in a detailed manner, featuring some elements of great flexibility and traits introducing some more restrictive aspects than the EU model. The Spanish provision allows for more flexible permitted acts compared to the EU counterpart. However, this expansion is counterbalanced by a limited approach to the type and amount of work that can be used and by confining the exception to a detailed array of beneficiaries. Some uses are allowed upon rightsholders compensation.

Article 32.3 TRLPI, introduced in 2015, permits teachers in educational establishments integrated within the Spanish education system and staff of universities and public research bodies to reproduce, distribute, and publicly communicate small fragments of already disseminated works and isolated figurative or photographic works as long as these acts do not have a commercial nature and are solely for teaching or research purposes. A small fragment is understood as an extract or a quantitatively insignificant portion of the work as a whole. The use must not go beyond the extent necessary for the purpose, and the exception covers both face-to-face and distance learning. Special rules apply in the case of textbooks, university manuals, or similar publications. Here, reproduction or public communication is allowed if this does not involve making the work or its fragments available to recipients. Copies of works can be made and distributed exclusively among collaborating research personnel of each specific research project. The use cannot go beyond the extent necessary for the project. The name of the author and the source shall be included unless proven impossible. When these conditions are met, no remuneration to rightsholders is due.

Article 32.4 TRPLI allows the partial reproduction, distribution, and public communication of works or publications by the personnel of universities or public research centres performed through the university or centres' means and instruments for the exclusive purpose of illustration for teaching or scientific research. The acts shall be confined to one chapter of a book, a single article in a journal, or up to 10 per cent of the total work. Copies can be distributed exclusively among students and teaching or research staff of the same centre, where the reproduction is made through internal and closed networks to which only such beneficiaries have access or within the framework of a distance education programme offered by said beneficiaries. Unless there is a specific agreement between rightsholders and the university or research body, and unless the latter holds the corresponding exclusive rights over the works partially reproduced, distributed, and publicly communicated, rightsholders have a non-waivable right to receive equitable remuneration, which shall be paid to collecting societies. Article 32.5 TRPLI excludes music sheets, single-use works (e.g., exercise books), compilations of fragments of works, and figurative and photographic works from the scope of the exception.

While the detailed content of each provision implies a more restrictive approach compared to the broad ISD exception, it is worth noting that the joint mention of teaching and research and the additional specifications introduced by the Spanish legislator make the national rules mostly useful for teaching purposes, leaving research activities mostly uncovered.

**Text and data mining**

Royal Decree n. 24/2021 has transposed Articles 3-4 CDSMD in Article 67 of the same Decree. The Spanish transposition of Article 3 CDSMD closely follows the EU standard, with the additional inclusion of translation, adaptation, arrangement, and other transformations of computer programmes. As to the transposition of Article 4 CDMD, the only divergent feature is that the national provision imposes additional conditions for conserving the results obtained. According to the law, reproductions and extractions may be kept for as long as necessary to fulfil the text and data mining in full compliance with the principles of legality and the rules on the protection of personal data and the guarantee of digital rights.

### 1.2.26.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 5(1) ISD has been implemented by Article 32.1 TRLPI by following closely the EU model. However, the Spanish transposition introduces a minor difference by relaxing the necessity benchmark, stating that reproduction should not be "necessary to allow/enable" a technical process but only "facilitate" it. Furthermore, a considerable number of countries explicitly state that quotations should be in the form of passages or short extracts. For instance, in Spain, it is mentioned as "fragments of other works". Additionally, Article 132 TRLPI extends the scope of exceptions and limitations outlined in Title III Chapter 2 (Articles 31-40) to the objects of related rights, except for Article 37 TRLPI.

**Quotation**

Article 5(3)(d) ISD is implemented in Article 32.1 TRLPI, which has been in force since 2006 and amended in 2019. This provision allows for the quotation of fragments from literary, musical, and audiovisual works that have been lawfully made available, as well as isolated figurative or photographic works, for purposes of analysis, commentary, critical judgement, teaching, or research, to the extent justified by the purpose. The name of the author and the source must be indicated. Periodical compilations in the form of reviews or press reviews are considered as quotations, except when they consist essentially of mere reproductions of journalistic articles and are used for commercial purposes. In such cases, rightsholders are entitled to equitable remuneration. However, rightsholders have the option to expressly exclude such uses. The reproduction, distribution, or public communication, in whole or in part, of isolated journalistic articles in press reviews distributed within an organisation requires the authorisation of rightsholders. In comparison to the EU model, the Spanish quotation exception narrows down the type of works that can be quoted and, for some works, adopts a less flexible approach than the EU counterpart by limiting the amount of works that can be quoted. However, the Spanish provision offers greater flexibility by expanding the allowed purposes of quotation.

Additionally, Article 132 TRLPI extends the scope of exceptions and limitations within Title III Chapter 2 (Articles 31-40) to the objects of related rights, with the exception of Article 37 TRLPI.

**Private study**

Article 5(3)(n) ISD is implemented in Article 37.3 TRPLI, which has been in force since 2006. This provision allows museums, archives, libraries, newspaper and periodicals archives, sound or film archives, which are public or belong to non-profit cultural, scientific, or educational entities of general interest, or to educational institutions integrated into the Spanish educational system to communicate to the public works in their collections or make them available to their patrons for research purposes, using dedicated terminals installed for this purpose within their premises. Rightsholders are entitled to receive equitable remuneration. However, this exception does not apply when the use is covered by specific purchasing or licensing conditions. Compared to the corresponding EU provision, the Spanish private study exception offers a greater level of flexibility in the array of beneficiaries but adopts a stricter approach as to the conditions of applicability.

**Preservation of cultural heritage**

Article 37.1 TRLPI, in force since 1996 and amended in 2006, allows museums, libraries, sound and film libraries, newspaper libraries, or archives that are publicly owned or integrated into institutions of cultural or scientific nature to reproduce works exclusively for research or conservation purposes, and the act shall be for non-profit purposes, in line with Article 5(3)(a) ISD. On top of this, Article 40 TRLPI (1996) stipulates that if, on the author's death or declaration of death, his beneficiaries exercise their right not to disclose the work in a manner that violates the Constitution, the judge may order appropriate measures upon the request of the State, the Autonomous Communities, local corporations, public cultural institutions, or any other person with a legitimate interest.

Royal Decree n. 24/2021 implements Article 6 CDSMD in its Article 69. The Spanish transposition closely follows the EU model, with the explicit addition that copies can be made in the necessary quantity and at any time during the life of a work, as long as they do not extend beyond what is necessary for the purpose of conservation. The national provision allows a greater degree of flexibility than the EU model, explicitly permitting acts of reproduction made by third parties acting on behalf of cultural heritage institutions and under their responsibility.

#### 1.2.26.5. Licensing schemes

The Spanish legislator has not made use of any licensing scheme for research-related purposes.

#### 1.2.26.6. Public domain

Article 13 TRLPI (1996) specifies that legal or regulatory provisions and their drafts, decisions of courts and tribunals, acts, agreements, deliberations, and opinions of public bodies, as well as official translations thereof, are excluded from copyright protection. Spain's implementation of Article 14 CDSMD is done through Article 72 of Royal Decree n. 24/2021, which follows the CDSMD provision verbatim.

Although there is no direct transposition of Article 1(2) SD, Article 10.1 TRLPI includes '*programmeas de ordenador'* or software *programmes* as works that are considered to be original and worthy of legal protection, in the same vein of other literary, artistic or scientific works.

#### Conclusions

The TRLPI in Spain contains various exceptions to facilitate access and reuse of computer programmes and databases, closely following the EU model. Article 5(3)(a) ISD is transposed in Spain in a detailed manner, featuring some elements of great flexibility and traits introducing some more restrictive aspects than the EU model. The Spanish provision allows for more flexible permitted acts compared to the EU counterpart. However, this expansion is counterbalanced by a limited approach to the type and amount of work that can be used and by confining the exception to a detailed array of beneficiaries. Some uses are allowed upon rightsholders compensation. It is worth noting that the joint mention of teaching and research and the additional specifications introduced by the Spanish legislator make the national rules mostly useful for teaching purposes, leaving research activities mostly uncovered. The transposition of Articles 3-4 CDMSD closely follows the EU model but includes additional aspects covering translation, adaptation, arrangement, and other transformations of computer programmes. The implementation of Article 4 CDSMD imposes additional conditions for conserving the results obtained.

Spain's quotation exception in Article 32.1 TRLPI follows the EU model but narrows down the type of works that can be quoted and, in some cases, adopts a less flexible approach. In the field of private study, compared to the corresponding EU provision, the Spanish exception offers a greater level of flexibility in the array of beneficiaries but adopts a stricter approach as to the conditions of applicability. As to cultural heritage preservation, the Spanish legislator followed the EU model but also included additional provisions to the purpose. While no licensing scheme seems to be used for research-related purposes, Article 72 of Royal Decree n. 24/2021 has implemented Article 14 CDSMD, with potentially positive effects on the public domain of works of art.

### 1.2.27. SWEDEN

In Sweden, the regulation of copyright and related rights is contained in the *Upphovsrättslagen* (URL) (Copyright Act)[1682].

#### 1.2.27.1. Access to and reuse of computer programmes

1682 Swedish Copyright Act (Upphovsrättslagen, URL).

Articles 26g(5) and (3) URL, which have been in force since 1994 and amended in 1997, implement Article 5(1) Software, adding that copies cannot be used for other purposes, nor when the right to use the programme has expired.

Articles 26g(2) and (6) URL implement the mandatory exception contained in Article 5(2) Software, following the standard provided therein. Similarly, Articles 26g(4) and (3) URL implement Article 5(3) Software verbatim, and the same can be said for Article 26h URL and its transposition of Article 6 Software.

#### 1.2.27.2. Access to and reuse of databases

Article 6(1) Database is implemented verbatim by Article 26g(5) URL of the URL, and the same can be said by Article 8(1) Database by Article 49 URL. Article 49(3) URL includes the exception to database copyright and sui generis right in line for teaching and research purposes, in line with Articles 6(2)(b) and 9(b) Database. However, the provision is subject to the same limitations of other teaching and research exceptions, as illustrated below (paragraph 3.1).

#### 1.2.27.3. Research-specific E&Ls

**Illustration for teaching and scientific research**

Article 14 URL (1993) permits teachers and students to record their own performances of works exclusively for educational purposes.

Additionally, Article 18 URL (1993, amended in 2005) allows the reproduction of smaller portions of literary or musical collections of works (works from a large number of authors) for educational purposes, provided that 5 years have elapsed since publication and the reproduction is non-commercial. Works of art may be reproduced in conjunction with the text if 5 years have passed since their publication. However, works specifically intended for educational use are excluded from this exception, and authors are entitled to remuneration for this use.

Compared to the corresponding Article 5(3)(a) ISD, Article 18 URL not only limits the amount and types of work that can be used but also imposes more restrictive operational conditions, such as compensation and cut-off dates.

This use is also addressed by rules related to ECL arrangements. In this context, Article 42c of the URL allows the making of copies of published works for teaching purposes if an ECL is available and as long as reproductions are made during activities covered by the license itself.

**Text and data mining**

Articles 15a and 15b URL transposed Articles 3 and 4 CDSMD verbatim.

#### 1.2.27.4. General E&Ls complementary to research-specific E&Ls

**Temporary reproduction**

Article 11a URL, which has been in force since 2005, transposes Article 5(1) ISD by adopting the same conditions as provided therein. The scope of this provision is expanded to include performances by Article 45(3) URL, audio and audiovisual recordings by Article 46(3) URL, broadcasts by Article 48(3) URL, sui generis database rights by Article 49(3) URL, and photographs by Article 49a(4) URL.

**Quotation**

Article 22 URL introduced the quotation exception in 1960 and was later amended in 1994 – still before the ISD exception. It closely resembles its text, but it imposes limitations on the amount of work that can be used and does not require acknowledgement of the source.

The scope of Article 22 URL extends to performances under Article 45(3) URL, to audio and audiovisual recordings under Article 46(3) URL, to broadcasts under Article 48(3) URL, to sui generis database rights under Article 49(3) URL, and to photographs under Article 49a(4) URL.

**Private study**

Although Article 5(3)(n) ISD has not been explicitly implemented, this use is covered by the provision relating to a private copy. The scope of this provision is extended to performances under Article 45(3) URL, to audio and audiovisual recordings under Article 46(3) URL, to broadcasts under Article 48(3) URL, to sui generis database rights under Article 49(3) URL, and to photographs under Article 49a(4) URL.

**Preservation of cultural heritage**

Article 16 URL, as last amended in 2017, includes specific provisions for preservation purposes benefiting CHIs. Under this provision, state and municipal archive institutions, public scientific and specialised libraries, and public libraries are allowed to make copies of works (excluding computer programmes) for preservation, integration, or research purposes. The beneficiaries can also make copies of articles or excerpts of articles (excluding computer programmes) to make them available or loan them to individuals, but this is only permitted when lending or making the original works available would jeopardise their preservation. In 2017, a second paragraph was added to extend these uses to other archives and libraries open to the public when reproductions are made for preservation purposes. The scope of this provision is extended to performances by Article 45(3) URL, to audio and audiovisual recordings by Article 46(3) URL, to broadcasts by Article 48(3) URL, to sui generis database rights by Article 49(3) URL, and to photographs by Article 49a(4) URL.

After its 2022 reform, Swedish legislation has introduced in Article 16 URL a provision relating to the protection and distribution of specimens within cultural heritage institutions by allowing libraries and museums, archives and institutions relating to film and sound to produce copies of works for preservation purposes. In this way, the URL has expanded the range of beneficiaries, prevented contractual overridability and aligned itself with Article 6 CDSMD.

#### 1.2.27.5. Licensing schemes

In Sweden, licensing schemes are regulated under Article 42a URL, which inspired Article 12 CDSMD.

Under this provision, a contractual license applies to the use of works in a specific manner when an agreement is made with an organisation representing a group of authors of works used in Sweden within a particular field. This license allows the user to utilise works covered by the agreement, even if the authors of those works are not directly represented by the organisation. The agreement establishes the conditions for the right to use the works, and the user must comply with these terms. In terms of compensation, the author must be treated equally to authors represented by the organisation as long as the compensation is essentially funded through the agreement. Authors always retain the right to opt-out claim compensation related to the exploitation of their work. They can request this compensation within 3 years from the year in which the work was exploited. Claims for compensation can only be made against the organisation, and only the contracting organisations have the right to assert claims against the person who uses a work according to the terms of Article 42f. The requirements for compensation must be submitted simultaneously by the contracting organisations. These ECLs have been broadly used for research-related purposes.

#### 1.2.27.6. Public domain

Article 9 of the URL, which has been effective since 1960 and last updated in 2000, specifically excludes decisions, reports, and statements made by Swedish public authorities, along with their translations, from copyright protection. However, the law explicitly states that when such documents contain maps, works of visual art, musical works, or poetry, the scope of copyright protection will be applicable once again. Furthermore, from a cultural heritage perspective, the implementation of Article 14 CDSMD, often referred to as the 'safeguarding of the public domain,' has resulted in significant achievements.

#### Conclusions

Swedish copyright law offers teaching and research exceptions in all fields covered by EU provisions. However, it introduces specific limitations to their applicability, which makes its model more restrictive, to a certain extent, than the EU counterpart. The law also makes use of licensing schemes under Section 42a URL, which is in line with Article 12 CDSMD. It is also worth noting that Sweden implemented Article 14 CDMSD, thus limiting the related right to photographic images of works in the public domain and thus tackling an obstacle that, before the CDSMD, Swedish law posed to the reproduction, digitisation and dissemination of cultural heritage.

## 1.3. Comparative Analysis

The following comparative analysis builds on the national reports on the implementation of EU copyright flexibilities. It reveals that although the EU legislator has struggled to provide users with E&Ls that, pursuant to public policy goals, can prevent over-exclusivity and promote innovation, the existing net of national sources does not raise optimistic expectations.

Each Member State features provisions that, by implementing E&Ls variously enshrined in EU copyright legislatures, significantly differ in terms of subjective and objective scope, also adding further specificities and conditions of applicability. Moreover, the formulation varies consistently from one country to another, thus discouraging, inter alia, the sharing of data and protected works among research teams operating in different Member States.

In light of the high level of fragmentation and diversification among copyright flexibilities in the EU, it seems even more crucial to portray the implementation status per each provision, which can play some role in research, shedding light on those EU countries where the degree of flexibility goes beyond the minimum harmonisation standard imposed by EU Directives, and from which perspective (subjective scope, objective scope, other conditions etc.). Conversely, the least virtuous national frameworks will be explored with serious concern, highlighting drawbacks for the research-driven reuse of copyrighted works.

With regard to each EU copyright law's flexibility, selected by specifically looking at its usefulness for research, it will therefore be possible to outline the array of Member States that encompass a more favourable legal framework from the perspective of researchers eager to reuse copyrighted works. In fact, each provision will be analysed to understand which Member State has implemented it more or less inflexibly in relation to the EU benchmark. Thereafter, an analysis of the benefits and drawbacks of the different implementation techniques embraced at the national level for Open Science and research will be provided.

EU copyright flexibilities will be explored by reference to the groups of provisions already individuated in the previous per-EU country analysis and translated into national charts: (2) access to and reuse of computer programmes, including Articles 5 and 6 Software; (3) access to and reuse of databases, including Articles 6, 8 and 9 Database; (4) access to and reuse of other subject-matters, subdivided into the analysis of research-specific and complementary E&Ls, the former group concerning Articles 5(3)(c) InfoSoc and Articles 3-4 CDSM, the latter Articles 5(3)(d) InfoSoc, 5(3)(n) InfoSoc, 5(2)(c) InfoSoc and 6 CDSM; (5) licensing schemes and (6) public domain rules when relevant for research and Open Science.

### 1.3.1. Access to and reuse of computer programmes

#### Article 5 Software

Under Article 5(1) Software, lawful users of computer programmes are allowed to use them according to their intended purposes, also to correct errors and disable a function if necessary for that purpose. The implementation of this provision is a circumstance that led to the provision being implemented almost verbatim in all EU countries. A slightly different formulation can only be found in Austria. Under Section 40d(2) UrhG-A, there is no mention of error corrections, while the provision allows “adaptation to users’ needs”. This can pave the way for a broad interpretation of the scope of EU rule in case law. In fact, all national courts across the EU face the same quandaries with defining the concepts of “error” and “intended use” of computer programmes, opening the door to fragmented outcomes in national copyright case law. In this respect, it is also worth noting that, under Section 25j TL (Finland), lawful users of computer programmes are also explicitly allowed to “alter” the programme if necessary to ensure its “intended use”, thus increasing the level of uncertainty with regard to its applicability.

Although the implementation of the exception is mandatory, Member States are not required to declare its contractual non-overridability. As a consequence, divergences among national laws can be found in this respect. In many countries, the exception cannot be overridden by contract: the Netherlands (Article 45j AW), Lithuania (Article 30 LiCA), Croatia, (Article 208(1) NN). Rather, Section 40d(4) UrhG (Austria) allows the definition of what should be held as “intended use” within the scope of contractual agreements, with the effect of encroaching the scope of the flexibility to a significant extent. Along the same lines, the Ljubljana High Court went beyond the wording of the national rule and achieved the same result in case law by declaring the non-overridability of the exception[1683].

1683 See: VSL Sodba V Cpg 697/2017 of 12 October 2017.

National implementations of Article 5(2) Software, which allows the making of backup copies of computer programmes, do not show high differences. In Germany, Section 69d UrhG lowers the necessity test as to allow backup copies for "future use" also, thus potentially leading to an extensive reading of the exception with regard to the number of copies permitted in light of the rationale of the provision. In Lithuania, Article 30 LiCA only allows the making of backup copies if the computer programme has gone lost, has been destroyed or become unusable. There are also EU countries which add further conditions of applicability. Within Polish law, Article 75(1) UPA establishes that, if not agreed otherwise, backup copies cannot be used simultaneously. In Slovenia, there is an upper cap for the number of copies that can be made. According to Article 114 ZASP, no more than two copies can be made. In Sweden, backup copies cannot be used until the period of lawful use of the original copy has expired, in line with the text of Article 26g URL. In addition, the Swedish Supreme Court also held that passive storage of a backup copy does not, in itself, amount to an infringement[1684]. In the reasoning of the court, copyright law does not prohibit the subsistence of an additional backup copy but only prevents the user from using it.

**b. Article 6 Software**

Article 6 Software embeds the "interoperability exception". This EU rule allows lawful users to reproduce and translate the code thereof as to achieve interoperability with another independently created computer programme to extent necessary as to achieve such purpose. Article 6 has been implemented slavishly in all Member States except for Bulgaria, where Article 71(3) BCA only includes translations and not reproductions of computer programmes and does not prescribe that the two computer programmes that should become interoperable must have been "independently created". Furthermore, the provision not only imposes that information contained in the source code is not readily accessible but also that it should not be provided at all, thus further lowering the level of flexibility compared to the EU benchmark.

**State of harmonisation and its impact on Open Science**

Article 5(3) Software is an E&L that can be of higher relevance for research and Open Science purposes. The provision allows lawful users to study the inner functioning of, observe and testing computer programmes with the aim of understanding the underlying ideas and principles. Thanks to this flexibility, software developers can study existing works and, upon obtaining a license over a software, are free to test its functioning and conduct individual research on it. Research activities can also be run in teams and last for the lifespan of an EU or nation-funded research project once the research organisation or the university supervising the team of researchers has lawfully obtained the license for the use of the software. National copyright flexibilities do not show any relevant difference in their transposition of the norm. In this sense, it can be stated that national legislators have lost the opportunity to increase the level of flexibility, giving little chance to study and conducting individual research over existing software works.

1684 Swedish Supreme Court, in case T 1738-17, judgment delivered 25 September 2018 (Storage of computer programme after licence expiry); alt. citation NJA 2018 s. 725.

An appreciable degree of harmonisation can be observed in the EU with regard to the implementation of Article 5 Software. All Member States transposing this exception did it almost in line with the EU model. Still, a limited number of countries introduced specificities. Some national legislators declared the exception mandatory, thus increasing its effectiveness compared to the EU model. This is the case of the Netherlands (Article 45j AW), Lithuania (Article 30 LiCA), Croatia, (Article 208(1) NN) and Slovenia (Article 114 ZASP). Two countries – Austria and Finland – adopted a broader formulation, potentially leading to extend the scope of the exception as to cover cases which may not be reconducted to the function of the EU rule. On the opposite side, four Member States provided additional conditions of applicability - Lithuania (Article 30 LiCA), Poland (Article 75(1) UPA), Sweden (Article 26g URL) and Slovenia (Article 114 ZASP).

Article 6 Software can play a considerable role in fuelling secondary innovation by incentivising EU countries to introduce interoperable interfaces and thus advance their products. It is notable, in this regard, that this exception has been implemented verbatim across the EU, except for slight divergences in the articulation of the Bulgarian provision.

### 1.3.2. Access to and reuse of databases

#### a. Articles 6 Database

Article 6(1) Database includes an exception to the "restricted acts" granted to the database author by Article 5 Database. Allowing lawful users to perform acts of temporary reproduction, translation, adaptation, arrangement, alteration, display, distribution, performance and communication to the public for the purpose and to the extent the "normal use" of the database is ensured. While this exception is mandatory, Article 6(2) Database leaves Member States free to optionally introduce an E&L specifically made, *inter alia,* for illustration for teaching and research purposes, therefore addressing an aspect that is key to fostering secondary creativity and research through reuse of database contents.

With regard to Article 6(1) Database, the two fundamental requirements to satisfy the EU model rule are that the user should be entitled to lawful access and normal use of the database, together with the need to respect a necessity test. Normally, EU countries implemented this rule in light of these two criteria without significantly departing from the EU-wide benchmark.

Apart from minimal changes to the formulation of "normal use", national copyright laws tend to replicate the language of the EU provision, with the effect of introducing vague provisions, which may likely cause uncertainty in both contractual practices and case law. In fact, it is unclear what level of freedom copyright holders have with contractually regulating the extent of database use and what, instead, is limited by the necessity of ensuring the effectiveness of Article 6(1) Database.

Following the EU path, in Slovakia, Section 134(1) ZKUASP includes an ambiguous formula. Accordingly, lawful users are entitled to make "normal use" of the database as long as the copyright over it is not infringed. In the same fashion, in Czechia, Section 36 CzCA establishes that copyright is not infringed when a lawful user of a database uses it in accordance with accessing it and making "normal use" of it. The same approach is adopted under Danish copyright law, as inferable from the text of Section 36(2) DCA; in Malta under Article 9(1)(w) MCA; in Luxembourg under Article 10bis LuDA; under Dutch copyright law, pursuant to the wording of Article 24a AW; in Slovenia, according to the text of Section 53a ZASP. Along the same lines, in Hungary, Section 62(1) SZJT uses the vague term "proper use", while the unofficial translation of Article 17/1 UPA (Poland) refers to "normal exploitation". An equally undetermined formula is present under Swedish copyright law, embedded in the text of 26g(5) URL.

Noteworthily, the Maltese provision is more explicit than others with regard to the meaning of "normal use", so as it might be possible to translate the term into non-commercial use that falls within the scope of the license. In this sense, the apparently broader room left by the provision is frustrated by the potential restrictions imposed by licensing terms. Similarly, the unofficial English translation of the Portuguese exception (Article 9(1) CDA) affirms that the prerogatives of lawful users are limited to the extent of their rights, which are likely defined by the license they entered into with rightsholders.

In some countries, however, the exception is formulated broadly. Section 31 LaCA (Latvia) features an open language under which users are entitled to perform "any act" that is necessary to ensure access and use of the database. The same is for Article 210(1) NN (Croatia), Estonia (§ 25/1 AutÕS), Finland (Section 25j TL), Spain (Article 34(1) TRLPI) and Greece (Article 3(3) GCA). Contrary to most national provisions, the Spanish exception explicitly holds that lawful users are entitled to perform all acts necessary to ensure normal use of the database. Considering that the exception cannot be overridden by contract, it follows that its level of flexibility undoubtedly goes well beyond the EU benchmark.

Rather, the French counterpart of Article 6(1) Database, enshrined in L. 122-5-5° CPI, is articulated in a particular manner so as to allow access according to "the needs and within the limits of the use provided for by contract" – a wording that encroach the prerogatives of lawful users of databases to a large extent. By the same token, under Austrian copyright law, § 40h(3) UrhG makes explicit that the scope of "intended use" can be regulated by contract, while the German Section 55a UrhG permits the reproduction and adaptation of database works within the limits established by contract. A reference to the pre-existence of a license is also present in the wording of Section 83 CRRA (Ireland).

Notably, under the copyright laws of the majority of EU countries, i.e., Austria (§ 40h(3) UrhG-A), Belgium (Article XI.188 CDE), Bulgaria (Article 93e(1) BCA), Croatia (Article 210(3) NN), Denmark (Section 36(3) DCA), Estonia (§ 25/1 AutÕS), Finland (Section 25j TL), Germany (Section 55a UrhG), Latvia (Section 31(2) LaCA), Lithuania (Article 32 LiCA), Malta (Article 9(1) MCA), Netherlands (Article 24a AW), Portugal (Article 9(2) PCPL), Romania (Article 142(4)(a) RDA), Slovenia (Article 53a(2) ZASP), Cyprus (7C(2)(b)(i) CL), Spain (Article 34 TRLPI), Hungary (Section 62(1) SZJT), Netherlands (Article 24a AW), and Sweden (Section 26g URL), the provision is contractually non-overridable.

It is relevant that, under Belgian law, Article XI.188 CDE explicitly features a broad array of permitted uses, including the translation, making available, renting and lending of a database, to ensure its normal use. A similar position has been endorsed by the Lithuanian legislator. Article 32(1) LiCA explicitly allows the transformation, public display, distribution, public performance, communication to the public and broadcasting of databases. Likewise, in Cyprus, Article 7C(2)(b)(i) CL explicitly covers a broad array of acts, spanning from the making available, making copies of, communication to the public, public display, presentation to the distribution of the copies. Along the same lines, Article 9(1) CDA allows the lawful user to perform all the acts enshrined in Article 5 Database, provided that they are conferred to them by license. By the same token, Article 134(2) ZKUASP (Slovakia) allows lawful users of protected databases to make copies, public transmission, performance, exhibition and processing, despite the fact that such activities must be run in line with their "normal use". Rather, in Germany, Section 55a UrGh only refers to the acts of "adaptation" and "reproduction".

It is noticeable that only a few EU countries implemented Article 6(2)(b) Database, which allows uses for non-commercial purposes to the extent justified by the purpose of illustration for teaching and research. Whilst this exception could play a role in fueling research activities, its level of implementation across the EU is low and piecemeal. A virtuous example is Section 134(1) ZKUASP in Slovenian law. Rather, partial implementations are to be found in the copyright laws of Austria and Italy. In the former, Section 40h(2) UrhG-A does not mention use for illustration. In the latter, Article 64-sexies(1)(a) l.aut. provides that the acts of extraction or reutilisation of substantial parts of database contents are still subject to authorisation.

Implicitly, the exception has also been transplanted into Bulgarian copyright law. In fact, Article 93e(2) BCA behaves as an all-encompassing provision that also implies a carve-out for teaching and research. This rule permits the extraction and reutilisation of database contents for whatever purpose, provided that compliance with the three-step test is ensured and the economic interests of copyright holders are not endangered.

**State of harmonisation and its impact on Open Science**

Article 6(1) Database has been implemented quite verbatim across the EU. There are very few differences as to the array of permitted uses, usually lying in the more open-ended language adopted by some national legislators. It is common for national rules to be articulated in a highly diversified manner, although the functions and implications of each provision are unlikely to differ significantly from one another.

Rather to the opposite, it represents a matter of concern for Open Science purposes that only a few Member States have implemented Article 6(2)(b) Database, which allows reuse for teaching and research purposes.

**b. Article 8 Database**

Also, due to its mandatory nature, EU countries mostly introduced the Article 8 Database by replicating the EU text verbatim. According to this rule, lawful users of databases are entitled to use insubstantial parts thereof, regardless of the aim, yet in a way that is compliant with the three-step test and without infringing copyright/sui generis rights over the database.

This exception can serve the interests of researchers and secondary innovators to a limited extent due to the significant limitation in the amount of work which can be reused without prior authorisation.

Nearly all EU countries implemented the Article 8 Database. The few exceptions are described below.

In some EU countries, the limitation in the amount of work that can be reused is phrased in a slightly different manner. This is the case of Bulgaria, Latvia and Cyprus. In fact, according to Article 93a BCA, Section 58 LaCA and Article 7C(ii) CL, only “non-essential parts” can be reused. The lack of a quantitative cap contributes to increasing the level of flexibility, yet unsubstantially. By way of contrast, in Croatia, Article 176(1) NN merely allows to use of “minor parts”, paving the way to a restrictive and quantity-oriented interpretation of the provision. The way Section 84/B (1) GCA is phrased under Greek law raises more hopes for an extensive reading of the provision. According to this rule, only a “certain part” of the database can be reused, with the risk of blurring the substance of the criterion and increasing the level of uncertainty. The same approach has been endorsed in Lithuania with the wording of Article 62(2) LiCA. Rather, in Italy, the language of Article 102-ter l.aut. only refers to the possibility of reusing a “part”, thus potentially opening the door to an extensive reading of the provision.

It is also noticeable that the Cypriot provision specifically prohibits the systematic and repeated extraction/reutilisation of insubstantial parts of databases when the acts carried out by lawful users are incapable of complying with the three-step test. Similarly, in Germany, Section 87b UrhG states that the reproduction, distribution and communication to the public of database contents should be deemed equivalent to – and therefore equally infringing as – the repeated and systematic extraction/reutilisation of insubstantial parts thereof. Likewise, under Czechian copyright law, Section 91 CzCA opposes a "reasonable" and "normal" use of a database to the repeated and systematic extraction/reutilisation of database contents, which, by definition, goes against the rationale of the three-step test.

It is relevant that in France, the text of Article L.342-3 CPI establishes that the conditions through which the rule should be applied are defined by the decree of the Council of State, with the risk of adding further requirements and, therefore, reducing the scope of the exception below the EU threshold. It must be noted that the requirement of the three-step test is missing under Irish copyright law, as inferable from the text of Section 327 CRRA.

Until now, this EU provision has not been explicitly implemented in Denmark and Finland.

**State of harmonisation and its impact on Open Science**

As observed before, the Article 8 Database has been implemented almost verbatim in all EU countries except for Denmark and Ireland. However, some limitations have been introduced as to the amount of work that can be used (Bulgaria, Latvia, Italy and Cyprus), which may impact, for instance, on the degree of flexibility offered for training Ai models based on pre-existing protected datasets. Additional specifications, with the effect of slightly curtailing the scope of the exception compared to the EU benchmark, feature the Czech and French provisions, while the formulation of the German and Greek exceptions may leave room for extensive interpretations.

**c. Article 9 Database**

Under Article 9(a) Database, reutilisations/extractions of substantial parts of database contents are allowed for private purposes. All Member States have implemented this exception verbatim.

Rather, according to the text of the much more relevant Article 9(b) Database, the EU legislator gives the Member States the possibility of introducing an exception to sui generis database rights to serve the public interest in various fields also, including, inter alia, illustration for teaching and research, provided that there is some indication of the source of the work and the use does not exceed what necessary to pursue the aim, necessarily pursued on a non-profit basis. Going well beyond the prerogative entitled to the lawful users of already licensed databases under Articles 6 and 9 Database, this purpose-specific exception can be highly useful to incentivise research at a higher level. In fact, the EU legislator creates an exception to the exclusionary prerogatives of sui generis rightsholders. Here, by way of contrast with the wording adopted in Articles 6 and 8 Database, the balance has already been struck in favour of lawful users of database contents, who are therefore better positioned against rightsholders and infringement threats and free to conduct their research activities without substantial interferences.

Due to its optional nature, not all EU countries introduced this fruitful research- and teaching-specific exception. In this context, it is worth mentioning Austria (§ 76d (3)(2) UrGh-A), Denmark (Section 71 DCA), France (Article L342-3 CPI), Czech Republic (Section 92 CzCA), Bulgaria (Article 93s BCA), Cyprus (Article 7(3)(iii)(b) CL), Estonia (§ 75/6 AutÕS), Greece (Article 45A(b) GCA), Hungary (Section 84/C (2) SZJT), Germany (Section 87c(1)(4) UrGh-G), Latvia (Section 59 ($2^1$) LaCA), Lithuania (Article 63 LiCA), Luxembourg (Article 68 LuDA), Malta (Article 26(2)(b) MCA), Poland (Article 8(1) UPA), Portugal (Article 15 PCPL), Romania (Article 142(4)(b) RDA), Slovakia (Section 138(1) ZKUASP), Slovenia (Article 141g(1) ZASP), Spain (Article 135(1) TRLPI) and Sweden (Section 49(3) URL).

In Luxembourg, the applicability of the exception is subject to an additional condition, according to which the same can be applied as long as the legitimate interests of database producers are not contravened.

In Cyprus, Latvia, Romania, Portugal, Hungary and Greece, the requirement of "illustration" is missing, with the potential effect of broadening the scope of the exception as to comprise other types of teaching and research-oriented activities. Interestingly, in the case of Latvia, the requisite of "illustration" is absent in the specific case of reuse for research purposes.

Interestingly, Germany provides more than one exception that delimits the enforceability of sui generis rights for the sake of promoting both educational and research activity. Section 87c(1) UrGh-G serves to both promote scientific research specifically and illustration for teaching and research within educational establishments, while Section 87c(4) UrGh-G explicitly allows the distribution, also in digital form, and the communication to the public of protected databases. Use in digital format is also allowed in Latvia under Section 59 ($2^1$) LaCA.

With the effect of falling slightly below the EU framework, the French correspondent of Article 9(b) Database, the national legislator mentions that illustration through extraction/extraction of substantial parts of sui generis databases can only take place within specific educational and related activities to which such illustration is purposive, and within the restricted circle of researchers involved in the project/activity at stake. Compared with the EU model, the limitation in purpose and the extent of use are narrowed down, preventing, e.g., the sharing of data and research outcomes among groups of researchers on a cross-border level, and even if within the borders of the national territory. Similarly, Section 330 CRRA (Ireland) imposes several conditions for the applicability of the exception to sui generis rights for illustration for teaching and research purposes. First, the teaching or research activity should take place within the realm of an educational establishment and during the undertaking of a research and teaching activity to which the reuse of substantial parts of a database is conducive. Second, the extraction/reutilisation should take place by an act performed by the teaching/research staff or on behalf of these subjects. This two-fold additional requirement tightens the limitation in purpose to a further extent in comparison with the EU threshold and unveils the highly teaching-oriented nature of the Irish provision. However, it is noticeable that Section 330 CRRA is articulated as a fair dealing-like clause, which offers a higher degree of flexibility by using open-ended language. The limitation in purpose features also the Hungarian Section 84/C (2) SZJT. Cutting the research purpose away from the text of the EU provision, in Slovenia, Article 141g(1) ZASP permits acts of reutilisation/extraction of substantial parts of database contents for direct teaching only, while Article 49 ZAPS explicitly allows the communication, but not the making available, of substantial parts of sui generis protected databases to the public, provided that the educational institution supervising the activity is responsible for that use of database contents as well.

The EU exception lacks an explicit counterpart in Finland, Croatia, Denmark and Italy. In these Member States, it is difficult to conduct research based on reutilisation/extraction of substantial parts of sui generis protected databases.

**State of harmonisation and its impact on Open Science**

EU Member States show a remarkable degree of harmonisation with respect to Article 9(2)(b) Database if compared to other Database exceptions. By way of contrast with Article 6(2)(b) Database, in fact, a substantial number of Member States (20) have implemented this E&L to the sui generis right for teaching and research purposes, a circumstance that should deemed positive for Open Science purposes. It should be noted, however, that transpositions feature a great variety of approaches. The area where national laws tend to diverge the most pertains to the conditions of applicability. In six Member States, the requirement of "illustration" is missing, with a consequent widening of the scope of the provision. To the contrary, in Ireland and France, the same purpose limitation is more articulated, while in Slovenia and Hungary, the array of permitted uses is reduced compared to the EU threshold.

### 1.3.3. Access to and reuse of other subject-matters

#### Research-specific E&Ls

The Software, Database, InfoSoc and CDSMD Directives both contain research-specific E&Ls that might be crucial for the purpose of fostering research and teaching activities. Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) Database allows the reuse of works of authorship, and databases can be reused for the sole purpose of illustration for scientific research and teaching, to the extent justified by the aim pursued, on a non-profit basis and by mentioning, unless impossible, the source of the work and the name of the author. Article 5(3) Software states that any person having a right to use a copy of a computer programme shall be entitled, without the authorisation of the rightsholder, to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the programme which he is entitled to do. Article 3 permits TDM activities on lawfully accessed software, databases and protected works. This last exception cannot be overridden by contract but is limited in purpose (scientific research) and in the array of beneficiaries, which only includes cultural heritage institutions and research organisations.

Due to their relevance in bolstering Open Science goals, assessing the degree of harmonisation of such exceptions across the EU and the level of flexibility offered by each Member State vis-à-vis the EU model is of key relevance to get a better understanding of the interplay between copyright law and Open Science policies, both at the EU and at a national level.

##### i. Article 5(3)(a) ISD: illustration for teaching and scientific research

The implementation status of Article 5(3)(a) ISD will be analysed so as to compare the array of beneficiaries (**1**), permitted uses and subject matters (**2**) chosen by the various national legislators in comparison with the EU benchmark, also considering, if present, the additional conditions of applicability that can be found in national laws (**3**). On this basis, it will be possible to assess the degree of flexibility different Member States' copyright laws offer vis-à-vis Open Science goals.

It is important to note, first, that all EU countries implemented Article 5(3)(a) ISD at least through one provision (sometimes more, such as in the case of Austria and Germany) except for Italy. Under Italian law, the functional equivalent of the exception for illustration for teaching and research can be found, indirectly in the exception for quotation, enshrined in Article 70(1) l.aut., coupled with a specific exception embedded in Article 70(2) l.aut. for the inclusion of copyrighted works in anthologies and textbooks.

#### Subjective scope

The EU provision is silent with regard to the array of beneficiaries as long as the limitation in purpose is respected. However, some Member States have introduced specifications, narrowing the subjective scope of the flexibility for research and teaching down and thus reducing the possibility of an extensive interpretation.

While the other Austrian provisions implementing Article 5(3)(a) InfoSoc do not distinguish in the account of the beneficiary, a beneficiary-specific exception can be found in the text of § 56c UrhG-A. This provision allows schools and universities to publicly perform cinematographic works and related musical works for the purpose of illustration for teaching. In Belgium, Article XI.191/1 4° CDE provides that the communication to the public of copyrighted works for the purpose of ensuring illustration for teaching and research can only be undertaken by officially recognised entities. In Croatian law, Article 198(5) NN specifies that the exception applies to educational activities carried out by institutions identified for that purpose by public authorities.

In France, Article L122-5(3)e CPI allows the reproduction, distribution and communication to the public of protected works only within a restricted audience made of teachers, students and researchers involved in research or teaching activities, thus implying that the act of illustration takes place is undertaken by one or more of these subjects.

Similarly, in German copyright law, Section 60a UrhG-G[1685] features an exception tailormade for teaching, only permitting reproduction, distribution and communication within the limited public of teachers and students, also involving third persons to the extent the same are involved in the educational activity, training course, examination or lecture, that must necessarily take place within the premises of an educational establishment. Noteworthily, in Germany, the concept of "educational establishment" for the purpose of Section 60a UrhG-G is identified in a broad manner, as to include kindergartens, schools, universities, and vocational or training institutions.

Likewise, Section 2 CRRA specifies that the entities that can be identified as "educational establishments" and benefit from the related flexibility under Irish law constitute a restricted array made of schools (of whatever kind), universities according to the specific law, providers of training and qualifications according to the specific law, as well as other educational institutions settled for that purpose by the Ministry of Education. Following the same subject-specific trend, Section 57(1)(b) CRRA explicitly allows educational establishments, defined as above, to reproduce copyrighted works and publicly display them for educational purposes. In the same fashion, in Poland, the teaching-oriented provision of Article 27(1)(2) UPA covers a closed list of beneficiaries specified by national law and permits the making available to the public if such display takes place on a time-shifting basis and within a restricted audience made of students and teachers specifically involved in the educational activity. The subject-specific requirement of the Polish provision was also questioned in court. A dispute regarding the use of a protected photo within a public library led the Court of Appeal of Łódź to affirm, by excluding libraries from it, that the subjective scope of Article 27 UPA should be interpreted restrictively[1686].

In Latvia, limitations can be inferred from the very same text of Section 21 LaCA, which explicitly addresses research organisations and educational establishments. Rather, in Lithuania, Article 22 LiCA mentions the use by educational institutions for lectures and teaching programmes as a mere example, thus tightening the limitation in purpose but excluding limitations in relation to the array of beneficiaries.

In Slovakia, Article 89(5) ZKUASP asserts that the making of copies of, processing and public distribution for a demonstration in class and/or during a teaching activity of a computer programme can only take place under the supervision of an educational establishment, provided that such use occurs via a secured electronic network. The aim is to restrict the audience to those subjects effectively involved in the activity. In the case of Spain, the text of Article 32(3) TRLPI is specifically refers to "the teaching staff of educational institutions integrated into the Spanish educational system and the staff of Universities and Public Research Organisations". Moreover, under Article 32(4), TRLPI permitted acts for the sake of illustration for teaching and research must necessarily take place within the premises of research centres and educational establishments, and distribution of the copies should occur among students, teachers and researchers belonging to the same centre where the educational or research activity has been embarked on.

1685 For related case law, see: BGH, 10.01.2019 – I ZR 267/15 – Cordoba II.

1686 Wyrok Sądu Apelacyjnego (Appellate Court in Łódź) of 4th February 2016, I ACa 1107/15; Legalis 2055849.

**Objective scope**

The EU rule does not distinguish on the basis of the subject matter, also giving full freedom to Member States with shielding one or more acts from infringement. As a result, national transpositions of Article 5(3)(a) ISD feature a high degree of divergence in terms of subject matter and array of permitted uses sheltered under the umbrella of the exception.

A plethora of EU countries cherrypicked the types of works and permitted uses, thus detaching from the ISD-model rule in the negative. The case of Austrian law is emblematic. Here, there are several E&Ls reflecting the rationale of Article 5(3)(a) InfoSoc, and some of them do not even find full correspondence in the EU text. Yet, it is noteworthy that all these provisions are characterised by a right and subject-matter-specific approach.

§41f(1) UrhG-A allows the reproduction, distribution, communication to the public, broadcast and use lawfully published works or whatever kind for performances. At the same time, the provision devises restrictions for some categories of works, as individual protected works can only be included in broader scientific works for illustration and content explanation; published works of fine arts can be presented to the public within the context of a lecture for explanation purposes, also making the copies justified by the aim; individual passages of autonomous lawfully published works can be quoted within broader and independent literary works.

Austrian copyright law encompasses other E&Ls covering specific uses and addressing specific categories of works. §54(1) UrhG-A allows the reproduction, making available and distribution of individual works of fine arts as to publish them in literary works for school use and teaching materials for the purpose of explaining contents for art education of young people. §45(1) UrhG-A allows the inclusion of specific works in collective works for church-related and teaching use, also permitting, after publication, the broadcasting of protected works within the context of school radio programmes and within the premises of the related educational establishment. §51(1) UrhG-A allows the reproduction, distribution and making available of musical works for singing classes, for explaining the contents also in the form of notation, as well as for any school use in general. §56c(1) UrhG-A covers public performances of cinematographic works and Annexed musical works within and by act of educational and school establishments. §59c(1)(2) UrhG-A allows the inclusion of specific types of works – literary, musical and works of fine art – within literary works, also permitting their reproduction, distribution and making available to the public for examination purposes within schools, universities and other teaching establishments.

The German legislator adopted a similar approach. Through a wealth of provisions, the UrhG-G different regimes for different subject matters also limit the amount of work that can be used in fixed percentages as well as set diversified limitations in purpose in each provision. Section 60a UrhG-G allows the reproduction, make available, and distribution of up to 15% of published works in specific contexts as subject to a strict limitation in purpose. However, the German legislator also envisages a carve-out for specific types of works, such as illustrations and individual articles taken from professional and academic journals, and small-scale and out-of-commerce works, for which full use is allowed. A similar rule exists for the purpose of promoting scientific research, subject to the same limitations in the amount of work that can be used. However, additional limitations with regard to the array of permitted uses can be inferred from Section 60a(3) UrhG-G, which excludes reproductions via video or audio recording, distribution, making available and communication to the public in the case of works specifically intended for teaching use, and graphic reproductions of musical works, if not strictly necessary for teaching purposes. Section 60b(1) UrhG-G allows producers of media collections to reproduce, distribute and make available up to 10% of published works within their collections for teaching, while Section 60c(1) UrhG-G permits the reproduction, distribution and making available of up to 15% of works for scientific research, although distribution should be limited to researchers involved in the project and to third parties called to assess the results, if present. It is worth mentioning that the amount of work that can be used, also allowing reproduction (Section 60c(3) UrhG-G), increases to up to 75% if its purpose is personal scientific research (Section 60c(2) UrhG-G). However, some subject matters, such as recitations, performances, and related audio and video recordings, are excluded from the scope of the provision.

Albeit very clear, specific and comprehensive, the German provisions target particular categories of works and set different regimes in terms of the array of permitted uses, with the risk of creating fragmentation and uncertainty on whether a specific category of work can be reused, in which context and to which extent. This may also produce the effect of discriminating among different types of works as for the array of permitted uses.

In Belgium, Article XI.191/1, 1° CDE explicitly covers only reproductions and communication to the public of protected works, also carving sheet music out from the scope of the provision. It is also worth noting that other Belgian rules have been enacted to extend the scope of the flexibility in order to cover computer programmes, databases and objects of related rights. Along the same lines, in France, Articles L122-5-3° e) and L342-3-4° CPI permit the reproduction and communication to the public of works of authorship, including database and musical works. In Finland, Section 14 TL provides that only published works can be reproduced and communicated to the public. In addition to that, the Finnish rule allows uses via whatever means, including TV and radio broadcasting, and temporary reproductions through recording within school activities, but it limits the number of copies that can be made to one and requires that the reproduction is temporary. In the case of literary works included in other works for examination purposes, only parts or the entirety can be used if the work is short.

Also, in Luxembourg, Article 10 LuDA specifically endows users of protected works with the two prerogatives of reproducing and communicating such works to the public for teaching and research-related aims without distinguishing on the basis of the subject matter and extending the flexibility so as to comprise objects of related rights under Articles 46 and 55 LuDA. This two-fold approach towards the array of permitted uses can also be found in The Netherlands. Under Article 16 AW, users can perform acts of reproduction and make them available to the public with specific regard to literary, artistic and scientific works. The Dutch provision encompasses another distinction based on the subject matter. In fact, works of applied art, musical and photographic works can be reproduced only insofar as the new copy differs from the original version of the work. Still, on a subject-matter basis, Article 12(5) AW excludes that some types of works – recitations, performances, plays and presentations – can be communicated to the public under specific circumstances.

All but Luxembourg have delimited the amount of work that can be used.

The most restrictive approach comes from Ireland, where Section 57 CRRA provides that no more than 5% of each work can be copied within a calendar year. Another exception, enshrined in Section 53(3) CRRA, specifically addresses phonograms, cable programmes, broadcasts, and original databases, yet it delimits the number of copies that can be made to one. More generally, the Irish E&Ls for teaching and research are targeted for specific subject matters. Section 53(1) CRRA addresses literary, artistic, and musical works, as well as typographical arrangements; Section 53(5) CRRA, which permits the use of works for lectures and examinations, carves some works from its objective scope so as to exclude reprographic versions of musical works. All in all, the Irish E&Ls show low flexibility in all aspects; the amount of work is dramatically limited, the array of permitted uses is inadequate, and it changes from one provision to another. Thus, as in Germany and Austria but showing even far less flexibility, Irish provisions are articulated in order to set diversified limitations in relation to the subject matter, amount of work/number of copies, an array of permitted uses and further conditions, thus creating a fragmented legal scenario which risks discouraging both teaching and research.

Limits in the amount of subject matter that can be reused are also within Article 32(4) TRLPI. Pursuant to the Spanish exception for illustration for scientific research, the reproduction, distribution and communication of works within the premises of a publicly funded and managed research centre, performed by the research staff, cannot go beyond a chapter of a book, an individual academic article or, in any case, it cannot overcome up to 10% of a whole work, regardless of how many acts, and how many copies, have been made and generated thereof. A subject-matter-specific restriction is present under Article 32(5) TRLPI, which carves figurative photographic works, as well as works full of exercises for schoolwork and sheet music, out of the scope of the provision.

Limitations in the amount of work that can be used, thus falling below the EU threshold, can also be found within the formulation of Section 34(2) SZJT[1687]. Accordingly, only parts or small works of specific types of works can be used. Although the list of subject matters embodied in the provision is quite long, it is unclear whether the same should be intended as a closed or open one. In line with that, works of fine and applied art, architecture, music, pictorial art, literature, and design can be used. Notably, in terms of permitted uses, the Hungarian legislator adopts a broad language, therefore slavishly replicating the open wording adopted by the EU legislator. In this respect, it grants beneficiaries a general right of use.

1687 For related case law, see: BDT2015. 3392; EBH2003. 947 Gyulai Törvényszék P. 20.213/2017/22.

Like in Hungary, the Bulgarian legislator chose to adopt a broad language with regard to the array of prerogatives enshrined in the exception, granting a right of use to its undetermined list of beneficiaries but prescribing a limitation in the number and in the amount of work that can be used. In fact, Article 24(1) BCA only allows the use of parts or a small number of published works to the extent that is necessary for the purpose of scientific research. In this respect, the Supreme Court clarified that the amount of work that can be used should be decided on a case-by-case basis, with the effect of furthering uncertainty on the limitations in scope and the consequent applicability of the exception[1688]. It is relevant that, by analogy, the exception also applies to phonograms, broadcasts, and fixations of films, as spelt out within the text of Articles 90, 90v, and 93 BCA. An equally wide reading of the array of permitted uses can be found in Croatian law, as inferable from the wording of Article 198(1) NN. Like in Bulgaria, the provision allows the "use" of fragments or parts of copyrighted works and other subject matters without distinguishing on the basis of the type of work and right. Similarly, in Cyprus, Article 7(2)(r) CL is highly flexible as it does not create disparities in terms of permitted uses – by allowing "any use" – subject matter and amount of work that can be used. In this sense, the Cypriot exception slavishly reflects the EU counterpart. The same approach is present in Czechian law under Section 31 CzCA, although the rule, similar to Italy, is shaped as a quotation-like flexibility tailormade for the illustration of protected works, also deployable for teaching and research purposes. In a way similar to Bulgaria, Cyprus, and Croatia, the Latvian counterpart embodied in Section 21 LaCA broadly confers a right of use to beneficiaries. As in the Italian case, the provision is framed within the quotation exception, with the aim of addressing the need to include works within textbooks. The Latvian legislator has also mercifully extended the scope of the flexibility as to cover the objects of related rights (performances, film fixations, broadcasts and phonograms) in light of the wording of Article 54(3)(2) LaCA.

An extensive interpretation in terms of permitted uses can be found in Lithuania. Here, Article 22 LiCA permits the making available, reproduction (also in digital and translated format) and communication of protected works to the public. Yet, a limitation in the amount of work that can be used has been added on two occasions[1689]. In 2002, the Court of Appeal of Lithuania held that, due to the highly substantial amount of work extracted and reused, the exception could not be applied. Not highly dissimilarly, in 2007, the Supreme Court applied it as to delimit use to two fragments of protected works in limited edition. Like in Lithuania, a broad list of rights features the scope of the Maltese exception, enshrined in Article 9(1)(h) MCA. According to the text of this provision, the reproduction, distribution, translation and communication to the public of any subject matter is permitted, and the rule is extended to objects of related rights (Article 21 MCA) and reproductions of topographies (Article 32(b) MCA). A satisfactory list of uses, yet less broad than the one featuring the Lithuanian and the Maltese exception, can be found within the text of the Polish Copyright Act. Under Article 10 UPA, the use and reproduction of excerpts and minor works is allowed. Notably, the exception is phrased in a markedly research-oriented way. In an important decision, the Court of Appeal of Łódź (2016) stated that the use of the full work falls outside of the scope of the exception.

1688 Court of Cassation, case no. 828/2009 of 7 January 2010.

1689 The Court of Appeal of Lithuania, case n.2A – 250 of 29 July 2002. Supreme Court of Lithuania, case n. 3K-3-28/2007 of 30 January 2007.

As in Lithuania and Malta, also in Portugal, Article 75 CDA is quite permissive, allowing users to perform acts of reproduction, distribution and making available to the public of lawfully published works. Again, open language in relation to permitted uses can be found in the wording of Section 44 ZKUASP. The Slovakian provision allows the reproduction, transmission and public performance of copyrighted works. Another rule, Section 89(5) ZKUASP, extends the scope of the flexibility as to include computer programmes. The Spanish exception is also notable for its ample range of uses covered. According to Article 32(3) TRLPI, small fragments of already published works can be reproduced, distributed, and publicly communicated. In the case of the inclusion of protected works within textbooks, the making available is excluded, except for research purposes and via a secured electronic network.

Instead, there are Member States which reduce the permitted uses to one. This is the case of Estonia, Where §19 AutÕS only allows to reproduce of every kind of lawfully published work. The Estonian provision does not make any difference based on the type of subject matter, thus replicating the wording of the EU correspondent in all aspects. In a similar way and even more inflexibly, in Greek law, Article 21 GCA allows the reproduction of fragments or small works. The scope of the flexibility is extended to cover phonograms, performances and broadcasts thanks to Article 52(b) GCA. It is worth highlighting that the array of subject matters has been further extended through the Ministerial Decision 24505KB/2006, entered into force in 2006, under which specific teaching and research-oriented flexibilities have been specifically introduced for allowing the free reproduction of official language certificates published on the official website of the Minister of Education for private and educational purposes. Instead, where such works to be reproduced or disseminated for research purposes, it is necessary to seek and obtain before authorisation from the Minister. Adopting the same approach of the Greek legislator, under French law, Article L122-5 CPI presents two different layers of inflexibility, the former on the side of the subject matter, as it merely covers fragments of published works, while the latter concerns the array of permitted uses, as the text of the provision uniquely refers to acts of reproduction.

The same restrictive approach can be found in Italy. The exception for quotation also includes research and teaching purposes, thus acting as the indirect implementation of Article 5(3)(a) InfoSoc, Article 70 l.aut., is limited to the quotation and/or reproduction of fragments and parts of works, thus revealing a two-layered lack of flexibility, both in terms of amount of work (as in the case of Bulgaria, Germany, Ireland, Hungary, Cyprus, Croatia), and of permitted uses.

**Other conditions**

Several EU countries added further conditions of applicability to the E&Ls for teaching and research, with the effect of lowering the degree of flexibility of such provisions below the EU benchmark, which only requires that the use is non-commercial and does not exceed what is necessary for its purpose.

In some Member States, remuneration is required. This is the case of Austria ((§42g(4), §45(5), §51(2), §54(2), §56c(2) UrhG-A), where the fair compensation should be administered by CMOs. In Belgium, the same can be found under Article XI.240 CDE. In the same country, a specific remuneration rule for the benefit of authors of scientific articles is present in Article XI.196 § 2/1 CDE. In Belgium, there is also an open access -like provision, embodied in Article XI.196 § 2/1 CDE, under which, if at least half of the research is publicly funded, and even if rights have been assigned to the publisher through an exclusive or standard license, the author can make the work available to the public after 12 months if the research pertains to the fields of humanities and social sciences, after 6 months in other cases from the date of first publication. In Finland, Section 24 TL allows the use of works for teaching and research and to make reproductions of published works for teaching by virtue of an Extended Collective License (ECL), which entails remuneration. In France, Articles L122-5 3° e) and L211-3 3° d) CPI provide that remuneration should be paid in a flat-rate. A remuneration duty can also be found in the Netherlands (Article 16 AW), and in Sweden (Article 18 URL). However, it should be observed that in the Netherlands, agreements have been concluded between publishers and educational institutes in this regard[1690]. If not agreed otherwise, a non-waivable right to receive equitable remuneration also exists in Spanish copyright law for the benefit of rightsholders under Article 32(4) TRPLI.

In other EU countries, compliance with the three-step test is explicitly required. This is the case in Belgium (Article XI.191/1, §1er 3° and 4° CDE); Bulgaria (Article 24(1)(3) BCA); Cyprus (Article 7(6) CL), Greece (Article 21 GCA); Hungary (Section 33(2) SZJT); Latvia (Section 54 LaCA); Luxembourg (Article 10(2) LuDA).

Different conditions can also be present. In Croatia, Article 198(2) NN allows the uses of copyright-protected works unless this harms the reputation or the honour of the author. In Cyprus, Article 7(2)(e) CL requires compliance with the undetermined concept of "fair dealing". Similarly, in Denmark and Greece, respectively, Section 23 DCA and Article 21 GCA prescribe that the work is used in line with fair practice. The same rule also appears in the Luxembourgish and Romanian provisions (Articles 10(2) LuDA and 35(2)(1)(d) RDA). In Swedish copyright law, Article 18 URL allows the reproduction of small portions of collections of musical and literary works 5 years after the first publication.

It is also relevant that in some Member States, national courts intervened to clarify the scope of the two-fold limitation in purpose affecting the provisions, sometimes worsening an already uncertain scenario. The case of Bulgaria is emblematic. Here, the Court of Appeal of Sofia held that the two conditions – scientific research and teaching – are cumulative, thus, the sole purpose of teaching does not suffice to trigger the application of Article 24(1)(3) BCA[1691]. Yet, in a case released less than a 1 month before, the Court had not requested the cumulation of the two criteria[1692].

The limitation in purpose is read restrictively in Dutch case law. The Court of Rotterdam in 2017 held that a video showing copyrighted works to instruct volunteers of an organisation about how to recognise the sounds of birds does not qualify as "education" for the purpose of the exception[1693]. A very strict interpretation of the limitation in purpose can also be found under Article 189(1)(c) PCPL, which states that the uses of protected works for the exclusive purposes of scientific research and pedagogical goals are excluded under some circumstances.

**The state of harmonisation and its impact on Open Science**

1690 See, for instance: the Mediafederatie and the Auteursbond: https://mediafederatie.nl; https://auteursbond.nl, accessed 11th August 2023.

1691 Court of Appeal of Sofia, case no. 741/2013, 9 May 2013.

1692 Court of Appeal of Sofia, case no. 3303/2012, 19 April 2013.

1693 Court of Rotterdam, 21 December 2017, ECLI:NL: RBROT:2017:10388 (Vogelfoto's).

The current implementation status of Article 5(3)(a) InfoSoc does not raise high hopes for a virtuous interplay between the goals of Open Science and the net of copyright flexibilities in the EU.

First, the array of beneficiaries is mostly teaching and education-oriented, with the risk of excluding many unconventional and not-state-led research centres, which may rather play a high role in areas of niche and highly sectorial research. In fact, very few provisions stand out for being tailor-made for individual or collective research. In this respect, it must be noted that many EU countries circumscribe the beneficiaries of the exception to a closed list of prescribed-by-law entities, augmenting the rigidity with regard to the subjective scope. Moreover, most of the carve-outs and the highest number of works covered by national implementations of E&Ls are directed to teaching and unshaped to address the needs of researchers.

Second, the high degree of divergence and fragmentation in the approach towards permitted uses and subject matters is likely to hamper research goals and the reuse of published works for Open Science to a significant extent. In fact, a lot of research projects require full use of protected works and sharing of data, together with research outputs, deliverables and joint analytical tools. If the sharing of data on a cross-border level is not possible or particularly burdensome, a high number of research projects may be frustrated in their collaborative endeavors.

Similarly, the provision of a closed list of prerogatives to users of copyrighted works downsides the potential of research projects and initiatives as well. In fact, it might turn out to be useless being endowed with the prerogative of making copies of a protected work for teaching and research if such copies cannot be even displayed within a restricted circle of researchers, and communication to the public is prevented. A further obstacle that is likely to produce the same effect consists of the limitation in the amount of work that can be used and in the number of copies that can be made, as set by the wording of several national provisions. In most cases, full use of the whole work is necessary to embark on secondary innovation and conduct high-quality research activities.

The comparative analysis of national implementations of Article 5(3)(a) ISD shows that the current degree of harmonisation is not yet sufficient to address the needs of researchers. The majority of Member States' provisions mention only teaching activities. In addition, divergences can be found on key matters such as the subject matters covered and the array of permitted uses. Beneficiaries tend to be similar across the EU, but the objective scope of national rules is the most various. The German and Austrian exceptions stand out for their high level of articulation and intricacy, to the detriment of legal certainty, and posing the risk of discrimination based on the subject matter of the research since some rights may be exercised by users with regard to specific categories of works only. The same applies in the field of teaching exceptions. On top of this, some countries (e.g. Germany, Spain, Ireland) insert precise caps for the amount of work that can be used, reaching the point of delimiting (in the Irish case) the number of copies that can be made in a single calendar year. More generally, all Member States but for Luxembourg limit the amount of work that can be used, albeit without specifying the maximum amount. In addition, the array of permitted uses also varies from one country to another. The expansive approach of Lithuania, Malta, Poland, Slovakia, Spain and Portugal countervail the restrictive stance of Estonia, Greece, France and Italy, where only reproduction is allowed.

To increase the degree of complexity, particularly for cross-border research endeavours, in Austria, Belgium, Finland, the Netherlands and Sweden, remuneration is required. Remuneration rules also differ. For instance, compensation is administered through ECL in Finland and amounts to a flat rate in France.

### b. Articles 3-4 CDSMD: text and data mining

The majority of Member States that have implemented the TDM exceptions to date closely follow the baseline model (Articles 3 and 4 CDSMD). There is little or no substantial variation from the EU equivalent in national transpositions like Luxembourg, Malta, and the Netherlands, which are outstanding instances of verbatim application[1694].

The same can be said regarding the beneficiaries of the first prong of the TDM exception[1695], for which most countries define the notions of cultural heritage institutions and research organisations in line with Articles 2(1) and 2(3) CDSMD[1696]. Ireland had even introduced the notion by making an explicit reference to the EU Directive[1697]. On the opposite side of the spectrum are those Member States that refer to the term "research organisations" with lists for exemplificative purposes or without offering a definition, thus paving the way for different judicial interpretations[1698]. In others, transpositions take a more restrictive approach by only encompassing institutions named in specific the law, as in Estonia[1699]. A rather expansive approach comes from Germany (Section 60d(3) UrhG-G) and Austria[1700], which both broaden the range of beneficiaries to include individual researchers who are occasionally involved in research activity or projects, provided that they pursue non-commercial goals. The maximum flexibility is found in Spain, which defines ROs as "any entity pursuing scientific research within its main objectives"[1701]. Only a few countries have expressly included research hospitals among the beneficiaries[1702]. A "sui generis" solution is found, instead, in the French implementation of Article 3 CDSMD. Whereas *prima facie* the list of beneficiaries therein outlined resembles that in the Directive, a closer look into the national formulation unveils a greater flexibility, for it allows beneficiaries to perform the acts through third parties acting on their behalf[1703].

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**1694 Luxembourg (Article 10(15)(16), 10 bis, 35(2) and 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases), Malta (Articles 3, 4 and 8 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021) and The Netherland, articles Article 15(n)(o) AW.**

1695 Article 3, Directive (EU) 2019/790 (n 8)

**1696 See, for instance the Italian Article 70-ter (3)(4) l.aut. ; Croatia's definition of CHI (Article 187(3) NN); Cyprus (Article 24 of Law 59/1976, and Article 2(1) of Law of 59/1976 which provides for the definition of "cultural heritage institutions", encompassing libraries, museums, archives, and film and audio heritage institutions), Czechia (39c(b) CzCA) limited to ROs' definition, Greece (Article 21A(b)(c) of Law 2121/1993); Lithuania (Article 2(31)(35) Law of 18 May 1999 n. VIII-1185); Luxembourg (Article 10(15) of the Law of 18 April 2001 on Copyright, Related rights and Databases) limited to ROs's definition; Malta (Article 3 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021); The Netherland (25a(4) AW) limited to CHI's.; Portugal (Article 75(6)(a) CDA), limited to ROs' definition; Romania (Article 2^1 RDA); Slovenia (Article 57b)1)(2)ZASP); Sweden (Article 15c URL), limited to ROs.**

**1697 Section 2 CRRA 'cultural heritage institution' has "the meaning assigned to it in the European Union" – a reference which would hereby go to Article 2(3) CDSM Directive.**

**1698 Belgium, art. XI.191/1, §1er, 2° -5° CDE.**

**1699 Estonia (Section 17/1 AutÕS) defines ROs in accordance with its Organisation of Research and Development Act. Without linking the notion to specific beneficiaries defined in a separate law, the Slovakian approach seems also rather restrictive for it only mentions "libraries, archives, museums, schools or legal depository according to a special regulation" (Article 51b ZKUASP).**

**1700 (Section 42h(1) and UrhG-A). A similar approach is taken by Hungary (Section 33/A(2)(2) SZJT), which encompasses individual researchers who conduct research under a contract - as long as no person or organisation having an influence over the research site has priority access to the results of the scientific research therein.**

**1701 Article 66(3) Royal Decree n. 24/2021.**

**1702 Croatia (Article 187(2) NN). Similarly, according to the definition provided by Hungary for "research organisations" within Section 33/A(2)(2) SZJT, this exception applies to the non-commercial scientific activities of university hospitals and laboratories, as long as no person or organisation having an influence over the research site has priority access to the results of the scientific research therein.**

**1703 Article L. 122-5-3-2 CPI.**

Regarding the array of authorised acts, most Member States continued to adhere in full to the EU baseline model[1704]. Only a few national solutions exhibit a higher level of flexibility as they encompass additional exclusive rights not covered by the CDMSD. However, the degree of this flexibility varies significantly, and at times, it is overshadowed by the introduction of additional requirements. For instance, in Italy, Article 70-ter (1) l.aut. – corresponding to Article 3 CDSMD – also covers the act of communication to the public of the reproductions and extractions made. Still, this is permitted only if the resulting extractions and reproduction of works are expressed in a new work in an original manner. Austria and Germany both allow the making of reproductions and extractions made within a specifically defined group of individuals for their joint scientific research or to anyone to review the quality of scientific research, provided that such distribution is justified for the pursuit of non-commercial goals[1705]. In Spain, both prongs of the TDM exception cover the translation, adaptation, arrangement and other transformation of computer programmes[1706]. The Romanian exception, which takes a very opposing stance and corresponds to Article 3 of the CDSM, gives rightsholders the option to restrict the number of copies that may be created[1707].

Most Member States follow the EU model in merely requiring copies to be stored with an appropriate level of security. However, it is important to note that only a small number of Member States have attempted to develop a more detailed set of guidelines on the specification of the security measures to be adopted. This is the case of Ireland and Croatia, which both expressly refer to the "access and validation through IP address or user authentication"[1708].

Few countries respond to the Directive's call for rightsholders, cultural institutions, and research organisations to voluntarily establish codes of conduct and best practices that define agreed procedures for Text and Data Mining (TDM) to generate research and other types of data. Still, their approach varies. France, Italy, Romania and Spain encourage CHI and ROs to adopt such voluntary codes of conduct and best practices[1709]. Cyprus, Portugal, and Greece elevate the adoption of codes of best practices directly or indirectly to a legal mandate.[1710] Austria does so indirectly by stipulating that TPMs to prevent unauthorised access to copyrighted works are considered acceptable only if they have been acknowledged within the framework of the best practices agreed upon by rightsholders, cultural heritage institutions (CHIs), and research organisations[1711]. Without mentioning any best practice mandate, Slovenia takes a straightforward approach by stating that if the use of security safeguards hinders the carrying out of permitted acts, the rightsholders must grant that person access to the works within a timeframe not exceeding 72 hours[1712].

1704 Belgium (Art. XI.191/1. §7, Art. XI.191/2. §1,3, Art. XI.217/1 §6 CDE); Cyprus (Article 24 of Law 59/1976); Czechia (39c(b) CzCA), for which the scope of this exception is extended to performances by Section 74, to phonograms by Section 78, to cinematographic works by Section 82, and to broadcasts by Section 86 as well as to databases protected by sui generis rights by Section 94); Greece (Article 21A (2) of Law 2121/1993); Lithuania (Article 22(1) Law of 18 May 1999 n. VIII-1185), Luxembourg (Article 10(15), 10bis and 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases); Malta (Article 4 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021), The Netherland (Article 15n AW), Portugal (article 75(2)(v) CDA and 10(1)(e) Decree Law n. 122/2000); Slovakia (Section 51b ZKUASP), Slovenia (Article 57b ZASP), Sweden (Article 15c URL).

1705 Section 42h(2) UrhG-A (Austria) and Section 60d(3) UrhG-G (Germany). In a similar vein: Hungary (Section 35/A(3)- SZJT))

1706 Foreseen only in Article 4 CDSM but absent in article 3CDM. This flexible approach yet slightly more restricted than the Spanish solution is also followed by France. Art. L211-3 CPI (corresponding to Article 3 CDSM) also allows the reproduction of computer programmes.

1707 Article 36^5 RDA, corresponding to Article 3 CDSM

1708 Ireland (Section 53A(3A) CRRA). It also entitles rightsholders to request information about the security proceedings adopted; Croatia (Article 187 (7) NN).

1709 France (Art. L122-5-3-II CPI), Italy (Article 70-ter(8) l.aut), Romania (Article 36^1 (5) RDA), Spain Article 67(4) Royal Decree n. 24/2021.

1710 Cyprus, Portugal (Article 76 (4)(5)(6) CDA), Greece (Article 21A (5) Article 21A of Law 2121/1993). Their wording refers to "shall adopt".

1711 Section 42h(2) UrhG-A.

1712 Article 57b (4) ZASP.

Lastly, Belgium imposes additional conditions of applicability, such as the indication of the source and name of the author, where possible[1713]. An interesting clarification is provided by Croatia, which refers to the preamble of the Directive concerning the concept of lawful access as a precondition for the applicability of the exception[1714].

There are no significant differences in the implementations of Article 4 CDSMD, except for a few isolated examples. Ireland recalls the Directive's preamble, allowing right holders to express their reservations through the terms and conditions of a website or service[1715]. Croatia does the same but explicitly states that a machine-readable approach that incorporates metadata and general conditions associated with web pages or services is the sole appropriate means for reserving rights[1716]. The Slovenian solution suggests reservations be made using internationally recognised and standardised machine-readable methods containing metadata and general terms of use for works publicly accessible on the Web[1717].

Lastly, there is a high level of harmonisation regarding the retention of copies generated during TDM activities, with Spain being the only one to add the requirement of complying with digital rights and regulations for the protection of personal data while retaining the obtained results.

### c. General E&Ls complementary to research-specific E&Ls

Along with E&Ls specifically enacted for incentivising research, EU copyright law also features other provisions which, despite being enacted for different purposes, may also play a role in the promotion of research by analogy or through an extensive reading. The E&Ls that have been most frequently used to facilitate access and reuse of protected works for research purposes are (i) Article 5(1) ISD, on temporary reproductions; (ii) Article 5(3)(d) ISD, on quotation; (iii) Article 5(3)(n) ISD, on private study, which may support research activities by allowing access to libraries' and archives' collections through dedicated terminals and/or ad-hoc equipment (e.g. VPN); (iv) Article 5(2)(c) ISD, on reproductions by CHIs; (v) Article 6 CDSM, on digital preservation, restoration and replacement of parts of collections by CHIs.

#### I. Article 5(1) ISD

Article 5(1) InfoSoc, as the only mandatory exception within the InfoSoc Directive, is fully harmonised across the EU.

Only a few divergences from the EU baseline can be found in national laws, which deserve to be highlighted.

The Cypriot exception, enshrined in Article 7(5) CL, adds further conditions of applicability compared to the EU counterpart. The provision states that the intermediary should not interfere with the lawful use of the technology, as established by industry-wide standards, and should not modify the information while transmitting it. Moreover, the production of transient copies can be prevented where prohibited by law or by the rightsholder. Similarly, in Portugal, Article 75(1) PCPL imposes that reproduction takes place according to the rules for the lawful transmission of contents via electronic networks, as to ensure both internet surfing and temporary storage. In addition, it must be ensured that the intermediary does not alter the work while transmitting the transient copy, in compliance with fair market practices. Section 38a(1) CzCA (Czechia) specifies that the act of making transient copies should necessarily take place via a computer or similar network.

1713 Belgium Art. XI.191/1 § 2.

1714 Article 187 (5) NN.

1715 §53B CRRA.

1716 Article 188 (5) NN.

1717 57° ZASP.

On the subject matter side, in Denmark, Section 11a(2) DCA explicitly excludes computer programmes and databases. Similarly, in Malta computer programmes are excluded under Article 9(1)(a) MCA, where the exception specifically addresses literary works, databases, audiovisual, musical and artistic works. Although the list is ample and seems open, some works risk being excluded, and the array of subject-matter results is limited in comparison with the EU model. Similarly, computer programmes and compilations are not covered by the scope of the Swedish exception (Article 11a URL). A limitation in the subject matter has also been introduced in Greek case law. In this respect, the Court of Athens held that access to "pirate websites", despite falling under the scope of Article 5(1) InfoSoc, should be blocked by internet service providers.[1718] Reflecting the same approach, the Italian counterpart of Article 5(1) InfoSoc, enshrined in Article 68-bis l.aut., states that the applicability of the exception leaves provisions regulating the liability of internet providers for the unauthorised uploading and transmission of contents unprejudiced. This implies that Article 5(1) InfoSoc cannot be used to allow the transmission and the unauthorised making of transient copies of online contents by ISPs.

With regard to permitted uses, the Irish exception, embodied in Section 87(2) CRRA, excludes from the scope of the provision acts of lending, exhibiting for sale, loan, rental, transferring, and making available copies.

Articulated in a more flexible manner than the EU text, the Finnish and German provisions (Sections 11a TL and 44a UrGh-G) do not explicitly require compliance with the three-step-test, while, in Romania, Article 35(3) RDA imposes compliance with fair practice.

All national exceptions also extend the flexibility to cover objects of related rights.

***II.*** Some countries qualify acts of temporary reproduction not as a subject of exception but as conducts falling out from the scope of copyright protection. The most glaring example is that of Dutch law (Article 13a AW).***Article 5(3)(d): quotation***

The exception for quotation, enshrined in Article 5(3)(d) ISD, has been often fruitfully adopted as a surrogate for the lack of full or outright implementation of Article 5(3)(a) ISD, as in the aforementioned case of Italy. In other situations, the provision has been used as a model for law-making, as to set out rules implementing other exceptions yet phrased in a quotation-like manner. For this reason, the mapping and analysis of its degree of implementation across the EU is fundamental to understand whether additional spaces for fostering research can be found between the lines of national copyright laws.

Getting a glimpse over the divergences and convergences of national solutions may allow understanding whether a function-based and teleological interpretation of the provision can also be used to ameliorate the interplay between EU copyright law and Open Science goals.

The quotation exception has been made mandatory vis-à-vis users of OCSSPs by Article 17(7) CDSMD Member States' transposing provisions tend not to depart from the EU model.

To date, Article 17(7) CDSMD has been implemented verbatim in Austria, Cyprus (Art. 38 (9)(a) CL) Belgium (Art. XI.228/6. § 1 CDE), Denmark (Article 52c DCA), Estonia (Section 579 AutÕS), France (Articles L137- 4-1, L219-4-1 CPI), Greece (Article 66F GCA), Hungary (Section 34/A(1) SZJT), Germany (Section 5 of the German Act on Copyright Liability of Online Content Sharing Service Providers (UrhDaG)[1719]), Ireland (Section 21 CRRA), Italy (Article 102-*nonies* l.aut.), Lithuania (Articles 21, 58 LiCA), Luxembourg (Article 70bis(8) LuDA), Spain (Article 73(8) of Royal Decree n. 24/2021). It is relevant to note that that under both French and Estonian law, the exceptions covered by the provisions go beyond quotation, parody and pastiche.

1718 Multimember Court of First Instance of Athens, case 3530/2017, 18 September 2017.

1719 See: Urheberrechts-Diensteanbieter-Gesetz vom 31. Mai 2021 (BGBl. I S. 1204, 1215).

**Subjective scope**

Member States do not envisage limitations with regard to beneficiaries, in line with the EU rule.

**Objective scope**

With regard to permitted uses, due to the fact that the EU rule gives full freedom in this respect, Member States adopted highly different postures.

In Austria, the exception is generous in drawing the boundaries of the objective scope. Section 42f(1) UrhG-A allows the reproduction, distribution, making available to the public of works in a number of contexts, including presentations, performances and public lectures, thus showing a specific care towards teaching- and research-related activities. The Austrian legislator also provides an exemplificative list of quotations allowed. This is, inter alia, the case for works quoted in scientific works, when they do not constitute their main subject matter, showing again the centrality of the provision for research activities. Section 42f(1) UrhG-A also mentions works of fine art made publicly available within the context of a public lecture, as well as every situation where a previously published work — first made available to the public with the consent of the author —, such as a musical or literary work, is cited in another independent work of a different or the same kind. A broad reading of the array of permitted uses has also been adopted in Germany. Section 51 UrhG-G comprises within the term “quotation” a wide array of acts, including reproduction, distribution and communication to the public. Among other examples, the German provision also mentions the quoting of extracts of a work for a scientific presentation for explanatory purposes, as well as to support a thesis.

Malta aligns with the German and Austrian approach as it entitles users with a broad array of prerogatives. In fact, under Article 9(1)(k) MCA, the reproduction, distribution, communication to the public, as well as the translation of protected works for quotation is permitted. An extensive interpretation of permitted uses and purposes, all embodied within the concept of “quotation,” is present under Italian law, also encompassing uses for teaching and research. As seen in the related Section, the exception for quotation in Italy compensates for the lack of an E&L tailormade for implementing Article 5(3)(a) ISD. For the purpose of the present analysis, it is worth noting that Article 70 l.aut. not only includes many purposes within the concept of “quotation”, but it is also broadly articulated in terms of rights covered. In fact, explicitly permits acts of reproduction, abridgement and communication to the public for the purpose of criticism and discussion, and to the extent necessary for it.

An explicit limitation in the amount of work that can be quoted features Article 24(1)(2) BCA (Bulgaria), which limits the exception to mere excerpts of published works for criticism and revie. Also in France, Article L. 122-5-3° a) CPI only allows use of short quotations. However, the French judiciary extended the scope of the exception as to cover, apart from literary works, also photographs[1720]. Similarly, under Greek law, Section 19 GCA only permits to quote short excerpts of published works, and the same is in Ireland (Section 52(4) CRRA), Lithuania (Article 21 LiCA), Slovenia (Article 51 ZASP), Sweden (Article 22 URL), Spain (Article 32.1 TRLPI) and Romania (Article 35(1)(b) RDA). It is also worth mentioning that the Lithuanian Supreme Court, reading the amount of work-requirement restrictively, held that the distribution of reproduced parts of a textbook was unlawful for it exceeded the scope of the exception, and thus created confusion with the original work without mentioning the source[1721]. A similar decision involved the quotation of large parts of online news on another media[1722], which, however, was shielded from infringement since the work quoted referred to facts or current events in the public domain. Also in Czechia, Section 31(1) CzCA only permits use of small excerpts and/or small works. Clarifications on the amount of work falling under the scope of the Czech exception can be found in two decisions of the Municipal Court of Prague. In June 2011, the Court of Prague held that the unauthoriseduse of twelve paintings amounted to a “major quotation”, exceeding the scope of the exception also due to the fact that the quotation was not accompanied by any review or criticism. In a different decision, issued on December 2011, the same court held that quotation of two out of nine paragraphs of an article within an artbook with mention of the source of the work fairly constitutes a quotation within the meaning of Section 31(1) CzCA. Also in Hungary, the Szeged Court of Appeal clarified that the slavish copying of a copyrighted work exceeds the scope of the exception for quotation, as well as the related limitation in purpose[1723]. To the contrary, in Poland, Article 29 UPA abstractly features a limitation in the amount of work but, as it will be better detailed below, the provision has been interpreted in a user-friendly and teleological manner by national courts, in light of the purpose that the exception is meant to achieve.

In Latvian law, Article 20(1) LaCA explicitly excludes computer programmes from the scope of the provision. Further limitations in the subject matter are present in the wording of Article 9(1)(k) MCA (Malta), which explicitly refers to audiovisual works, databases, literary, artistic and musical works, thus implicitly excluding computer programmes as well. A similar limitation can be found in the Dutch exception (Article 15(a)(1) AW), which delimits its objective scope to literary, artistic and scientific works. To the contrary, the Slovenian exception, enshrined in Article 51 ZASP, permits quotations of photographic and architectural works, also including works of fine art, applied art and industrial design. Thanks to the proactivity of national courts, the objective scope of the provision, restricted to some kinds of artistic subject matters, was extended as to cover audiovisual works and films[1724], as well as musical works, partitures excluded[1725]. Instead, adaptations of copyrighted works are deemed outside from the scope of the exception[1726]. Along the same lines, a limitation in the array of works features the Spanish exception (Article 32(1) TRLPI), which specifically targets literary, audiovisual and musical works, as well as isolated and individual pieces of photographic and figurative works.

**Other conditions**

1720 CA Paris, 4ème ch., 12 octobre 2007.

1721 Supreme Court of Lithuania, case No 3K-3-270-687/2017, 15 June 2017.

1722 Supreme Court of Lithuania, case No e3K-3-513-916/2016, 14 December 2016.

1723 Szegedi Ítélőtábla (Szeged Regional Court of Appeal), case Pf. 20.029/2018/6, 8 June 2018.

1724 VSL II Cp 1392/2013, 27.9.2013. Previously, in the same sense: VSL II Cp 4863/2008, 24.6.2008.

1725 VSRS II Ips 213/2008, 26.2.2009.

1726 VSL V Cpg 362/2015, 17.6.2015.

In contrast with the EU rule, the Irish exception (Section 52(4) CRRA) does not require compliance with fair practice. The same can be found in Poland (Article 29 UPA), while Sweden (Article 22 URL) does not explicitly require the mention of the source.

Notably, the Danish exception (Section 22 DCA) does not provide any limitation in purpose, in contrast with the EU provision. A similar approach can be found in Finland (Section 22 TL).

The French exception can be used for multiple purposes, including criticism, review, information, critical thinking, and education. Moreover, the Supreme Court clarified in 1983 that, provided that the quotation is of an informative nature and the reader is not bewildered, there is no need to incorporate the quoted part in an independent work[1727]. Later, in 2003, the same Court held that the reproduction of an artistic work in another one cannot be heralded as a "short quotation", thus exceeding the scope of Article L. 122-5-3° a) CPI[1728]. Likewise, the Latvian exception (Section 20(1) LaCA), allows reproduction for multiple purposes, including scientific research. A long list of purposes also features the wording of Article 10(1) LuDA (Luxembourg), which allows the quotation of published works, also in translated form, for polemising, teaching, researching, as well as for the aim of conveying an informative message with regard to the incorporated work. Similarly, the Dutch provision (Article 15(a)(1) AW) allows uses for polemics, criticism, review, the making of an announcement, incorporation within a scientific/academic piece or for similar aims. In this respect, the Dutch rule is phrased as a purpose-unspecific inclusion rule, leaving room to an extensive interpretation. In line with this trend, the Romanian exception (Article 35(1)(b) RDA) also permits quotations for analysis, illustration, criticism, and commentary. The highly vague character of these definitions has the effect of weakening the filtering function of the limitation to a significant extent, thus potentially increasing the degree of flexibility of the provision.

A broad list of purposes is also embedded in the formulation of the Spanish exception. According to Article 32(1) TRLPI specific subject-matters can be quoted for building a personal judgement, criticism, commentary, analysis, as well as for teaching and research purposes. In this sense, the rationale of both Articles 5(3)(a) and 5(3)(d) InfoSoc are embedded within a single provision. Yet, the exception explicitly excludes quotations for journalism, which is qualified as a commercial activity. As a result, the reproduction, distribution and communication to the public of journalistic articles in press reviews is subject to the rightsholder's authorisation.

Also, in Polish law, Article 29 UPA allows quotations for many different purposes, including criticism, polemics, scientific analysis, explanation, and art-related aims. It is also noteworthy that, despite the limitation in the amount of work embedded in the provision, the Polish Supreme Court held that such limitation should be overcome in the case quotation of the whole work is necessary to comply with the purpose of the exception[1729]. In another decision, the Supreme Court reiterated that, since the provision does not specify the limit in the amount of work that can be used, it should be interpreted broadly in order to ensure its effectiveness and the respect of the fundamental right of freedom of research and expression[1730]. Yet, the Court also clarified that, under all circumstances, the quotation should play an auxiliary role in the work where the same is incorporated[1731].

1727 French Supreme Court, 1ère civ., 9 novembre 1983, Microfor.

1728 French Supreme Court, 1ère civ., 13 novembre 2003, Utrillo.

1729 Judgement of Sąd Najwyższy (Supreme Court) of 23rd November 2005 I CK 232/04, OSNC 2005/11/195.

1730 Judgement of Sąd Najwyższy (Supreme Court) of 22nd February III CSK 11/17, Legalis nr. 187876

1731 Ibid.

A lax limitation in purpose can also be found in Article 51 ZASP (Slovenia), which covers the purpose of discussing a topic, supporting arguments, criticism and referral. An open approach has been endorsed in case law, which requires a case-by-case assessment of whether the purpose of the quotation reflects the rationale of the exception[1732], inspired – as in the Polish case law – by a fundamental rights-oriented reading - which may also justify the quotation of the entire work[1733].

An additional condition for the application of the exception is set out by the Estonian legislator within the text of Section 19(1) AutÕS, which requires that the copyrighted work is quoted and/or summarised in a manner that conveys the message behind the original work correctly. A similar condition also features the Hungarian exception, embodied in Section 34(1) SZJT.

With a rather different approach, Finland implemented Article 5(3)(d) InfoSoc through a wide array of provisions, overlapping with other E&Ls and characterised by strict limitations in purpose. Apart from Section 22 TL, which provides a general exception for quotation, Section 25 TL, allowing incidental inclusions, can also be interpreted as covering uses for a quotation. By this token, Section 25(1) TL permits the photographic reproduction of works of art, once made public, if associated with a text in a critical or scientific presentation and/or inserted within a newspaper article in order to report current events[1734]. Section 25(1) TL is remarkably useful in the case of quotations for research purposes since their use within scientific presentations is explicitly identified as one of the purposes of the provision. In Poland, apart from the general exception for quotation, which does not distinguish on the basis of the rights covered or the type of subject matters, Article $27^1$ UPA permits – on top of the EU benchmark, the inclusion of small works or fragments of bigger works in textbooks, pieces of literature and anthologies for teaching and/or research purposes, in exchange of remuneration.

Fulfilling multiple aims, the Portuguese exception (Article 75(2)(g) PCPL) allows quotations, inter alia, for teaching-related aims, thus also indirectly covering the scope of Article 5(3)(a) ISD. However, the provision requires the quotation not to create confusion between the original and the new work – a condition that in other countries is introduced only by very restrictive judicial interpretations. In addition, Portuguese courts have interpreted the purpose-limitation very strictly, requiring that reproductions are occasional and limited to short excerpts.

**The state of harmonisation and its impact on Open Science**

The exception for quotation may be leveraged as a remarkable flexibility for researchers. In fact, most academic articles, especially in humanities and social sciences, are based on refinement, advancement and critical analysis of previous works, and accurate, grounded and well-settled arguments mostly depend on the quality, as well as on the pertinency of references. For these aims, abstractly, the broad articulation of Article 5(3)(d) ISD can be helpful. Yet, many drawbacks in the current implementation status of the provision across the EU, and a general weak harmonisation may hamper the full realisation of the purposes of the provision vis-à-vis Open Science goals.

Limitations in the quantity of work that can be quoted weaken the effectivity of the provision, and the same can be said for the exclusion of specific subject matters.

1732 VSL V Cpg 200/2016, 1.6.2016.

1733 VSL II Cp 4863/2008 of 24 June 2008.

1734 For related national case law, see: MAO 126/21.

However, there are also positive notes that deserve being underlined. Flexible approaches in terms of flexibility can be found in those cases where the limitation in purpose is relaxed to the point of losing its blocking nature against an extensive, function-based interpretation of the provision. This may make it possible to stretch the boundaries of the exception so as to cover extensive uses of protected works for the purpose of fostering academic freedom, and therefore, incentivising the sharing of research data and academic articles. In this sense, the condensation of multiple purposes within the general exception for quotation – that is a common approach among national legislator – can be of some help. The common law-making practice of amplifying the array of purposes for which the exception for quotation may apply is undoubtedly the most relevant sign of flexibility featuring transpositions of Article 5(3)(d) ISD across the EU, holding the virtue of going beyond the European benchmark.

With regard to the divergences and convergences among national rules and by way of comparison with the EU threshold, several considerations can be made.

First, the degree of harmonisation of the exception for quotation in the EU is quite low, showing great variety among the provisions adopted in the various Member States. National rules do not diverge significantly as to beneficiaries but show great variations on the array of permitted uses and limitations in purpose. As to the latter, in some Member States, the term "quotation" also encompasses uses for purposes other than criticism and review, going beyond the EU benchmark rule (France, Latvia, Romania, Luxembourg, Netherlands, Poland and Spain). This, however, is often the product of the legislative intent of bringing under the quotation exception functions that in other legal systems are performed by other E&Ls (e.g. Italy and Portugal, where the quotation is used for purposes akin to those enshrined in Article 5(3)(a) ISD). Thus, although the exception for quotation might seem in these cases broadly articulated and therefore more expansive than the EU counterpart, the lack of other exceptions, conversely, might turn out being compensated by an all-encompassing provision, which usually has a more constrained objective scope. However, it is also worth noting that there are also national examples where the limitation in purpose is lacking, with the result of broadening the scope of the provision much beyond the EU model (Finland and Denmark).

***III.*** The main limitation featuring national E&Ls for quotation lies in the limits in the amount of work that can be used (Bulgaria, Greece, France, Slovenia, Lithuania, Sweden, Romania and Czechia). The cruciality of this requirement has also been underlined by national courts (e.g. in Czechia). There are also some Member States that explicitly carve some subject matters out from the scope of the provision (Spain, Malta, Latvia and the Netherlands), while judicial extensions in this respect have been made in Slovenia. ***Article 5(3)(n): private study***

Article 5(3)(n) InfoSoc permits "use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of [educational establishments, archives, museums and libraries] of works and other subject-matter not subject to purchase or licensing terms which are contained in their collections". This exception may be useful to foster private research and individual study-related activities. However, due to its narrow scope and limitations as to beneficiaries, means and permitted uses, it is also unlikely to have a large-scale impact on institutional research activities, and particularly in joint cross-border endeavours. Despite all limitations, its potential lies in the fact that it allows granting broader access to CHIs collections, and thus to knowledge and science, for the benefit of researchers and the general public, and it may be used as a model for broader provisions pursuing the same aim.. In this sense, offering an overview of the divergences and convergences in national approaches vis-á-vis the definition of beneficiaries (1), objective scope (2) and other conditions of applicability eventually set out by Member States (3) may be useful to assess the degree of harmonisation of this exception across the EU, the degree of flexibility Member States' show towards the matter and, more generally, to grasp the added value this provision may bring for the fulfilment of Open Science goals (4).

It is worth noting that five EU countries - Croatia, Greece, Sweden, Romania and Cyprus – have not implemented Article 5(3)(n) ISD. Nevertheless, in some of these cases, the function of the provision is performed via an extensive application of other exceptions. In Cyprus, this role is played by the exception for quotation (Article 7(2)(a) CL); in Sweden, by the exception for private copy (Article 12 URL); in Romania, by the national implementations of Articles 5(3)(a) ISD (teaching and research) and 5(2)(c) ISD (uses by cultural establishments — see below).

**Subjective scope**

Several EU countries introduced specifications concerning beneficiaries or narrowed down their list, lowering the level of flexibility of the provision in respect to the EU model.

The Latvian exception for private study (Section 23 LaCA) targets state, publicly-funded or led entities without mentioning educational establishments and therefore detaching from the EU rule. In Poland, Article 28(1)(3) UPA states that only educational institutions and research organisations falling under the scope of a specific national law[1735] can lawfully reproduce and make their collections available to users. While the Polish exception is noteworthy since it goes beyond the EU rule and explicitly refers to research organisations, this added flexibility is down-sized by the limitation to organisations set by law. Additional restrictions in this regard are also inserted under Danish copyright law. According to Section 16(a)(1) DCA, the copies made are to be deposited in compliance with a specific national law[1736] within the premises of specific entities (Royal Library, State and University Library and Danish Film Institute). However, Denmark goes beyond the EU rule, explicitly allowing the exchange of copies of published and broadcasted works among the beneficiaries unless the works are available on the market.

Among others, the Irish and German provisions are undoubtedly the most rigid ones. In fact, the Irish exception, enshrined in Section 69A CRRA, refers to libraries and archives only while the German exception (Section 60e(4) UrhG-G) only addresses libraries.

Yet, there are also opposite examples where national provisions show more flexibility than the EU threshold. In Czechia, Section 37(1)(c) CzCA makes explicit that “universities” are included among the beneficiaries of the exception. Similarly, the Lithuanian exception (Article 22 LiCA) also includes research organisations, while the text of the Spanish exception (Article 37.3 TRPLI) refers to a broad list of entities, i.e., museums, archives, also including sound, film heritage and newspapers’ archives, libraries, either public or belonging to non-profit cultural, research or educational institutions supported by the general interest, also addressing educational institutions integrated into the Spanish educational system.

**Objective scope**

A limit to the amount of work that can be used are added by the German exception for private study and use, enshrined in Section 60e(4) UrhG-G. Accordingly, only up to 10% of the works contained in the collections of libraries can be reproduced for private use and study, also allowing the attendees of libraries to make reproductions of individual articles taken from the same academic or scientific journals, small-scale or out-of-commerce works. As a counterweight to this restriction, Section 60e(4) explicitly allows also the reproduction (and not only access and making available on dedicated terminals) of works in the collections of beneficiaries, in line with the CJEU decision in *Ulmer*. Section 69A CRRA, introduced in Irish copyright law in 2019, is also quite generous with regard to permitted uses. Articulated as a fair dealing-like provision, the Irish provision enables the users of libraries and archives to reproduce and communicate the works of their collections to the public.

1735 Research institutes specified by Act of 30 April 2010 on Research Institutes (Dziennik Ustaw 2018, item 736): research institutes of the Polish Academy of Sciences pursuing the activity referred to in Article 50.4 of the Act of 30 April 2010 on the Polish Academy of Sciences (Dziennik Ustaw2017, items 1869 and 2201).

1736 Lov nr 1439 af 22/12/2004 Lov om pligtaflevering af offentliggjort materiale.

Lithuania adopts a similar approach, covering also reproduction (Article 22 LiCA). However, copies can be made only for the purpose of making them available to attendees through dedicated terminals as long as adequate technical measures as to prevent further distributions have been implemented. Moreover, reproductions cannot exceed the number of copies held by the institutions. In Poland, instead, the array of permitted uses is interpreted in a flexible manner. For instance, the District Court of Poznań held that, if a library stores and provides access to its users to a paper copy of a journal, it acts within the scope of the exception for private study[1737].

As to the type of subject matters included within the objective scope of the provision, the Latvian provision (Section 23(3) LaCA) explicitly states that the exception should be extended to include also works accessible via the joint state library information system (Latvian Digital Library), while in Luxembourg, Article 10(14) LuDA explicitly carves out databases from its scope, and the Maltese exception (Article 9(1)(v) MCA) implicitly excludes computer programmes.

**Other conditions**

Member States feature a different approach to the conditions of applicability of the private study exception, being either stricter or more flexible than Article 5(3)(n) ISD.

For instance, the Bulgarian exception (Article 24(1)(11) BCA) does not mention the requirement under which access to protected works should occur via dedicated terminals, thus increasing the level of flexibility compared to the ISD baseline. Similarly, the condition that works should not be available in digital format for license or purchase on the market is absent in the Estonian and Dutch counterparts, as inferable, respectively, from the texts of Section 20(4) AutÕS and Article 15h AW. The same approach also characterises the Finnish legislator (with Section 16b(1) TL), which does not even require compliance with the three-step test. In this vein, it is also notable that, although the Polish exception is in line with the EU provision in this respect, the Court on the Protection of Competition and Consumer went further by holding that a license term which limits the amount of work that can be copied to 22 pages is unfair within a contract signed with the user of a library[1738].

Leaning more towards a stricter approach, in Czechia, Section 37(1)(c) CzCA affirms that the act of making available to the public is subject to the further condition under which the members of the audience should be prevented from making copies. In this respect, the Czechian exception is less flexible than the ISD model provision. Also, the Latvian exception (Section 23 LaCA) encompasses a particularly rigid wording with regard to the requirement of ensuring access only through dedicated terminals, as it requires state and publicly-funded beneficiaries to provide access to their works via a closed network upon access and by use of an authentication code.

By explicitly extending the limitation in purpose as to explicitly cover, other than private study, also research activities, the Italian (Article 71-ter l.aut.), Slovenian (Article 49(b) ZASP), Maltese (Article 9(1)(v) MCA), Slovakian (Section 48 ZKUASP), Polish (Article 28(1)(3) UPA), Luxembourgish (Article 10(14 LuDA), Portuguese (Article 75(2)(o) PCPL) and Latvian (Section 23 LaCA) exceptions move remarkably beyond the EU baseline. In this respect, the Irish exception (Section 69A CRRA) is paradigmatic for being particularly flexible. In fact, while the EU provision solely refers to private study, the Irish provision also covers uses for teaching and research, thus also embedding the goals of Article 5(3)(a) ISD, allowing users of libraries and archives to perform acts of reproduction and communication to the public for private study, as well as for teaching and research purposes.

**State of harmonisation and impact on Open Science**

1737 Judgement of 29th October 2014, LEX nr 1729297.

1738 Wyrok Sądu Ochrony Konkurencji i Konsumentów (Judgement of the Court on the protection of competition and consumers) of 9th December 2011XVII Amc 113/11.

The exception for private study is relatively harmonised across the EU. All Member States except Croatia, Greece, Sweden, Romania, and Cyprus have implemented the exception quite in line with the EU paradigm. Moreover, in most cases where the national exception has not been implemented, other exceptions are teleologically applied or extended in scope as to fill the gap.

The differences among provisions are few. As to beneficiaries, there are virtuous examples of countries which went beyond the EU benchmark, whilst the opposite is rarer. With regard to the amount of work that can be used, no Member States set explicit limitations but Germany. Similarly, in terms of subject matter, nearly all Member States converge on not setting any limitation, except for Lithuania, Luxembourg and Malta.

As to permitted uses, there are EU countries where the flexibility is stretched to explicitly cover acts of reproduction, distribution to a limited audience and communication to the public, such as Germany. Otherwise, most Member States rephrased the EU model rule quite slavishly, thus revealing a substantial degree of harmonisation.

With regard to other conditions of applicability, three countries (Finland, Netherlands and Estonia) noteworthily eliminated the requirement that copies are not available for purchase or license on the market. In a high number of countries, the exception serves also other functions beyond private study, also explicitly including research. A virtuous example is also that of Bulgaria, where the requirement of providing copies through dedicated terminals is absent, boosting the effectiveness of the exception.

As to the interplay between the implementation of Article 5(3)(n) and Open Science goals, it can be stated that this exception, despite being widely implemented and useful for self-education and/or individual research, may currently play little role. In fact, the requirement under which copies should necessarily be provided through dedicated terminals is often accompanied by other safeguards, requiring, inter alia, the adoption of specific security measures (Latvia), also preventing the further distribution of copies beyond the audience of the attendees of the beneficiaries listed in the exception (Czechia).

Moreover, national transpositions rarely refer to research organisations explicitly, and in no case but for Denmark (which excludes research entities from the scope of the exception) they allow beneficiaries to exchange their collections and make them available to their patrons. Both elements would be needed to make the implementation of Article 5(3)(n) an effective tool to facilitate the fulfillment of the EU Open Science agenda.

### *IV. Article 5(2)(c) ISD: uses by cultural establishments*

As the predecessor of Article 6 CDSM, Article 5(2)(c) ISD was enacted to cover uses by cultural establishments. In this vein, the EU provision aims to shield from infringement "specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage". This exception is articulated in a broad manner and may thus cover multiple activities. For this reason, the comparative mapping of national transpositions may be useful to understand whether and to which extent this provision has been used to foster access to and reuse of research materials. In fact, since the EU provision does not encompass any limitation in the subject matter, the room for discretion left to Member States to adapt the implementation to their needs was relatively broad.

It is worth noting that France did not implement Article 5(2)(c) but only Article 6 CDSMD, Germany, Netherlands and Lithuania updated their provisions in order to align it to the CDMD requirements.

#### Subjective scope

The array of beneficiaries covered by national provisions is generally in line with the EU model, with some variations that, in the majority of cases, go below the EU benchmark.

In Austria, Section 56b UrhG-A addresses sound or image carriers, as well as libraries. In Denmark, the provision (Section 16(1) DCA) univocally targets state-funded or led entities, also prescribing that, in the case of museums, compliance with specific national law is required[1739]. In Ireland (Sections 65 and 68A CRRA) and Sweden (Article 42(d) URL), the list of beneficiaries is limited to libraries and archives only. In Latvia, Section 23(1) LaCA only refers to state-funded libraries, explicitly excluding educational establishments from its scope.

In contrast with the most common trend, Poland features a broad list of beneficiaries. Article 28(1)(2) UPA refers to educational institutions, universities, and research institutes, inasmuch as they are compliant with national law[1740], libraries, museums and archives.

In Finland, there is a specific provision tailor-made for the National Audiovisual Institute. Under Section 16c TL, this entity is allowed to make copies of all works within its collection, including those transmitted via radio and television, except for those deposited by a foreign film producer, but with no limitation as to the purpose. In Greece, Article 28(1) GCA is subject-specific and context-specific, as it addresses museums only.

**Objective scope**

Some EU countries, like Austria, chose to attribute an all-encompassing right of use to cultural establishments, thus going well beyond the EU benchmark, limited to acts of reproduction.

As to the amount of work that can be used, several national exceptions added limitations. This is the case of the Belgian Article XI.190, 12° CDE, which only allows the making of a limited number of copies. By the same token, in Slovenia, Article 50(3) ZASP does not allow more than three copies.

With regard to subject matters, the Bulgarian exception (Article 24(1)(9) BCA) is less flexible than the EU counterpart, for it explicitly excludes objects of related rights and unpublished works. The Danish exception (Section 16(1)(4) DCA) provides a series of specifications. Computer programmes are excluded, but for computer games, while unpublished works can be reproduced for preservation provided that it can be demonstrated that such works are unavailable elsewhere. The Slovenian exception, enshrined in Article 50(3) ZASP, is also quite restrictive in terms of subject matter, as it excludes literary and architectural works, graphic editions of musical works, electronic databases and computer programmes.

**Other conditions**

In Austria, Section 56b UrhG-A contains a relatively strict limitation in purpose. Works can be reproduced for a lecture, performance or presentation, and the use of the work cannot involve more than two patrons at a time, strictly on a non-commercial basis. Remuneration is also required, as well as in Belgium (Article XI.190, 12° CDE). In Finland, uses for cultural purposes and by cultural establishments are managed through an ECL, in line with Section 26 TL. An ECL for these purposes is also present in Sweden (Article 42(d) URL), with the possibility for rightsholders to opt-out or to oppose specific forms of exploitation.

Even before the enactment of Article 6 CDSMD, some national legislators imposed a limitation in purpose in the context of the national implementation of Article 5(2)(c) ISD, akin to that of preservation later inserted in the CDSMD exception.

Under Belgian law, use is permitted for preservation purposes, while authors can always claim access to the original protected works as long as this does not prejudice the effectiveness of the exception. Likewise, under Bulgarian law, use is permitted for educational and preservation purposes only, while in Croatia (Article 193 NN), the exception applies only

1739 Act no. 473 of 07.06.2001.

1740 Act of 30 April 2010 on Research Institutes (Dziennik Ustaw 2018, item 736), research institutes of the Polish Academy of Sciences pursuing the activity referred to in Article 50.4 of the Act of 30 April 2010 on the Polish Academy of Sciences (Dziennik Ustaw 2017, items 1869 and 2201).

for the purpose of ensuring an adequate level of security to CHI collections, as well as for internal management tasks, including technical restoration and replacement of missing materials. Again, similarly, in Czechia (Section 37(2) CzCA), acts of reproduction are allowed in the amount and through the means necessary to achieve the conservation and archivistic purposes specified by the provision. Under Danish law, pursuant to Section 16(3) DCA, the act of making (also backup) copies, as well as distribution and use of works, should be backed by preservation purposes, such as, for example, replacing a missing element that is lacking in the collection. Under Finnish law, in line with Section 16 TL, it is permitted to reproduce works that are not available through ordinary commercial channels for preservation. In Greek law, following Article 28(1) GCA, exhibition of works of art is allowed within the premises of the museum organizing the exhibition and owning the physical carrier where the works are incorporated, while Article 22(1) GCA allows not-for-profit libraries and archives to reproduce works retained in the collections for preservation purposes, also allowing the sharing of materials among beneficiaries of the exception, provided that such works are not available on the market (as also in Denmark, Section 13 DCA). The same limitation in purpose is present in Ireland (Sections 65 and 68A CRRA). Latvia (Section 23(1) LaCA) allows the making of copies for restoration and preservation if the original work has been lost, destroyed or deteriorated, on condition that the original copy is unavailable on the market and that the acts of reproduction are mutually separable. The same approach has been endorsed in Luxembourg, as inferable from Article 10(10) LuDA, Spain (Article 37(1) TRLPI), Romania (Article 35(1)(d) RDA), Slovakia (Section 49 ZKUASP) and the Netherlands (Article 16n AW). Also, in Poland, Article 28(1)(2) UPA requires strict adherence to a preservation-oriented purpose, which has been deemed crucial by the Polish Supreme Court[1741]. In line with that, the text of Article 28(2) UPA also prohibits acts of reproduction that aim to increase the number of works within the collection rather than replace missing or deteriorated elements.

Noticeably, the Slovenian exception features a much more lenient approach, which covers any act of reproduction that serves for the internal needs of beneficiaries.

Compliance with the three-step-test is explicitly required in Belgium, Bulgaria, Cyprus, Greece, and Latvia.

### V. Article 6 CDSMD: preservation of cultural heritage

Under Article 6 CDSM, cultural heritage institutions (CHIs) are allowed to reproduce the works thereof via any medium and in any format for the purpose and to the extent necessary as to ensure such preservation. Article 2(3) CDSM defines a cultural heritage institution as "a publicly accessible library or museum, an archive or a film or audio heritage institution".

This exception may be useful to incentivize preservation activities, thus allowing access and study of cultural heritage materials through the restoration or replacement of missing elements, reproduction, and making available in digital format of CHIs' collections. This is of key importance for the advancement of research in fields such as humanities and social sciences.

National implementations of Article 6 CDSM do not differ from the EU benchmark in a substantial manner. Yet, some differences can still be noted.

1741 Judgement of Sąd Najwyższy (Supreme Court) of 20th March 2015, II CSK 224/14, LEX nr 1711682.

Notably, some exceptions are articulated in a more advanced manner compared to the EU rule. The Austrian exception (Section 47(7) UrhG-A) is more flexible with regard to beneficiaries by broadly addressing "publicly accessible institutions which collect works", and permitted uses by allowing to reproduce works within the beneficiaries' collections, including unpublished and out-of-commerce works, also giving the prerogative of exhibiting and lending the copies made. In contrast with Article 6 CDSM, however, the Austrian exception prevents copying via paper or similar media. As to beneficiaries, the newly introduced Article 69 of Royal Decree 24/2021, transposing Article 6 CDSM in Spanish copyright law, is particularly flexible as well, for it explicitly permits that the making of copies is undertaken by third parties acting on behalf of CHIs.

In Germany, Sections 60e(1) and 60f(1) UrhG-G, in contrast with the EU text, do not require compliance with the three-step test. Moreover, the specification of the purpose of the exception is better articulated than in Article 6 CDSMD. According to German copyright law, works within CHI-collections can be reproduced for indexing, cataloguing, restoring, and preservation purposes. This also includes the making of subsequent copies and technical alterations, if necessary to replace missing elements.

Also, the Latvian exception (Section 23(1)(3) LaCA) goes beyond the EU benchmark by including research organisations among its beneficiaries and covering also flyers, posters, brochures and any other informative instrument which may promote cultural heritage dissemination. As in Germany, the provision explicitly mentions the possibility of reproducing CHI collections to replace deteriorated works or works whose data carriers have become technologically obsolete. Similarly, Article 10(10) LuDA (Luxembourg) also allows the communication to the public of the reproductions of works within CHI collections for the purpose of exhibiting cultural heritage works and advancing general knowledge in this regard.

A handful of Member States have opted for more restrictive approaches. The Czech implementation of Article 6 CDSM (Section 37(1) CzCA), contrary to the EU rule, does not cover objects of related rights, while some national legislations have reinforced the "non-commerciality requirement" (France (Article L. 122-5 CPI), Austria (Section 47(7) UrhG-A), Estonia (Section 20(1) AutÕS), Latvia (Section 23 (1)(3) LaCA), Luxembourg (Article 10(10 LuDA) and Hungary (Section 35(4)(b) SZJT)). The German provision requires the payment of remuneration, while in Romania, Article $36^4$ RDA allows rightsholders to delimit the number of copies which can be made.

The French provision, enshrined in Article L. 122-5-8° CPI, excludes establishments and public broadcasting organisations from the array of beneficiaries but extends its scope to cover, apart from acts of reproduction, also the communication to the public of the copies made. A higher level of flexibility than the EU text with regard to permitted uses and a lower one with regard to beneficiaries can also be found in Hungary. According to Section 35(4)(b) SZJT, distribution is also permitted while, at the same time, the exception excludes public broadcasting organisations from the array of beneficiaries.

In Greece, Finland, Denmark, Poland, and Portugal, Article 6 is yet to be implemented and/or is waiting for final approval.

**The state of harmonisation and its impact on Open Science**

The state of implementation of Article 5(2)(c) ISD across the EU is quite satisfactory.

Common trends can easily be found with regard to beneficiaries. In this respect, it is also relevant that additional subject-specific provisions have sometimes been enacted (Greece and Finland). In Austria, Denmark, Latvia and Ireland, the array of beneficiaries has also been narrowed down. Although variations can be found in all these respects, however, the number of EU countries which detached from the EU threshold, falling below it, is very low, unveiling that the implementation process of Article 5(2)(c) ISD has led to some degree of harmonisation across the EU. Similarly, very few Member States have imposed additional conditions, such as remuneration duties or compliance with a three-step-test. To the contrary, the aspect on which national provisions converge the most is the limitation in purpose. In fact, falling below the EU model, which does not specify the purpose of the use, many Member States have inserted an additional condition, according to which use is permitted for conservation and/or preservation only. This common trend may be identified as the ultimate inspiration that led EU legislators to introduce a mandatory cultural heritage preservation rule, enshrined in Article 6 CDSMD, targeting a wide array of beneficiaries and allowing the making of copies in all forms. The aim of this EU rule is to incentivise digitalisation of cultural heritage collections, as to avoid the deterioration of the cultural objects contained therein and thus bolster access and research activities based on restoring, study and observation of cultural heritage materials.

Nearly all Member States implemented Article 6 quite verbatim, but for five countries. A low number of EU countries have introduced specifications with regard to the limitation in purpose, also allowing the exhibition and communication of CHI collections to the public so as to incentivise dissemination of culture at the national level. In most cases, use on a non-profit-basis has been imposed, while several Member States restricted the array of beneficiaries (excluding public broadcasting organisations) or enlarged it, also allowing third parties to make copies on behalf of CHIs (Spain). Noteworthily, compared with the EU baseline, the provisions of Spain, Germany, France and Austria are quite expansive with regard to permitted uses, although in Germany, remuneration is required and the number of copies that can be made is limited.

- The current implementation of Article 6 CDSMD, however, is unlikely to foster secondary creativity and research. The lack of specific mention of research organisations among the beneficiaries and the limited array of permitted uses substantially prevent the research-driven reuse of CHI collections. In fact, in their national transposition, both provisions are usually featured by a strict limitation in purpose, which, by itself, is unlikely to address the needs of researchers. In fact, only cultural heritage institutions are allowed to make copies, except for Spain, and usually not without limits, both in purpose and extent of reuse. Although these provisions may be useful to affirm the right to culture and increase the access to and dissemination of cultural heritage on a national basis, they are unsuitable for playing a substantial role in pushing research based on CHI-collections forward.**Licensing schemes**

It is worth highlighting that some Member States have used licensing schemes to facilitate, directly or indirectly, research activities over protected works.

As recalled above, Finnish law encompasses an ECL with a view to allowing uses by educational establishments for teaching and research, as inferable from the text of Section 14 TL. Moreover, it is relevant that, according to Section 16d TL, a different ECL-system is provided with regard to uses by cultural establishments, pursuant to the rationale of Article 5(2)(c) ISD. The Finnish provision goes even further by specifying that, by virtue of the ECL, it is possible to extend the scope of the provision to uses that are not encompassed by the Finnish correspondent of Article 5(2)(c) ISD. Therefore, on a contractual basis, it might be possible to empower CHIs situated in Finland to further use, communicate to the public, make copies and distribute works within their collections for purposes other than preservation, potentially achieving research-driven aims as well. However, it must be noted that the provision applies only if authors have not opposed such uses.

In Austria, § 25b(1) UrhG-A establishes a general ECL scheme. A different provision targets libraries and carriers of sound and image collections (§ 56b(1) UrhG-A), providing that works contained in their collections can be used for performances, lectures and scientific presentations upon remuneration, whose right has to be asserted on a collective basis. This rule might be useful to streamline the process of obtaining and reusing copyrighted works for academic and scientific purposes, thus increasing the dissemination of scientific works at the national level.

In Czech law, Sections 35 and 60 CzCA provide that educational establishments are permitted to license schoolwork without specifying the purpose. Interestingly, the provision also allows to overcome the author's by asking the court to grant permission *in lieu* of the author will where reasons advanced for denying the authorisation by contract are considered unreasonable. By the same token, in Ireland, Section 168 CRRA provides that protected works can be used for examinations and teaching activities by virtue of an agreement managed by the Irish Licensing Agency, while in Italy Article 70(2) l.aut. introduces a compulsory licensing regime that allows to reproduce protected works to include them in anthologies for school use for remuneration. In Spain, Article 32(4) TRLPI sets out a statutory license for the benefit of educational and higher research centres. In Slovakia, Section 93(1) ZKUASP states that, in response to the proposal issued by an educational establishment, the author of schoolwork is obliged to conclude a licensing agreement for its non-commercial use. If the author objects it, the school can request the court to determine the content of the license. The school can also request to compensate for the costs sustained by it as to cover the creation of the schoolwork, deducting such sum from the overall remuneration owed to the author.

A general compulsory license for the benefit of local government authorities and the like is present under Swedish law. Section 42b(1)(2) URL provides that these entities can perform reproduction of literary works and make them available for internal informative purposes. A compulsory license scheme is also in place for teaching (Section 42c URL) and for the benefit of libraries and archives (Section 42d URL).

Without specifications with regard to the array of beneficiaries, subject-matters, permitted uses and limitations in purpose aprioristically, collective licensing schemes are present in various EU countries: Denmark (Section 50 DCA), Estonia (Section 57/1 AutÕS), Finland (Section 26 TL), Germany (Section 51 UrhG-G), Latvia (Section 63 LaCA).

All in all, the licensing rules mentioned above are only limited to meeting the needs of researchers and research organisations specifically. ECLs or collective licenses for research and teaching rarely appear in national copyright laws. Moreover, the extent, type of use and related subject-matters are outright left to private ordering without having a much-needed intervention from public authorities.

- **Public domain**

Public domain rules are also key to understanding whether and to which extent copyright answers to the need of Open Science. In fact, with the rise of digital technologies, the risk of transforming unprotected subject matters, such as data, facts, and information, into protected materials is high. For this reason, specific public domain rules under national copyright laws deserve to be highlighted as a virtuous example of how it may be possible to incentivise secondary innovation via the exclusion of a higher number of subject matters from copyright protection.

In Denmark (Section 9(1) DCA), Sweden (Section 9(1)(2) URL), Netherlands (Article 11 AW), Spain (Article 31 TRLPI), Italy (Article 5 l.aut.), Germany (Section 5 UrhG-G), Finland (Section 9 TL), and Portugal (Article 7(1) PCPL), only official works – and, in Portugal, also public speeches – are explicitly carved out from copyright protection.

It is also notable that the Portuguese exception cited above also encompasses the prohibition of communicating these works to the public in case they can endanger the honour and the reputation of the author. In Portuguese law, there is also a rule under which the works whose protection has elapsed or remained unpublished, as well as those that have not been lawfully disseminated for 70 years, automatically fall into the public domain (Article 38(2) PCPL).

In Austria, Section 7(1) UrhG-A excludes from protection official works. §44(2) UrhG-A (Austria) excludes protection for news and press information only. In Sweden, Section 9(1)(2) URL specifies that some categories of subject matters contained in official acts are not necessarily non-copyrightable. While useful to some extent, these national approaches fail to take a stance with regard to data and information, with dangerous consequences for future reuses. To the contrary facts, information as such, data, news, ideas and concepts, as well as works of folklore, are explicitly excluded from copyright protection under Bulgarian law (Article 4 BCA) – a policy option that may be useful to prevent misappropriation of knowledge. Adopting the open language of the Bulgarian legislator and even going beyond it, the Croatian Article 18(1) NN excludes the same subject matters, also adding a reference to unpublished official documents and programmes. Notably, the provision also states that "academic programmes" cannot be protected through copyright.

With an even more encompassing approach, Czechia (Sections 2, 3, 28 and 65 CzCA) explicitly excludes from protection ideas, procedures, mathematical formulas or scientific discoveries (Section 2); official documents and works of folklore (Section 3); works whose copyright protection has expired, thus excluding the possibility of prolonging it via contract law (Section 28); ideas and principles behind a computer programme, (Section 65). A similar expansive approach can be found in Estonia (Section 5 AutOS), which carves out ideas, images, theories, systems, methods, concepts, principles, discoveries and any other idea behind the expression contained in work (Section 5(1)); works of folklore (Section 5(2)); official acts and court decisions (Section 5(3)(4)); insignia and official symbols of state (Section 5(5)); news of the day, facts and data (Section 5(6)). All the works mentioned within the text of the Estonian provision are also excluded in Latvia (Section 6 LaCA), Slovakia (Section 5 ZKUASP), Slovenia (Article 9(1) ZASP), Lithuania (Article 5 LiCA), Romania (Article 9 RDA) and Hungary (Section 1(1)-(7) SZJT). In Slovakia, works of folklore are not explicitly mentioned within the provision whilst, contrary to the other Member States, speeches and land-planning documents are. In the case of Latvia, maps are not copyrightable.

- In Cyprus, Article 3(2) CL, apart from excluding ideas, systems, methods and processes, principles and elements — that is akin to the exclusion of facts, information, data and news — also holds that non-original works, as well as left in unpublished or draft format, cannot be protected. A noteworthy approach is taken by Greece (Article 2(2) GCA), which states that the individual contents underlying anthologies, encyclopedias, databases and computer programmes are excluded from copyright protection, as well as draft and preparatory design works (Article 2(3) GCA).

- In Sweden, there is a nation-specific provision under which circuit designs for semiconductors are not copyrightable, as there are special rules concerning the attribution of rights over circuit patterns (Section 10(1)(2) URL).

Article 1(2) of Software Directive finds correspondence in copyright laws of the vast majority of the EU Member States. Indeed, 19 out of 27 Member States have either transposed this provision into their national laws or hold a provision that follows the phraseology of Article 9(2) of the TRIPs Agreement, which carves 'ideas, procedures, methods of operation or mathematical concepts'[1742] out of copyright protection[1743].

Ideas, operational methods, concepts and information are the only subject matters excluded from protection in Luxembourg (Article 1(1) LuDA). A similar rule exists in Polish law, as inferable from the text of Article 1(2/1) UPA. Yet, it is worth mentioning that, in Poland, there is a specific public domain-like provision (Article 4 UPA) which, apart from excluding official acts, logos, symbols and materials, also excludes published patent applications and industrial design specifications from protection.

In France, no rule concerning the public domain has been enacted. For this reason, the boundaries of copyright protection are still unclear.

> All in all, the majority of EU countries adopted an expansive approach while articulating their public domain rules. No Member State but France has excluded such a rule from the national copyright law landscape. Yet, there is a consistent number of countries that do not explicitly exclude raw facts, data, and information from copyrightability. On the opposite side, there are also remarkable approaches, as reflected by the text of the Spanish and the Portuguese rules, under which, after a certain time lapse, works whose rights have expired or not adequately used automatically fall within the realm of the public domain.**f. Secondary Publishing Right**

A legal tool useful to enable academic freedom and foster the dissemination of scientific and academic works in OA is the Secondary Publishing Right (SPR). The SPR has been introduced by several EU national legislators with the aim of stimulating the publication of academic works by authors in OA and reducing the imbalances in bargaining power between publishers and authors. Thanks to it, authors of academic and research works can reuse them without the permission of the publisher/copyright holder. The SPR grants allows authors making their articles freely available to the public in OA repositories after an "embargo period", despite the same having already been published in subscription journals. The SPR operates beyond the scope and regardless of the publishing contract terms. In this sense, it acts as a limit to freedom of contract within the field of publishing contracts and takes the form of an additional author's right in the copyright laws of France, Austria, Belgium, Bulgaria, Germany, and the Netherlands.

1742 Agreement on the Trade-Related Aspects of Intellectual Property Rights (n 190), Art. 9(2).

1743 These EU Member States are Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain. Also see: 'Copyright Flexibilities' <http://www.copyrightflexibilities.eu/#/search> accessed 24 April 2023.

SPR provisions are homogenous, with a few divergences. The main difference concerns the conditions of applicability, which vary from one Member State to another. In Germany and Austria, only works published in journals and collections with at least two issues per year are subject to the SPR-regime. Thus, individual works like monographs, books and collections that are not distributed periodically or are published less often are excluded. In France, research data produced by research entities, organizations and researchers can be reutilized on condition that they are not protected by specific regulations and laws. The non-commercial purpose of the republication is set as an additional precondition in Austria, France and Germany.

Sometimes, the version of the manuscript that can be published is specified, with the effect of slightly reducing the degree of flexibility of the SPR provision. In Germany and Austria, only the "Accepted Manuscript Version" (AMV) can be republished. In Bulgaria, republication is allowed in repositories for both academic and educational purposes as lon as these repositories are of non-commercial nature. In this respect, it is also worth noting that in France, the applicability of the SPR-regime is subordinated to the lack of republication of the works in digital format by the first publisher on a free-of-charge basis. Consequently, the SPR-regime cannot be applied if the publisher has already provided an OA-regime through its own channels. Mentioning the source of first publication is compulsory in Belgium, Bulgaria, the Netherlands, Germany and Austria. In most EU countries, the right is explicitly mandatory, cannot be waived by the author nor overridden by contract. However, in some national provisions, such as, in Belgian law, Article XI.196 § 2/1 CDE, the embargo period set by law of 12 months for works related to humanities and social sciences can be modified by the publishing contract or changed by the King, who can establish a different duration. The Belgian provision also applies retrospectively to works yet to fall into the public domain.

In France, the embargo period is set to a maximum of 12 months for academic works related to technical, medical or scientific fields and 6 months for the works related to humanities and social sciences. Instead, in Germany and Austria the embargo period is 12 months for all works. By way of contrast, a more flexible approach has been endorsed in Bulgaria and the Netherlands, where the embargo period is unspecified. The Dutch provision only refers to a "reasonable period", which varies in accordance with the type of journal, the share of the public funding supporting the research and the interest of the author in recouping the access and subscription fees.

All SPR provisions introduced until now by national legislators limit their scope to works that are the output of research at least in part publicly funded. In some instances, the SPR is subject to other restrictions, which narrow its degree of flexibility The Austrian case is emblematic. Article 37a UrhG-A restricts its subjective scope to students and researchers who are part of the academic staff of the project while those unrelated to the publicly funded research institution are excluded. Similarly, in France, the array of publicly funded types of research whose works can be republished is specified in greater detail by including European funds, grants and subsidies, as well as any other funding source provided by an agency or a public institution.

To sum up, national SPR provisions do not present remarkable differences. The main divergence lays in the presence and duration of the embargo period. Moreover, three Member States (France, Germany, and Austria) have added further conditions of applicability, which reduce its objective scope in part.

**Table 33. National implementation of the EU provisions**

| Research-specific E&Ls | | |
|---|---|---|
| **Provision** | **Degree of harmonisation** | **Divergences** |

| | | |
|---|---|---|
| **Article 6(2)(b) DBD** | Low | Only a few MSs implemented it |
| **Article 8 DBD** | High | • Limitations to amount that can be used (BG, LV, IT, CY)<br>• Additional requirements in CZ and FR<br>• Broader formulation in DE and GR |
| **Article 9(2)(b) DBD** | Average | • 20 MSs implemented it<br>• In 6 MSs requirement of "illustration" is missing<br>• Stricter purpose limitation in IR and FR<br>• Reduced array of permitted uses in SI and HU |
| **Article 5(3)(a) ISD** | Low | • Most MSs mention only teaching activities<br>• Even when mentioning both teaching and research, content is tailored on educational activities<br>• Differences in subject matters covered and related permitted uses (various combinations)<br>• Some MSs have caps on amount of work that can be used (IR, ES, DE)<br>• Divergent scope of permitted uses (broad vs narrow)<br>• Remuneration required in BE, FI, ND, AT, SE, with divergent schemes |
| **Article 3 CDSMD** | High / average | • Divergences in definition of beneficiaries<br>• Harmonisation of permitted uses, few MSs added rights not covered by Article 3 CDSMD<br>• Only few MSs adopted detailed guidelines on security measures<br>• Diverging approaches on definition of code of conducts |
| **General E&Ls complementary to research-specific E&Ls** | | |
| **Provision** | **Degree of harmonisation** | **Convergences/divergences** |
| **Article 5 Software** | High | • Mandatory in NED, LT, KR, SI<br>• Additional conditions of applicability (LT, PL, SE, SI) |

| | | |
|---|---|---|
| **Article 6 Software** | Very high | • None (but for BG) |
| **Article 5(1) ISD** | Very high | • Further conditions of applicability in CY, PT, CZ<br>• Exclusions of software and databases in DK, MT, SE<br>• RO requires compliance with fair practice |
| **Article 5(3)(d) ISD** | Average | • Greatly different approaches to permitted uses<br>• Limitations in amount that can be quoted (BG, FR, GK, IE, LT, SI, SE, ES, RO, CZ)<br>• Different works excluded (LT, MT, NED, SI, ES)<br>• Specification of purpose(s): none, broader, narrower |
| **Article 5(3)(n) ISD** | High | • Not implemented in KR, GR, SE, RO, CY<br>• Limitation as to amount of work that can be used in DE<br>• Additional limitations in LT, LUX, MT<br>• FI, NED, ES do not limit E/L to copies not available for purchase/license |
| **Article 5(2)(c) ISD** | Average | • Provision implemented in all MSs but FR<br>• General convergence but several MSs provide patchwork of subject-specific provisions<br>• Some MSs introduced limitation of purpose (preservation) |
| **Article 6 CDSM** | High | 1. Few MSs introduced more articulated provisions of beneficiaries (AT, ES, LT, FR, HU)<br>2. Fragmented differences (e.g. remuneration in DE; limitation on number of copies in RO etc.) |
| **Licensing schemes** | Low | Special ECLs for educational/research activities in FI, CZ, IR, ES, SK |
| **Public domain** | Low / average in some categories | Great variety of lists of subject matters excluded from protection, convergence on a handful of items |

*Source: Compiled by the study team.*

**Table 34. National Provisions concerning the Secondary Publishing Right**

| FEATURES | DE (2014) | NED (2015) | AT (2015) | FR (2016) | BE (2018) | BG (2023) |
|---|---|---|---|---|---|---|
| **Source** | **UrhG, §38** | **AW, Art. 25fa** | **UrhG, §37a** | **CPI, Art. L.533-4** | **CDE, Art.XI.196** | **Bulgarian Copyright Act, Art.60** |
| **Subject matter** | Scientific contributions<br><br>Appeared in collections periodically published at least 2 times a year | Short works of science<br><br>No limitation as to venue of first publication | Scientific contribution by member of staff of research institutions<br><br>Appeared in collections periodically published at least 2 times a year | Scientific writing (*écrit*)<br><br>Published in a periodical issued at least once a year | Scientific article<br><br>Published on a periodical (number of issues not specified) | Work of scientific literature |
| **Requirements** | Research publicly funded for > 50% | Research financed entirely/partly publicly | Research publicly funded for at least 50% | Research publicly funded for at least 50%<br><br>Agreement of all co-author(s) required | Research publicly funded for at least 50% | Research publicly funded, in whole or in part |
| **Overrides contrary contractual clauses?** | Y | Y (Article 25h) | Y | Y | Y | Y |
| **Version limitation** | Only for AAM version | No limitation | Only for AAM version | Only for AAM version | Only for AAM version | No limitation |
| **Content of SPR** | Right to make the contribution available to the public | Right to make the work available to the public free of charge | Right to make the contribution publicly accessible | Right to make available the contribution free of charge in an open format, by digital means | Right to make the manuscript available to the public free of charge | Right to make the work or parts thereof available to the public |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Embargo** | 1 year after 1st publication | After a reasonable period | 1 year after 1st publication | 6 months (science, technology and medicine) or 1 year (humanities and social science) after 1st publication | 6 month/1 year after 1st publication, but can be shorter (if so provided by contractual licenser) or longer (by law) | None |
| **Use limitation** | Non-commercial purposes | No limitation (type of use not specified) | Non-commercial purposes | Non-commercial purposes | No limitation (type of use not specified) | Secondary publishing via non-commercial repositories |
| **Mention of source** | Mandatory indication of 1st publication | Mandatory indication of 1st publication | Mandatory indication of 1st publication | Not required | Mandatory indication of 1st publication | Mandatory indication of the 1st publisher |

*Source: Compiled by the study team.*

## 1.4. Legal Mapping of the Member States

### 1.4.1. AUSTRIA

| Access to and reuse of computer programmes | |
|---|---|
| Relevant EU provision | Article 5 Software |
| Legal provision | Section 40d UrhG-A |
| Legal text | Free use of works<br>§ 40d. (1) § 42 shall not apply to computer programmes.<br>(2) Computer programmes may be reproduced and adapted as far as this is necessary for their intended use by the person entitled to use them.<br>(3) The person authorised to use a computer programme may:<br>1. make copies for back-up purposes (back-up copies) to the extent necessary for the use of the computer programme.<br>2. observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme, if they do so by actions of loading, displaying, running, transmitting or storing the programme which they are entitled to do.<br>(4) The rights under paragraps 2 and 3 cannot be effectively waived; this does not exclude agreements on the scope of intended use referred to in paragraph 2. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 40e UrhG-A |
| Legal text | Decompilation<br>§ 40e. (1) The code of a computer programme may be reproduced and translated, provided that the following conditions are met:<br>1. the actions are essential to obtaining the information necessary to make an independently created computer programme interoperable with other programmes.<br>2. the acts are performed by, or on behalf of, a person authorised to use the computer programme or a copy thereof.<br>3. the information required to establish interoperability has not yet been made readily accessible to the persons mentioned in no. 1; and<br>4. the actions are limited to the parts of the programme that are necessary to establish interoperability.<br>(2) The information obtained in accordance with paragraph 1 may not:<br>1. used for any purpose other than to make the independently created programme interoperable.<br>2. transfered to third parties, unless this is necessary for the interoperability of the independently created programme.<br>3. for the development, reproduction or distribution of a programme with substantially similar expression or for other activities that may infringe copyright.<br>(3) The right to decompile (paragraph 1) cannot be effectively waived. |
| **Access to and reuse of databases** | |

| | |
|---|---|
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 40h(3) UrhG-A |
| Legal text | Free use of database works<br>§ 40h. (1) § 42(1), (3) and (4) does not apply to database works. However, any natural person may make individual copies of a non-electronic database work for private use, unless it is for direct or indirect commercial purposes.<br>(2) § 42(2) applies to database works with the proviso that reproduction on paper or a similar medium is also permissible.<br>(3) The person authorised to use a database work or a part thereof may carry out exploitation actions otherwise reserved for the author if they are necessary for access to the content of the database work or part thereof or for the intended use of the database. This right cannot be effectively waived; this does not exclude agreements on the scope of the intended use. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 76d UrhG-A<br>Section 76e UrhG-A |
| Legal text | **Section 76d:**<br>Anyone who has made the investment within the meaning of Section 76c (manufacturer) has the exclusive right, subject to the restrictions stipulated by law, to reproduce, distribute, broadcast, and publicly reproduce the entire database or a significant part of it in terms of type or scope and make it available to the public. The repeated and systematic duplication, distribution, broadcasting and public reproduction of insignificant parts of the database are equivalent to these acts of exploitation if these acts conflict with the normal exploitation of the database or unreasonably impair the legitimate interests of the manufacturer of the database.<br><br>**Section 76e:**<br>A contractual agreement by which the legitimate user of a published database undertakes towards the manufacturer to refrain from duplicating, distributing, broadcasting or publicly reproducing parts of the database that are insignificant in terms of type and scope is ineffective insofar as these actions do not correspond to normal exploitation the database nor unreasonably impair the legitimate interests of the database manufacturer. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 76d (3)(5) UrhG-A |
| Legal text | Protected Databases<br>Property Rights<br><br>§ 76d. (...) (3) The reproduction of an essential part of a published database is permitted<br>1. for private purposes; this does not apply to an electronic database.<br>2. for scientific or educational purposes to an extent justified by the purpose, unless it is for profit and as long as the source is acknowledged. (...)<br>(…)<br>(5) Paragraph 5§§ 8, 9, 11 to 13, 14 paragraph 2, § 15 paragraph 1, §§ 16, 16a paragraphs 1 and 3, §§ 17, 17a, 17b, 18b, § 18c, § 23 paragraph 2 and 4, §§ 24, 24a, 24b, 25 para. 2, 3 and 5, §§ 26, 27 para. 1 and 3 to 5, § 31 para. 1, § 32 para. 1, § 33 para. 2, § |

| | |
|---|---|
| | 41, § 42 Paragraph 7 first and second sentence [Reproduction by CHI], §§ 42d, 42g [uses for digital teaching], 42h [Text and data mining], 56f and § 57 Paragraph 3a Z 3a and 4 apply accordingly. |
| **Access to and reuse of works and other subject-matters** | |
| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 42g UrhG-A |
| Legal text | Digital uses in teaching<br>§ 42g. (1) Schools, universities and other educational establishments may reproduce, disseminate, or broadcast published works for purposes of digital use in order to illustrate lessons or teaching, in particular to support, enrich, or supplement them, for public communication in accordance with §18 paragraph 3, use and make available to the public, as well as publicly reproduce a database work (§ 40g), if:<br>1. this takes place under the responsibility of the educational institution on its premises or other locations; or<br>2. takes place in a secure electronic environment, to which only the pupils, students and teaching staff of the educational institution have access and to the extent that this is justified for the pursuit of non-commercial purposes.<br>(2) In the case of works which, based on their nature and designation, are intended for school or teaching use and in the case of works of cinematic art, the first showing of which took place either in Austria or in German or in a language of an ethnic group recognised in Austria no more than 2 years ago, the use of minor excerpts of the work may not generally exceed ten percent of the work. Individual works of fine art and representations of the type specified in § 2 no. 3 or other works of a small extent and out of print works may be used in their entirety. Minor excerpts of such works or such works and representations may not be used, however, insofar as permission for use can be obtained on reasonable terms. An author or person entitled to use the work.<br>(3) The act of exploitation pursuant to paragraph 1 no. 2 takes place in the Member State of the European Union or state party to the Agreement on the European Economic Area in which the educational institution has its registered office.<br>(4) The author is entitled to fair remuneration for the use according to paragraph 1. Such a claim can only be asserted by collecting societies.<br>(5) The free use of the work according to paragraph 1 cannot be contractually waived. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 45 UrhG-A |
| Legal text | § 45. (1) In order to pursue non-commercial purposes, individual literary works or the works specified in §2 no. 3 may be reproduced, distributed and made available to the public, only to the extent justified by the purpose, in the following cases:<br>1. in a collection that contains works by several authors and is intended for church, school or teaching use according to its nature and designation; a work of the type specified in §2 no. 3 may only be included to explain the content.<br>2. in a work which, by its nature and designation, is intended for school use, merely to explain the content. |

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| | (2) For the pursuit of non-commercial purposes, literary works may also be used after their publication to an extent justified by the purpose for radio broadcasts, the use of which for school use has been declared permissible by the educational authority and which are designated as school radio.<br>(3) The author is entitled to fair remuneration for the reproduction, distribution and public availability pursuant to paragraph 1 and for broadcasting pursuant to paragraph 2. Such claims can only be asserted by collecting societies. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 51 UrhG-A |
| Legal text | Free use of works of musical art.<br>Article 51. paragraph 51,<br>(1)In order to pursue non-commercial purposes, individual works of musical art may be reproduced, distributed and made available to the public after their appearance in the form of notations to a degree justified by the purpose, which is intended for school use according to its nature and designation.<br>1.digit one<br>if they are included in a collection intended for singing lessons that brings together works by several authors,<br>2.paragraph 2<br>if they are only included to explain the content.<br>(2) paragraph 2. The author is entitled to reasonable remuneration for the reproduction, distribution and public provision pursuant to paragraph 1. Such claims can only be asserted by collecting societies. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 54(1)(3) UrhG-A |
| Legal text | § 54. (1) It is permitted:<br>(...) 3. to reproduce, distribute and make available to the public individual works of fine arts that have been published for non-commercial purposes in a literary work intended for school or teaching use according to its nature and designation, merely to explain the content or in such a schoolbook for the purpose of art education for young people, (...).<br>(2) The author is entitled to reasonable remuneration for reproduction, distribution and making available to the public pursuant to paragraph 1 no. 3. These claims can only be asserted by collecting societies. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 56c UrhG-A |
| Legal text | Public playback in the classroom<br>§ 56c. (1) Schools and universities may publicly perform works of cinematographic art and associated works of musical art for the purposes of illustration for teaching, to the extent justified by this purpose.<br>(2) The author is entitled to fair remuneration for the public performance pursuant to paragraph 1. Such claims can only be asserted by collecting societies.<br>(3) Paragraphs 1 and 2 do not apply<br>1. for cinematographic works which, by their nature and designation, are intended for school or teaching use; |

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| | 2. if an image or sound carrier is used which has been produced or distributed in violation of an exclusive right to reproduce or distribute the work recorded on it. |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 42h(1) UrhG-A |
| Legal text | § 42h.(1) Anyone may reproduce a work for a research institution (paragraph 3) or for a cultural heritage institution (§ 42 paragraph 7) in order to automatically evaluate texts and data in digital form for scientific or artistic research and information, among other things about patterns, trends and correlations when having lawful access to the work. Individual researchers are also entitled to such reproduction, insofar as this is justified for the pursuit of non-commercial purposes.<br>(2) A copy according to paragraph 1 may be saved and kept while maintaining appropriate security precautions as long as this is justified by the research purpose, including the verification of scientific findings. In any case, a security measure is appropriate, the use of which has been recognised as good practice by representative associations of rightsholders on the one hand and research institutions or cultural heritage institutions on the other. Such reproduction may also be made accessible to a specific, limited group of people for their joint scientific research or to individual third parties for checking the quality of scientific research, insofar as this is justified in pursuit of non-commercial purposes.<br>(3) A research facility within the meaning of this provision is a facility:<br>1. whose primary goal is scientific or artistic research or research-led teaching and<br>2. which is not-for-profit in its activity, reinvests all profits in its scientific or artistic research or for-profit and operates in the public interest within the framework of a government-recognised contract and<br>3. which does not give preferential access to the results of scientific research to a company that has a decisive influence on the institution.<br>(4) Paragraphs 1 to 3 shall also apply if the reproduction takes place within the framework of a public-private partnership in which, in addition to the research institution or the cultural heritage institution, a profit-making company or another third party is also involved.<br>(5) The free use of the work according to paragraphs 1 to 4 cannot be contractually waived. However, this does not prevent the application of measures intended to ensure the security and integrity of the networks and databases in which the works or other subject-matter are stored, provided that those restrictions do not go beyond what is necessary to achieve that objective. Such restrictions are considered appropriate where they have been recognised as good practice by representative associations of rightsholders on the one hand and research or cultural heritage institutions on the other. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 42h(6) UrhG-A |
| Legal text | § 42h (6) Anyone may reproduce a work for their own use in order to automatically evaluate text and data in digital form and to obtain information about patterns, trends and correlations, among other things, if they have legal access to the work. However, this does not apply if reproduction is expressly prohibited and this prohibition is appropriately indicated by a reservation of use, for example in the case of works made publicly accessible via the Internet using machine-readable means. Reproduction according to this paragraph may be kept as long as this is necessary for the purposes of data analysis and information gathering |
| **General E&Ls complementary to research-specific E&Ls** | |

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| **Temporary reproduction** | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Section 41a UrhG-A |
| Legal text | Transient and incidental reproductions<br>§ 41a. Temporary reproduction is permitted,<br>1. if it is transient or incidental and<br>2. if it is an integral and essential part of a technical process and<br>3. if its sole purpose is transmission in a network between third parties by an intermediary or lawful use, and<br>4. if it has no independent economic significance. |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD<br>Article 17(7) CDSMD |
| Legal provision | Section 42f (1) UrhG-A |
| Legal text | Quotes, caricatures, parodies and pastiches<br>§ 42f. (1) A published work may be reproduced, distributed, broadcast, communicated to the public and used for public lectures, performances for the purpose of quotation, provided that the extent of use is justified by the specific purpose. This is particularly permissible if<br>1. individual works are included in a main scientific work after their publication; a work of the type specified in § 2 no. 3 or a work of fine art may only be included to explain the content.<br>2. published works of fine arts are presented in public for the sole purpose of explaining the content of a scientific or instructional lecture that forms the main part and the copies required for this are made.<br>3. individual passages of a published literary works are quoted in a new, independent work.<br>4. individual passages of a published work of music are quoted in a literary work.<br>5. individual passages of a published work are quoted in a new, independent work.<br>(...)<br>(3) For the purposes of this provision, a published work is equivalent to a work that has been made available to the public with the consent of the author in such a way that it is accessible to the general public. |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |

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| Legal provision | Section 56a UrhG-A |
| Legal text | Licensing of image or sound carriers to certain federal institutions<br>Section 56a. (1) Image or sound media on which a published work is recorded may be distributed by being made available to scientific institutions under public law of the Federal Government that have the task of collecting, preserving, and developing audiovisual media and do not pursue any commercial purposes. A copy of the image or sound carrier may also be made for the purpose of transfer.<br>(2) Paragraph 1 does not apply to image or sound carriers that have been produced or distributed in violation of an exclusive right to reproduce or distribute the work recorded on them. |
| Relevant EU provision | Article 6 CDSMD<br>Article 5(2)(c) ISD |
| Legal provision | Section 42(7) UrhG-A |
| Legal text | § 42. (…) (7) Publicly accessible libraries or museums, archives or institutions active in the field of film or audio heritage (cultural heritage institutions) may reproduce or have reproduced works which are permanently in their collections, regardless of format or medium, for the purpose of their preservation (reproduction for personal use of cultural heritage institutions) if and to the extent that reproduction is required for this purpose. This use cannot be contractually waived. In addition, institutions open to the public that collect workpieces may make copies or have them made for inclusion in their own archives (reproduction for personal use of collections) if and to the extent that reproduction is required for this purpose. However, this is only permissible on media other than those mentioned in paragraph 1 if they do not pursue any direct or indirect economic or commercial purpose. Subject to this restriction, they may also:<br>1. produce a copy of one's own workpieces and exhibit this instead of the reproduced workpiece under the same conditions as the former (§ 16 Para. 2), lend it (§ 16a) and use it according to § 56b;<br>2. make individual copies of published but unpublished or out-of-print works and exhibit them (§16(2)), lend them out in accordance with § 16a and use them in accordance with § 56b as long as the work has not been published or is out-of-print. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 25b Verwertungsgesellschaftengesetz |
| Legal text | Extended collective rights management<br>§ 25b. (1) A collecting society may also grant usage licenses to rightsholders who have not granted them these rights via a rights management agreement or a contract with another collecting society, if and to the extent that<br>1. the usage permits fall into a precisely defined area for which the supervisory authority has approved the exercise of the rights of outsiders,<br>2. 3 months have passed since the information pursuant to paragraph 4 was published on the collecting society's website, and<br>3. the holders of the rights to the works or subject matter concerned do not object to the management of their rights by the collecting society.<br>(2) The supervisory authority shall grant approval pursuant to paragraph 1 no. 1, insofar as<br>1. the usage permits are intended to apply to well-defined areas of use for which obtaining permission from the rightsholders in each individual case is normally cumbersome and impractical to the extent that the nature of the use or the type of work concerned or other subject matter of protection becomes unlikely, and |

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| | 2. the collecting society administers the rights concerned for the relevant area in a significant part of the holdings of works or other subject-matter used domestically.<br>The license must be revoked if the requirements no longer apply, or the collecting society waives the license.<br>(3) The supervisory authority shall announce the authorisation and its revocation on its website and shall inform the European Commission of the authorised scope of uses, the purposes and types of the authorisations for use covered by the authorisation and how the collecting society fulfills its publication obligation.<br>(4) The collecting society shall publish the approval of the supervisory authority on its website with a notice that it intends to grant usage permits to outsiders if and as long as they do not object to the granting of such usage permits. In doing so, it has the possibility of objection and its consequences, the other rights and obligations of outsiders (paragraph 6), the conditions for administration agreements (§ 44 Z 3), the general agreements (§ 44 Z 4) and statutes (§ 44 Z 5) , the conditions for contracts for usage permits (standard license contracts; § 44 Z 6) and the tariffs according to which it calculates fees and statutory remuneration (§ 44 Z 7), insofar as these tariffs are relevant for the uses covered by the approval of the supervisory authority.<br>(5) A rightsholder can also object to the extended collective management of rights or the granting of individual permissions in general or in specific cases after a usage permit has been granted or after the use of his works or other subject matter has begun. The objection can be declared to the collecting society issuing the license or to the user; the user and the collecting society must inform each other immediately about the receipt of the objection. The collecting society must immediately revoke any usage permits that have been granted and set a reasonable deadline for the end of usage. This does not affect the rightsholder's claim to the distribution of the income collected for the use of his works or protected objects.<br>(6) With regard to the usage permits granted on the basis of this provision, the rightsholders who have not concluded a rights management agreement with the collecting society and whose rights are not being managed on the basis of a contract with another collecting society also have the same rights and obligations as the beneficiaries of the collecting society.<br>(7) Permissions for use according to paragraph 1 can only be granted for domestic use. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 56b UrhG-A |
| Legal text | Use of image or sound carriers in libraries<br>§ 56b. (1) Facilities accessible to the public (library, image or sound carrier collection and the like) may not use image or sound carriers for public lectures, performances and presentations of the works recorded on them for more than two visitors to the facility, provided this is not for commercial purposes. The author is entitled to reasonable remuneration for this. Such claims can only be asserted by collecting societies.<br>(2) Paragraph 1 does not apply if an image or sound carrier is used that has been produced or distributed in violation of an exclusive right to reproduce or distribute the work recorded on it. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 59 UrhG-A |
| Legal text | Use of Radio Broadcasts<br>§ 59. Broadcasts of literary works and music may be used for public lectures and performances of the broadcast works with the help of loudspeakers if the organiser of such public reproduction has received permission from the responsible collecting society (§3 |

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| | Paragraph 1 VerwGesG 2016). The collecting society shall distribute the remuneration for such authorisations in the same way as the remuneration it receives from a domestic broadcaster for the authorisation to broadcast literary or musical works by radio. |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 7 UrhG-A |
| Legal text | Free works<br>Sect. 7. (1) Laws, ordinances, official decrees, announcements, and decisions as well as official works of the type specified in Section 2 no. 1 or 3 ["literary works, including computer programmes; works of scientific or instructive nature that consist of pictorial representations, provided they do not count as works of fine arts"] produced exclusively or predominantly for official use do not enjoy copyright protection.<br>(2) Map series produced or edited (Section 5(1)) and intended for distribution (Section 16) by the Federal Office for Calibration and Surveying are not free works. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 44(3) UrhG-A |
| Legal text | § 44. (…) (3) Press reports representing simple communications (miscellaneous news, daily news) are not protected by copyright. Section 79 applies to such press reports. |
| **Secondary Publishing Rights** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 37a UrhG-A |
| Legal text | § 37a - Secondary exploitation right of authors of scientific contributions<br><br>The author of a scientific contribution, which was created by him as a member of the scientific staff of a research institution financed at least half with public funds and which has been published in a collection appearing periodically at least twice a year, has the right, even if he has granted the publisher or editor a right to use the work, to make the contribution publicly available in the accepted |

manuscript version after 12 months have elapsed since the first publication, provided that this does not serve any commercial purpose. The source of the first publication must be indicated. Any agreement to the detriment of the author to the contrary shall be invalid.

### 1.4.2. BELGIUM

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article XI.299, §§ 1-3 CDE |
| Legal text | Art. XI.299. § 1. In the absence of specific contractual provisions, the acts referred to in Article XI.298, a) and b), are not subject to the authorisation of the holder, when these acts are necessary to enable the person entitled to use the computer programme, to use it in a manner consistent with its intended purpose, including the correction of errors.<br>§ 2. The person having the right to use the computer programme cannot be prohibited from reproducing it in the form of a back-up copy insofar as this copy is necessary for the use of the programme.<br>§ 3. The person having the right to use the computer programme may, without the permission of the right holder, observe, study or test the operation of this programme in order to determine the ideas and principles which are the basis of an element of the programme, when it performs an operation of loading, displaying, playing, transmitting or storing the computer programme that it is entitled to perform. (...) |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article XI.300 CDE |
| Legal text | Art. XI.300. § 1. The authorisation of the rightsholder is not required when the reproduction of the code or the translation of the form of this code within the meaning of Article XI.298, a) and b), is essential to obtain the information necessary to the interoperability of an independently created computer programme with other programmes and provided that the following conditions are met:<br>(a) the acts of reproduction and translation are performed by a person enjoying the right to use a copy of the programme, or, on its behalf, by a person authorised for this purpose.<br>(b) the information necessary for interoperability is not already easily and rapidly accessible to him.<br>(c) the acts of reproduction and translation are limited to the parts of the original programme necessary for this interoperability.<br>§ 2. The provisions of the preceding paragraph cannot justify that the information obtained by virtue of their application:<br>(a) be used for purposes other than achieving the interoperability of the programme created independently.<br>(b) be communicated to third parties, unless such communication proves necessary for the interoperability of the independently created computer programme.<br>(c) or are used for the development, production or marketing of a computer programme which is substantially similar in expression, or for any other act infringing copyright.<br>§ 3. This Article may not be applied which unreasonably prejudices the legitimate interests of the rightsholder or interferes with the normal operation of the computer programme. |
| **Access to and reuse of databases** | |

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| Relevant EU provision | Article 6 Database |
| Legal provision | Article XI.188 CDE |
| Legal text | Art. XI.188. The lawful user of a database or copies thereof may perform the acts referred to in Article XI.165, § 1 [rights to reproduction, adaptation, translation, making available to the public, renting and lending, and the right to tranfer copyright], which are necessary for access to the contents of the database and its normal use, without the authorisation of the author of the database. Insofar as the lawful user is authorised to use only a part of the database, § 1 applies only to that part.<br>The provisions of paragraphs 1 and 2 shall be binding. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Articles XI.311-XI.314 CDE |
| Legal text | Art. XI.311. The producer of a database which is made available to the public in any way whatsoever cannot prevent the legitimate user of this database from extracting and/or reusing parts, qualitatively or quantitatively, an insubstantial part of its contents for any purpose whatsoever.<br>Insofar as the legitimate user is authorised to extract and/or reuse only part of the database, paragraph 1 applies to this part.<br>Art. XI.312. The legitimate user of a database which is made available to the public in any way whatsoever may not perform acts which conflict with the normal operation of this database or which in any way injure unjustified the legitimate interests of the producer of the database.<br>Art. XI.313. The legitimate user of a database which is made available to the public in any way whatsoever may not prejudice the holder of a copyright or a related right relating to works or of the services contained in this database.<br>Art. XI.314. The provisions of Articles XI.310 to XI.313 are mandatory. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article XI.310, § 1, 1° CDE |
| Legal text | Art. XI.310. § 1. The lawful user of a database which is lawfully made available to the public may, without the authorisation of the maker of the database: 1° extract a substantial part of the contents of a non-electronic database where such extraction is carried out for a strictly private purpose; (...). |

## Access to and reuse of works and other subject-matters

### Research-specific E&Ls

#### Illustration for teaching and scientific research

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| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article XI.191/1, §1er 3° and 4°, and §2 CDE |
| Legal text | Art. XI.191/1. § 1. When the work has explicitly disclosed, and without prejudice to the possible application of Articles XI.189, § 3 and XI.190, 2°, 2/1°, 10°, 12°, 13°, 15°, 16°, 17°, 18° and 19°, the author cannot prohibit: |

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| | (…) 3° the reproduction of works, with the exception of sheet music, for the purpose of illustration for teaching or scientific research, provided that the use is justified by the non-profit purpose pursued and that the use does not prejudice the normal exploitation of the work;<br>4° the communication to the public of works for the purpose of illustrating teaching or scientific research, by establishments officially recognised or organised for that purpose by the public authorities and provided that such communication is justified by the non-profit-making aim pursued, is within the framework of the normal activities of the establishment, is secured by appropriate measures and does not prejudice the normal exploitation of the work; (…).<br>§ 2. In the case of the uses referred to in paragraph 1, the source and the name of the author shall be mentioned, unless this proves impossible. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article XI.190, 3° CDE<br>Article XI.217, 3° CDE |
| Legal text | Art. XI.190. When the work has been lawfully disclosed, the author cannot prohibit:<br>(…) 3° the free and private performance carried out in the family circle; (…).<br>Art. XI.217. Articles XI.205, XI.209, XI.213 and XI.215 are not applicable when the acts referred to by these provisions are performed for the following purposes:<br>(…) 3° free and private performance within the family circle; (…). |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article XI.191/1, 5° CDE |
| Legal text | Art. XI.191/1. § 1. When the work has explicitly disclosed, and without prejudice to the possible application of Articles XI.189, § 3 and XI.190, 2°, 2/1°, 10°, 12°, 13°, 15°, 16°, 17°, 18° and 19°, the author cannot prohibit:<br>(...) 5° the use of literary works of deceased authors in an anthology intended for teaching purposes that does not seek any direct or indirect commercial or economic advantage, provided that the choice of the extract, its presentation and its place respect the moral rights of the author and that an equitable remuneration is paid, to be agreed between the parties or, failing that, to be fixed by the judge in accordance with honest practices; (…)<br>§ 2. In the case of the uses referred to in paragraph 1, the source and the name of the author shall be mentioned, unless this proves impossible. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article XI.196 § 2/1 CDE |
| Legal text | Art. XI.196. (…) § 2/1. The author of a scientific article resulting from research financed for at least half by public funds retains, even if, in accordance with Article XI.167, they have assigned their rights to a publisher of a periodical or have placed them under a simple or exclusive license, the right to make the manuscript freely available to the public after a period of 12 months for the humanities and social sciences and 6 months for the other sciences, after the first publication, in a periodical, with mention of the source of the first publication. The publishing contract may provide for a shorter period of time than that set out in paragraph 1. The King may extend the period fixed in paragraph 1. The right provided for in paragraph 1 cannot be waived. This right is imperative |

and applies notwithstanding the right chosen by the parties if a point of connection is located in Belgium. It also applies to works created before the entry into force of this paragraph and not fallen into the public domain at that time.

| **Text and data mining** | |
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| Relevant EU provision | Article 3 CDSMD |
| Legal provision | **Article XI.191/1, § 1, 7° CDE**<br>**Article XI.191/2, § 1, 3° CDE**<br>**Article XI.217, § 1, 6° CDE**<br>**Article XI.299, § 5 CDE**<br>**Article XI.310, 3° CDE** |
| Legal text | Art. XI.191/1. § 1. When the work has been explicitly disclosed, and without prejudice to the possible application of Articles XI.189, § 3, and XI.190, 2°, 2/1°, 10°, 12°, 13°, 15° , 16°, 17°, 18°, 19°, 20°, and 21°, the author may not prohibit:<br>(...) 7° the reproduction, by research organisations, by libraries accessible to the public, by museums accessible to the public, by archives or by institutions custodians of a cinematographic or sound heritage, with a view to proceeding, for the purposes of scientific research, text and data mining on works to which they have lawful access.<br>These reproductions of works are stored with an appropriate level of security and may be kept for scientific research purposes, including for the verification of research results.<br>The author is authorised to apply measures intended to ensure the security and integrity of the networks and databases where the works are hosted, provided that these measures do not go beyond what is necessary to achieve this goal; (...).<br>§ 2. For the uses referred to in paragraph 1, the source and the name of the author are mentioned, unless this proves impossible.<br>Art. XI.191/2. § 1. By way of derogation from Article XI.191/1 when the database has been lawfully disclosed, the author may not prohibit:<br>(...) 3° the reproduction, by research organisations, by libraries accessible to the public, by museums accessible to the public, by archives or by institutions custodians of a cinematographic or sound heritage, with a view to proceeding, for the purposes of scientific research, text and data mining on databases to which they have lawful access.<br>These database replications are stored with an appropriate level of security and may be retained for scientific research purposes, including verification of research results.<br>The author is authorised to apply measures intended to ensure the security and integrity of the networks and databases where the databases are hosted, insofar as these measures do not go beyond what is necessary. to reach this goal; (...).<br>The use of databases for purposes of illustration of teaching carried out by means of secure electronic environments, as referred to in the preceding sentence, is deemed to take place only in the Member State in which the establishment of teaching is established.<br>§ 2. For the uses referred to in paragraph 1, the source and the name of the author are mentioned, unless this proves impossible.<br>§ 3. Article XI.191/1, § 1, 1°, 2° and 6°, applies by analogy to databases.<br>Art. XI.217/1. Without prejudice to the possible application of Article XI.217, 8°, 9°, 11°, 12°, 14°, 15°, 16°, 17°, 18 °, 19°, and 20°, Articles XI.205, XI.209, XI.213, XI.215 and XI.216/2 are not applicable when the acts referred to in these provisions are performed for the following purposes:<br>(...) 6° the reproduction, by research organisations, by libraries accessible to the public, by museums accessible to the public, by archives or by institutions custodians of a cinematographic or sound heritage, with a view to proceeding, for the purposes of scientific research, text and data mining on services to which they have lawful access. |

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| | These reproductions of performances are stored with an appropriate level of security and may be kept for scientific research purposes, including for the verification of research results.<br>Holders of related rights are authorised to apply measures intended to ensure the security and integrity of the networks and databases where the services are hosted, provided that these measures do not go beyond what is necessary. to reach this goal; (...).<br>Art. XI.299. (...) § 5. The authorisation of the rightsholder is not required for reproductions of accessible works in a lawful manner, within the meaning of Article XI.298, a) and b), for the purposes of text and data mining, provided that the use of these works has not been expressly reserved by the appropriately entitled.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These reproductions may be kept for as long as necessary for the purposes of text and data mining. (...).<br>Art. XI.310. (...) § 3. The producer's authorisation is not required for:<br>(...) 2° the extraction of the content of a lawfully accessible database, including works or services, for the purposes of text and data mining, provided that the use of the content of a database has not been expressly reserved by the database producers in an appropriate manner.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These extractions may be kept for as long as necessary for the purposes of text and data mining. (...) |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | **Article XI.190, 20° CDE**<br>**Article XI.217, § 1, 7° CDE**<br>**Article XI.299, § 5 CDE**<br>**Article XI.310, § 3, 2° CDE** |
| Legal text | Art. XI.190. When the work has been lawfully disclosed, the author may not prohibit:<br>(...) 20° the reproduction of works, lawfully accessible, for the purposes of text and data mining, provided that the use of these works has not been expressly reserved by the author in an appropriate manner.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These reproductions may be kept for as long as necessary for the purposes of text and data mining; (...).<br>Art. XI.217. § 1. Articles XI.205, XI.209, XI.213, XI.215 and XI.216/2 are not applicable when the acts referred to in these provisions are performed for the following purposes:<br>(...) 19° the reproduction of services lawfully accessible for the purposes of text and data mining, provided that the use of these services has not been expressly reserved by the holders of related rights in an appropriate manner.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These reproductions may be kept for as long as necessary for the purposes of text and data mining; (...). |

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| | Art. XI.299. (...) § 5. The authorisation of the rightsholder is not required for reproductions of accessible works in a lawful manner, within the meaning of Article XI.298, a) and b), for the purposes of text and data mining, provided that the use of these works has not been expressly reserved by the appropriately entitled.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These reproductions may be kept for as long as necessary for the purposes of text and data mining. (...).<br>Art. XI.310. (...) § 3. The producer's authorisation is not required for:<br>(...) 2° the extraction of the content of a lawfully accessible database, including works or services, for the purposes of text and data mining, provided that the use of the content of a database has not been expressly reserved by the database producers in an appropriate manner.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These extractions may be kept for as long as necessary for the purposes of text and data mining. (...). |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article XI.189, § 1er CDE<br>Article XI.217, 1° CDE |
| Legal text | Art. XI.189. § 1. Quotations, taken from a lawfully published work, made for the purpose of criticism, polemic, or review, in accordance with the honest practices of the profession and to the extent justified by the purpose, do not infringe copyright.<br><br>The quotations referred to in the previous paragraph must mention the source and the name of the author, unless this is impossible. (...)<br><br>Art. XI.217. Articles XI.205 [reproduction of performances], XI.209 [reproduction of phonograms and cinematographic works], XI.213 [use of performances and phonograms] and XI.215 [reproduction, making available and communication to the public of broadcasts] shall not apply where the acts referred to in those provisions are performed for the following purposes:<br>1° quotations taken from a performance, carried out for the purpose of criticism, polemic or review, in accordance with the honest practices of the profession and to the extent justified by the aim pursued; (...). |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article XI.191/1, § 1er, 1°, and § 2 CDE<br>Article XI.191/2 § 3 CDE<br>Article. XI.217/1, 1° CDE |
| Legal text | Art. XI.191/1, § 1. Where the work has been explicitly disclosed, and without prejudice to the possible application of Articles XI.189, § 3 and XI.190, 2°, 2/1°, 10°, 12°, 13°, 15°, 16°, 17°, 18° and 19°, the author may not prohibit:<br>1° quotations made for teaching purposes or in the context of scientific research, in accordance with honest practices and to the extent justified by the aim pursued: (...) |

§ 2. In the case of the uses referred to in paragraph 1, the source and the name of the author shall be mentioned, unless this proves impossible.

Art. XI. 191/2. (…) § 3. Article XI.191/1, § 1, 1°, 2° and 6°, applies by analogy to databases.

Art. XI.217/1. Without prejudice to the possible application of Article XI.217, 8°, 9°, 11°, 12°, 14°, 15°, 16°, 17° and 18°, Articles XI.205 [reproduction of performances], XI.209 [reproduction of phonograms and cinematographic works], XI.213 [use of performances and phonograms] and XI.215 [reproduction, making available and communication to the public of broadcasts] shall not apply where the acts referred to in those provisions are carried out for the following purposes:
1° quotations drawn from a service provided for teaching purposes or in the context of scientific research, in accordance with the honest practices of the profession and to the extent justified by the purpose pursued; (...).

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| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article XI.228/6, § 1 CDE |
| Legal text | Art. XI.228/6. § 1. The cooperation referred to in Article XI.228/5 between online content sharing service providers and rightsholders does not prevent the making available of works or services uploaded by users who do not infringe copyright and related rights, including when these works or services are covered by an exception or limitation.<br><br>§ 2. The application of this Chapter does not give rise to any general monitoring obligation. |

**Private study**

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| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article XI.190, 13° CDE<br>Article XI.217, 12° CDE |
| Legal text | Art. XI.190. When the work has been lawfully disclosed, the author cannot prohibit:<br>(...) 13° the communication, including by making available to individuals, for the purposes of research or private study, of works that are not offered for sale or subject to licensing conditions, and that form part of the collections of publicly accessible libraries, educational and scientific institutions, museums or archives that do not seek any direct or indirect commercial or economic advantage, by means of special terminals accessible on the premises of such institutions; (...).<br><br>Art. XI.217. Articles XI.205 [reproduction of performances], XI.209 [reproduction of phonograms and cinematographic works], XI.213 [use of performances and phonograms] and XI.215 [reproduction, making available and communication to the public of broadcasts] are not applicable when the acts referred to in these provisions are performed for the following purposes:<br>(...) 12° the communication and making available to individuals, for the purposes of research or private study, of services which are not offered for sale or subject to licensing conditions and which are part of the collections of libraries accessible to the public, educational and scientific establishments, museums or archives which do not seek any direct or indirect commercial or economic advantage, by means of special terminals accessible on the premises of such establishments; (...). |

| Preservation of cultural heritage | |
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| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article XI.190, 12° CDE<br>Article XI.217, 11° CDE |
| Legal text | Art. XI.190. When the work has been lawfully disclosed, the author cannot prohibit:<br>(...) 12° reproduction limited to a number of copies determined according to and justified by the purpose of preserving the cultural and scientific heritage, carried out by libraries accessible to the public, museums or archives, which do not seek any direct or indirect commercial or economic advantage, provided that this does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.<br><br>The materials thus produced remain the property of these institutions, which shall refrain from any commercial or profit-making use.<br><br>The author may have access to them, in strict compliance with the preservation of the work and in return for a fair remuneration for the work performed by these institutions; (...).<br><br>Art. XI.217. Articles XI.205 [reproduction of performances], XI.209 [reproduction of phonograms and cinematographic works], XI.213 [use of performances and phonograms] and XI.215 [reproduction, making available and communication to the public of broadcasts] are not applicable when the acts referred to in these provisions are performed for the following purposes:<br>(...) 11° reproduction limited to a number of copies determined according to and justified by the purpose of preserving the cultural and scientific heritage, carried out by libraries accessible to the public, museums or archives, and film and audio heritage institutions, which do not seek any direct or indirect commercial or economic advantage, provided that this does not conflict with a normal exploitation of the performance and does not unreasonably prejudice the legitimate interests of the holders of related rights.<br><br>The materials thus produced remain the property of these institutions, which shall refrain from any commercial or profit-making use.<br><br>The holders of neighbouring rights will be able to have access to them, in strict compliance with the preservation of the work and in return for a fair remuneration for the work carried out by these institutions; (...). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article XI.191/2, § 1 CDE<br>Article XI.217, 11° CDE<br>Article XI.299, § 7 CDE<br>Article XI.310, § 5 CDE |
| Legal text | Art. XI.217. Articles XI.205, XI.209, XI.213, XI.215 and XI.216/2 are not applicable when the acts referred to in these provisions are performed for the following purposes:<br>(...) 11° reproduction in any form or on any medium whatsoever, justified by the aim of preserving the cultural and scientific heritage, carried out by publicly accessible libraries, publicly accessible museums, by archives or by institutions holding a cinematographic or sound heritage; (...). |

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| | Art. XI.299. (...) § 7. The authorisation of the beneficiary is not required for the acts referred to in Article XI.298, a), when these acts, in any form or on any medium whatsoever, are carried out by libraries accessible to the public, by museums accessible to the public, by archives or by institutions custodians of a cinematographic or sound heritage, on works which are permanently in their collections, (...).<br><br>Art. XI.310. (...) § 5. The authorisation of the producer is not required for the extraction and/or reuse of the content of a database, in any form or on any medium whatsoever, which is carried out by accessible libraries to the public, by museums accessible to the public, by archives or by institutions custodians of cinematographic or sound heritage, on the content of databases, including works or performances, which are permanently in their collections, for the purposes of preserving such content of a database and to the extent necessary for such preservation. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Secondary Publishing Right** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article XI.196 § 2/1 CDE |
| Legal text | Art. XI.196. (…) § 2/1. The author of a scientific article resulting from research financed for at least half by public funds retains, even if, in accordance with Article XI.167, they have assigned their rights to a publisher of a periodical or have placed them under a simple or exclusive license, the right to make the manuscript freely available to the public after a period of 12 months for the humanities and social sciences and 6 months for the other sciences, after the first publication, in a periodical, with mention of the source of the first publication. The publishing contract may provide for a shorter period of time than that set out in paragraph 1. The King may extend the period fixed in paragraph 1. The right provided for in paragraph 1 cannot be waived. This right is imperative |

and applies notwithstanding the right chosen by the parties if a point of connection is located in Belgium. It also applies to works created before the entry into force of this paragraph and not fallen into the public domain at that time.

### 1.4.3. BULGARIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 70 and Article 71 paragraphs (1) and (2) of the Bulgarian Copyright Act |
| Legal text | Article 70. Unless otherwise agreed, it is considered that the person who has legally acquired the right to use a computer programme can load the programme, display it on a screen, execute it, transmit it remotely, store it in the memory of a computer, translate, reuse and make other changes to it, if such actions are necessary to achieve the purpose for which the right to use the programme was acquired, including the correction of errors.<br>Article 71. The person who has legally acquired the right to use a computer programme may, without the consent of the author and without payment of a separate fee:<br>1. prepare a back-up copy of the programme, if this is necessary for the respective type of use for which the programme was acquired.<br>2. observe, study and test the operation of the programme to determine the ideas and principles underlying any of its elements, if this happens in the process of loading the programme, rendering and on the screen, executing and, transmitting and at a distance or the storage and in the computer memory provided that he has the right to perform these actions in accordance with Article 70; (...). |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 71(3) of the Bulgarian Copyright Act |
| Legal text | Article 71. The person who has legally acquired the right to use a computer programme may, without the consent of the author and without payment of a separate fee: (...)<br>3. (suppl. - SG No. 28 of 2000, entered into force on 05.05.2000) translate the programme code from one form to another, if this is absolutely necessary to obtain information to achieve compatibility of created computer programme with other programmes, provided that the information necessary for this purpose has not been provided in ready form and that this is done only in respect of those parts of the computer programme which are necessary to achieve interoperability. The obtained information may not be used to create and distribute a computer programme insignificantly different from the programme whose programme code is being translated, as well as for any other action that may infringe copyright on the programme. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 93e(1) of the Bulgarian Copyright Act |

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| Legal text | Article 93e. (New - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) (New - SG No. 99 of 2005, entered into force on 10.01.2006) The person who has legally acquired the right to use a database or a copy of it, may freely perform the actions under Article 18, paragraph 2, items 1, 2, 3, 4, 5, 7 and 8 with it, as well as actions related to the results possibly obtained from the translation, processing and any other changes it has made with it, when this is necessary to access the content of the database and for normal use. Where that person is entitled to use only part of the database, this provision applies only in respect of that part. (...)<br>(3) (SG No. 99 of 2005, entered into force on 10.01.2006) The legal user of a database that has been disclosed in any way may not perform actions, which contradict the normal and use or damage the legitimate interests of the author and/or maker of the database.<br>(4) (SG No. 99 of 2005, entered into force on 10.01.2006) The legal user of a database that has been disclosed in any way may not damage the rights of the holder of a copyright or related right to the works or other objects contained therein.<br>(5) (New - SG No. 99 of 2005, entered into force on 10.01.2006) Any arrangement contrary to the provisions of paragraphs 1, 2, 3 and 4 is void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 93e(2) of the Bulgarian Copyright Act |
| Legal text | Article 93e. (New - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) (New - SG No. 99 of 2005, entered into force on 10.01.2006) (...)<br>(2) (SG No. 99 of 2005, entered into force on 10.01.2006) When a database has been disclosed in any way whatsoever, the maker of the database cannot prevent the extraction or the reuse of a non-essential part of the content and for any purposes by the lawful user. If the lawful user has the right to extract or reuse only a part of the database, this provision applies only to that part.<br>(3) (SG No. 99 of 2005, entered into force on 10.01.2006) The legal user of a database that has been disclosed in any way may not perform actions, which contradict the normal and use or damage the legitimate interests of the author and/or maker of the database.<br>(4) (SG No. 99 of 2005, entered into force on 10.01.2006) The lawful user of a database that has been disclosed in any way may not damage the rights of the holder of a copyright or related right to the works or other objects contained therein.<br>(5) (New - SG No. 99 of 2005, entered into force on 10.01.2006) Any arrangement contrary to the provisions of paragraphs 1, 2, 3 and 4 is void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Access to and reuse of works and other subject-matters** | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |

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| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 24(1)(3) of the Bulgarian Copyright Act |
| Legal text | Article 24. (Amended - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) Without the consent of the copyright holder and without payment of remuneration, it is permissible: (...) 3. to non-commercial use of parts of published works or of a small number of works in other works to the extent necessary for analysis, commentary or other type of scientific research; such use is permissible only for scientific and educational purposes, by giving reference to the source and the name of the author, unless this is impossible; (...). |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 26g of the Bulgarian Copyright Act |
| Legal text | Automated text and data analysis for scientific research<br>Article 26g. (1) Anyone who has lawful access to a work or other subject matter is permitted to use such work and other subject matter for automated text and data analysis for research purposes under this Article and without the authorization or remuneration of the rightsholders.<br>(2) The use under paragraph 1 can be carried out digitally or in digital form only through the following actions and to the extent they are necessary for the purposes of reproduction or extraction for automated text and data analysis:<br>1. reproduction of works or parts thereof.<br>2. reproduction, extraction or reuse within the meaning of Article 93c of databases or parts thereof.<br>(3) The provisions of paragraphs 1 and 2 apply to the following persons:<br>1. universities and their libraries.<br>2. scientific and research institutes, as well as hospitals that conduct scientific research.<br>3. publicly accessible libraries, museums and archive institutions.<br>4. film and audio heritage institutions subject to the Law on the National Archive Fund.<br>5. organizations whose main activity is conducting scientific research or conducting educational activities including scientific research, as well as associations including such organizations, provided that these organizations or their associations:<br>a) carry out a non-profit activity for the public benefit, or<br>b) reinvest all profits from their activities in the scientific research they conduct, or<br>c) act in the public interest recognized by a Member State, including if they are financed with public funds or through public-private partnerships.<br>(4) The provisions of paragraphs 1 and 2 do not apply to organizations and their associations over which a business enterprise exercises control within the meaning of the Commercial Law or otherwise influences and is able to enjoy privileged access to the results of scientific research.<br>(5) The persons listed in paragraph 3 have the right to store the results of the actions listed in paragraph 2, as well as to grant third parties access to them for the purposes and the period of conducting the scientific research, including the verification and evaluation of research results. |

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| | (6) The persons listed in paragraph 3 are obliged to use appropriate technical measures to protect the information stored by them under the conditions of paragraph 5.<br>(7) The provisions of this Article do not affect the application of Article 26e and cannot be limited by that provision.<br>(8) The provisions of this Article do not apply to computer programmes. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 26f of the Bulgarian Copyright Act |
| Legal text | Automated text and data analysis<br>Article 26f. (1) Anyone who has lawful access to a work or other subject matter is permitted to use such work and other subject matter for automated text and data analysis under this Article and without the authorization or remuneration of the rightsholders.<br>(2) The use under paragraph 1 can be carried out digitally or in digital form only by the following actions, to the extent they are necessary for the purposes of reproduction or extraction for automated text and data analysis:<br>1. reproduction of works or parts thereof.<br>2. reproducing, translating, reworking computer programmes or making other changes thereto.<br>3. reproduction, extraction or reuse within the meaning of Article 93c of databases or parts thereof.<br>(3) The persons listed in paragraph 1 have the right to store the results of the actions under paragraph 2, as long as this is necessary for the purposes of automated text and data analysis.<br>(4) Rightsholders may prohibit the use of works, other protected subject matter or parts thereof under the conditions of paragraphs 1 and 2 before they are made available. In the case of objects to which electronic access has been granted, the prohibition shall have effect only if it is established by technical means recognisable by the software carrying out automated text and data analysis. |
| **General E&Ls complementary to research-specific E&Ls** | |
| Temporary reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Article 24(1)(1) of the Bulgarian Copyright Act |
| Legal text | Article 24. (Amended - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) Without the consent of the copyright holder and without payment of remuneration, it is permissible:<br>1. (suppl. - SG No. 99 of 2005, entered into force on 10.01.2006) to have temporary reproduction of works, if it is of a transitory or incidental nature, has no independent economic significance, constitutes an indivisible and essential part of the technical process and is made for the sole purpose of allowing:<br>a) network transmission through an intermediary, or<br>b) other lawful use of a work; (...). |
| Quotation | |

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| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 24(1)(2) of the Bulgarian Copyright Act |
| Legal text | Article 24. (Amended - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) Without the consent of the copyright holder and without payment of remuneration, it is permissible: (...) 2. to quote from a lawfully published work for the purposes such as criticism or review, by indicating the source and the name of the author, unless this is impossible; the quotation must conform with common practice and be to the extent justified by the purpose; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 24(1)(11) of the Bulgarian Copyright Act |
| Legal text | Article 24. (Amended - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) Without the consent of the copyright holder and without payment of remuneration, it is permissible: (...) 11. to grant access to natural persons to works located in the collections of organisations within the meaning of item 9 [publicly accessible libraries, educational or research institutions, museums and archives], provided that it is carried out for scientific purposes and is not of a commercial nature; (...). |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 24(1)(9) of the Bulgarian Copyright Act |
| Legal text | Article 24. (Amended - SG No. 77 of 2002, entered into force on 01.01.2003)<br>(1) Without the consent of the copyright holder and without payment of remuneration, it is permissible: (...) 9. (amended - SG No. 99 of 2005, entered into force on 10.01.2006) to reproduce works that have been made available by publicly accessible libraries, educational or other research institutions, museums and archives, for educational purposes or with the purpose of storing the work, if it does not serve commercial purposes; (...). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 26з of the Bulgarian Copyright Act |
| Legal text | Free use for the preservation of cultural heritage |

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| | Article 26з. (1) The use of works and other subject matter by or under the control and responsibility of publicly accessible libraries, educational institutions, museums, archival institutions and film and audio heritage institutions subject to the National Archives Act is permitted without the authorization and remuneration of the rightsholder.<br>(2) The use under paragraph 1 can be carried out digitally or in digital form, to the extent necessary for the preservation and storage of works and other subject matter that are in the permanent collections of the relevant organization, unless such use is for commercial purposes and if it is carried out through the following actions:<br>1. reproduction of works or parts thereof.<br>2. reproduction, extraction or reuse within the meaning of Article 93c of databases or parts thereof. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Article 4(5) of the Bulgarian Copyright Act |
| Legal text | Article 4. The following are not subject to copyright:<br>(…) 5. materials obtained by the reproduction of works under Article 3, paragraph 1, sub-paragraphs 5-10 whose term of copyright protection has expired. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 4 of the Bulgarian Copyright Act |
| Legal text | Article 4. The following are not subject to copyright:<br>1. (suppl. - SG No. 21 of 2014) normative and individual acts of State management bodies, the acts of the courts, as well as their official translations.<br>2. ideas and concepts.<br>3. works of folklore.<br>4. news, facts, information and data. |

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| | 5. materials obtained by the reproduction of works under Article 3, paragraph 1, sub-paragraphs 5-10* whose term of copyright protection has expired.<br><br>*These materials are:<br>(5) works of fine art, including works of applied art, desings, folk arts and crafts,<br>(6) works of architecture and the layout plans thereof,<br>(7) photographic works and works created in a manner analogous to photography,<br>(8) architectural projects, structural planning projects, maps, schemes, plans and other documents related to architecture, geography, topography, museum objects in any field of science and technology,<br>(9) typography of printed publications,<br>(10) cadastral maps and topographic maps of the State. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 34 of the Bulgarian Copyright Act |
| Legal text | Use of a work after the expiration of copyright protection<br>Article 34. After the copyright protection has expired, the works may be used freely, without any prejudice to the rights under Article 15, paragraph 1, subparagraphs 4 and 5, which continue indefinitely. The authority mentioned in Article 33 [Ministry of Culture] monitors compliance with these rights and may exceptionally authorize changes to the work. |
| **Secondary Publishing Right** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 60(2)-(3) of the Bulgarian Copyright Act |
| Legal text | Article 60. (…) (2) The author of a work of scientific literature, which has been created as the result of publicly-funded research, in whole or in part, shall retain the right to make that work or parts thereof available to the public in educational or scientific repositories for non-commercial purposes after its acceptance for publication by a publisher, and the author as such shall be obliged to mention the publisher when doing so.<br>(3) Any arrangement which prevents or restricts the right enshrined in paragraph 2 shall be null and void. |

### 1.4.4. CROATIA

| **Access to and reuse of computer programmes** | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 208(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 208 (1) A lawful user of a computer programme is allowed, without the authorisation of the rightsholder and without payment of a fee: |

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| | - to reproduce and process the computer programme if this is necessary for the use of the computer programme in accordance with its intended purpose, including for the correction of errors.<br>- to create a backup copy of the computer programme, if this is necessary for the use of the programme.<br>- to observe, study or examine the operation of the computer programme in order to determine the ideas and principles on which any element of the programme is based, if they do so when performing any of the actions of loading, displaying, executing, transferring or storing the computer programme, which they are authorised to undertake.<br>(2) Contractual provisions contrary to the provisions of this Article are null and void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 209(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 209(1) The lawful user of a computer programme, to whom data for achieving the interoperability of the computer programme was not previously available, is permitted, without the authorisation of the right holder and without payment of compensation, to reproduce the code of the computer programme and to translate its form, as long as this is necessary to obtain the data necessary to achieve the interoperability of an independently created computer programme with other programmes, and if these actions are limited to only those parts of the original programme that are necessary to achieve interoperability.<br>(2) Data obtained in the manner described in paragraph 1 of this Article may not be:<br>- used for purposes other than achieving interoperability of an independently created computer programme.<br>- transfered to others, except when it is necessary to achieve interoperability of an independently created programme.<br>- used for the development, production or promotion of another programme, essentially similar in its expression, or for any other action that causes copyright infringement.<br>(3) Contractual provisions contrary to the provisions of this Article are null and void. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 210(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 210. (1) The lawful user of an author's database or a copy thereof is allowed, without the authorisation of the rightsholder and without paying a fee, to perform any act of use that is necessary for accessing the content of the database or its regular use.<br>(2) If the user is authorised to use only part of the database, paragraph 1 of this Article applies only to that part of the database.<br>(3) Contractual provisions contrary to the provisions of this Article are null and void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 176(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 176(1) A lawful user of a published non-original database may use minor parts of its content for any purpose. If they are authorised only to use a certain part of the database, this paragraph applies only to that part.<br>(2) An authorised user of a non-original database made available to the public may not perform actions that are contrary to the usual use of that database or that unreasonably harm the legitimate interests of the database maker.<br>(3) The authorised user of the published non-original database may not harm the authors and holders of related rights with regard to copyright works and objects of related rights included in that database.<br>(4) Contractual provisions contrary to the provisions of this Article are null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 211 Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |

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| Legal text | Art. 211. A lawful user of a published non-electronic, non-original database is permitted, without the authorisation of the rightsholder and without payment of compensation, to extract and reuse the database for private purposes. |
| **Access to and reuse of works and other subject-matters** | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 198 Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 198. (...) (2) It is permitted, without the approval of the rightsholder and without payment of compensation, to use copyrighted works and other subject-matters protected by related rights, for the purpose of giving examples in teaching or in scientific research, which is justified by the non-commercial purpose to be achieved, with the fact that the source must be indicated and the name of the author or other rightsholder, unless this proves impossible.<br>(3) Giving examples for teaching includes the use of copyrighted works and other subject-matter protected by related rights, as a rule, in parts or in clips, for the purpose of supporting, enriching, or supplementing teaching and teaching activities inside and outside the premises of educational institutions.<br>(4) Non-commercial purpose implies the non-commercial purpose of an individual teaching activity, whereby the organisational structure and means of financing the educational institution are not decisive for determining whether an individual teaching activity is of a non-commercial nature.<br>(5) The exception provided for in this Article applies in an appropriate manner also to lifelong education activities carried out by state institutions, public institutions and other entities that are authorised to undertake such activities. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 187(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 187. (1) Reproduction of works of authorship, including author's databases, and other subject-matter protected by related rights, extracting parts of the content and actions or reusing all or a significant part of the content of a non-original database, is permitted without the authorisation of the rightsholder and without payment of compensation, to be carried out by scientific organisations and cultural heritage institutions for text and data mining and for the purposes of scientific research, as long as the beneficiaries had legal access to copyrighted works and other subject matter protected by related rights.<br>(2) A scientific organisation is a university, including its libraries, a scientific institute or institute, a component of a university, a hospital that conducts research or any other entity whose main goal is to conduct scientific research or conduct educational activities that include conducting scientific research on a non-profit basis, or by reinvesting all profits in scientific research or in accordance with the mission of public interest recognised by the Republic of Croatia (for example, through public financing or a special law or public contracts), in such a way that access to the results obtained from such scientific research cannot be obtained on a privileged basis by an entrepreneur who exerts a decisive influence on such an organisation.<br>(3) A cultural heritage institution is a publicly accessible library or museum, archive or film or audiovisual heritage institution. This includes national libraries and national archives, as well as archives and publicly accessible libraries of educational institutions, scientific organisations and public broadcasting organisations.<br>(4) Text and data mining means any automated analytical technique whose goal is to analyse text and data in digital form to create data, which includes patterns, trends, and correlations. |

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| | (5) Legal access means access to content protected by copyright or related rights, which is based, among other things, on a contractual relationship between the rightsholder and scientific organisations and cultural heritage institutions, which can be a subscription relationship, a relationship based on an open access policy or on other legal ways of gaining access to content protected by copyright or related rights. It is considered that all persons covered by subscriptions and usage agreements have legal access due to their connection with scientific organisations and cultural heritage institutions.<br>(6) Scientific organisations and cultural heritage institutions shall store the results of reproduction and extraction created in accordance with paragraph 1 of this Article with an appropriate level of security and may retain them for the purposes of scientific research, including for checking the results of scientific research.<br>(7) Rightsholders may apply measures to ensure the security and integrity of networks and databases on or in which works, and other subject-matter protected by related rights are located, such as IP address verification measures or user authentication procedures. These measures must be proportionate to the risks involved and shall not exceed what is necessary to achieve the goal of ensuring the security and integrity of the system, and they must not jeopardise the effectiveness of the application of the restrictions from paragraph 1 of this Article.<br>(8) Rightsholders, scientific organisations and cultural heritage institutions shall cooperate in order to agree on the best practices related to the application of obligations from paragraph 6 and measures from paragraph 7 of this Article.<br>(9) Contractual provisions contrary to this Article are null and void. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 188(1) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 188. (1) Reproduction of author's works, including reproduction of author's databases and computer programmes, and processed computer programmes in the sense of Article 15, Paragraph 1 of this Act, as well as related rights; extracting parts of the content and the reusing the entire or a significant part of the content of a non-original database, is permitted.<br>(2) The results of reproduction and extraction referred to in paragraph 1 of this Article may be stored as long as it is necessary to achieve the purpose of text and data mining.<br>(3) The exception provided for in paragraph 1 of this Article refers to works of authorship and other subject-matter protected by related rights that can be legally accessed and on the condition that the rights to use them have not been expressly reserved in an appropriate manner by their right holders.<br>(4) Suitable ways of preserving rights can be: a machine-readable way that includes metadata, general terms and conditions related to the web pages and the service, contractual provisions or unilateral statements of the rightsholder.<br>(5) When it comes to copyright works and objects of related rights that have been made available to the public on the Internet, the only appropriate way of maintaining rights is a machine-readable way that includes metadata and general conditions related to the web pages or service. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 202 Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 202. It is permitted, without the approval of the rightsholder and without payment of compensation, to quote excerpts of the author's work (citations) or of other subject matters protected by related rights, is such have become legally accessible to the public, and as long as such quotations are for the purpose of scientific research, teaching, criticism, polemics, reviews, and the like, and |

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| | to the extent justified by the purpose to be achieved and in accordance with good customs, by including the source and the name of the author, if this is possible considering the way of use. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 191 Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |
| Legal text | Art. 191. (1) It is permitted for cultural heritage institutions from Article 187, paragraph 3 of this Act, without the authorisation of the rightsholder and without payment of compensation, to reproduce works of authorship and other subject-matter protected by related rights that are a permanent part of their collections, in any format or on any medium, for the purpose of their preservation and to the extent necessary for this purpose.<br>(2) Copyrighted works and other subject-matter protected by related rights are considered to be part of the collections of cultural heritage institutions in cases where copies of these works and objects of related rights are owned by the cultural heritage institution or are permanently held by it on the basis of a contract for use, deposit or permanent loan, or similar contractual relationship.<br>(3) Contractual provisions contrary to the provisions of this Article are null and void. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 18(7) Copyright and Related Rights Act of 30 October 2003 (as last amended in 2021) |

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| Legal text | Art. 18. (...) (7) Literary and artistic creations of folklore, as in their original form, are not the subject of copyright; however, a fee is to be paid for the communication of such creations to the public. The fee is used to encourage artistic and cultural creativity of a predominantly non-commercial nature and cultural diversity in the appropriate artistic and cultural area in accordance with Article 245, paragraph 4 of this Act. Compensation must be collected collectively. Cultural heritage institutions mentioned in Article 187, paragraph 3 of this Act [publicly accessible institutions] are not obliged to pay compensation. |

### 1.4.5 CYPRUS

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 7B(4) of the Cypriot Copyright Act |
| Legal text | Article 7B. (...) (4) Subject to the exceptions provided for in subSection (2) of Article 7, the lawful user is allowed to carry out, without the permission of the author and without payment of remuneration, the following acts:<br>(a) As long as there is no contrary agreement, it is permitted to perform the permanent or temporary reproduction, translation, adaptation, or any other transformation of the computer programme and reproduction of its results, when these operations are necessary for the intended use of the computer programme by the person who legally acquired it, including the correction of errors.<br>(b) To produce a back-up copy of the computer programme, to the extent that such copy is necessary for the lawful use of the programme. Any agreement to the contrary is void.<br>(c) To monitor, study or test the operation of the programme in order to identify the ideas and principles underlying any of its elements, provided that such actions are performed during the act of loading, displaying on the screen, executing, transferring or computer programme storage. Any agreement to the contrary is void.<br>(d) Reproduction for non-private use, as well as for private use beyond the cases mentioned above in paragraphs (b) and (c), is not permitted.<br>(e) In the commercial lending to the public of computer programmes where the programme itself is not the essential object of the lending. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 7(5)(a) of the Cypriot Copyright Act |
| Legal text | Article 7. (...) (5)(a) It is permitted for the lawful user, or the authorised third parties, to reproduce the code and modify its form within the meaning of paragraphs (a) and (c) of subSection (4), if such actions are necessary in order to obtain the information necessary for the interoperability with other programmes of an independently created programme, and provided that the information necessary for the interoperability was not already easily and quickly accessible to the legitimate user and operations are limited to those parts of the original programme necessary for such interoperability.<br>(b) The information obtained during the decompilation provided for in paragraph (a) shall not:<br>(i) be used for purposes other than achieving interoperability of the independently created computer programme.<br>(ii) be disclosed to other persons except as required for the interoperability of the independently created computer programme.<br>(iii) be used to process, produce or market a computer programme, the expression of which bears significant similarities to the original programme, or for any other act that infringes the intellectual property of the creator. |

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| | (c) The provisions of this subSection cannot be interpreted in such a way as to affect the normal exploitation of the programme or to make it possible to cause unjustified damage to the legitimate interests of the rightsholder, as these terms are understood in accordance with the provisions of the Berne Convention.<br>(d) Agreements contrary to those defined in paragraphs (a), (b) and (c) above are void. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 7C(2)(b) of the Cypriot Copyright Act |
| Legal text | Article 7C. (...) (2) (...) (b)(i) Subject to the exceptions provided for in subSection (2) of Article 7, the lawful user of a database or its copies thereof may, without the permission of the author of the database, perform any of the acts listed in paragraph (a) [temporary or permanent reproduction of the database by any means and form, in whole or in part; translation, adaptation, arrangement and any other transformation of the database; any form of distribution of the database or copies thereof to the public; display or presentation of the database to the public; any reproduction, distribution, communication, display or presentation], which are necessary for accessing the content of the database and the normal use of the database.<br>(ii) If the lawful user is authorised to use only a part of the database, then the exception applies only to that part.<br>(iii) Any agreement contrary to the above is void.<br>(c) The use of a database in the context of the exceptions provided for in subSection (2) of Article 7 and in paragraph (b) may not unreasonably affect the legitimate interests of the beneficiary or conflict with the normal exploitation of the database, as the above terms are understood according to the Berne Convention. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 7C(3)(b) of the Cypriot Copyright Act |
| Legal text | Article 7C. (…) (3) (...) (b) Subject to the provisions of paragraph (c) below, the maker of a database which has in any way been made available to the public may not prevent the lawful user of the database, or, if the lawful user is authorised to use only a certain part of the database, then the lawful user of that part to: (...)<br>(ii) Extract and/or reuse non-essential parts of the content of an electronic database, evaluated qualitatively or quantitatively.<br>(...) The lawful user of a database, which has been made available to the public in any way, is not entitled to (...)<br>(iii) repeatedly and systematically extracts and/or reuses non-essential parts of the content of the database, as long as this involves carrying out actions that conflict with the normal exploitation of the database or unreasonably harm the legal interests of the database creator. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 7(3)(iii) of the Cypriot Copyright Act |
| Legal text | Article 7. (...) (3) (...) (iii) To extract and/or reuse part of the content of an electronic database, regardless of whether it is material or non-material, provided that such use is:<br>(a) For private purposes, (...).<br>The lawful user of a database, which has been made available to the public in any way, is not entitled to:<br>**(i)** Perform acts that conflict with the normal exploitation of this base or unjustifiably affect the legitimate interests of its maker; (...). |

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| | (b) For educational or research purposes, as long as the source is mentioned, and as long as the extraction and/or reuse does not exceed the extent justified by the intended non-commercial purpose, (...).<br>The legal user of a database, which has been made available to the public in any way, is not entitled to:<br>(i) Perform acts that conflict with the normal exploitation of this base or unjustifiably affect the legitimate interests of its author; (...).<br>(c) extraction and/or reuse for reasons of public safety or for purposes of administrative or judicial proceedings. (...)<br>The lawful user of a database, which has been made available to the public in any way, is not entitled to:<br>(i) Perform acts that conflict with the normal exploitation of this base or unjustifiably affect the legitimate interests of its creator; (...). |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 7(2)(r) of the Cypriot Copyright Act |
| Legal text | Article 7. (…) (2) Copyright does not include the right to control: (...)<br>(r) any use for the purpose of illustration only for teaching or scientific research, as long as the source is mentioned, including the name of the author, unless this proves to be impossible and if it is justified by non-commercial purpose; (...). |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 24 of the Cypriot Copyright Act |
| Legal text | Text and data mining for scientific research purposes<br>Article 24. (1) Irrespective of the exclusive rights in respect of the acts provided for in sub-paragraphs (i) and (vii) of paragraph (a) of subSection (1) of Article 7, in sub-paragraph (i) of paragraph (a) of of subSection (2) and paragraph (a) of subSection (3) of Article 7C and Article 7F, the reproductions and extractions made by research organisations and cultural heritage institutions, in order to carry out, for the purposes of scientific research, text and data mining of works or other subject matter, to which they have lawful access, is permitted.<br>(2) Copies of works or other subject matter made in compliance with the subSection (1), shall be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results.<br>(3)(a) Rightsholders are allowed to implement measures to ensure the security and integrity of the networks and databases where the works or other subject matter are hosted.<br>(b) The measures provided for in this subSection shall not exceed the measure necessary to achieve the purpose referred to in paragraph (a).<br>(4) Rightsholders, research organisations and cultural heritage institutions may determine commonly accepted best practices regarding the implementation of the obligation and measures provided for in subSections (2) and (3) respectively. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 25 of the Cypriot Copyright Act |
| Legal text | Exception or Limitation for Text and Data Mining |

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| | Article 25. (1) Regardless of the exclusive rights in respect of the acts provided for in subparagraphs (i) and (vii) of paragraph (a) of subSection (1) of Article 7, in subSection (3) of Article 7B, in subSections (i), (ii), (iv) and (v) of paragraph (a) of subSection (2) and paragraph (a) of subSection (3) of Article 7C and Article 7F, reproduction and extractions of lawfully accessible works and other subject matter are permitted for text and data mining purposes.<br>(2) The reproductions and extractions carried out in accordance with the subSection (1) may be retained for as long as it is necessary for the purposes of text and data mining.<br>(3) The exception or limitation provided for in subSection (1) applies, provided that the use of works and other subject matter provided for in the aforementioned subSection has not been expressly reserved by their rightsholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online.<br>(4) The provisions of this Article do not affect the application of the provisions of Article 24. |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Article 7(5) of the Cypriot Copyright Act |
| Legal text | Article 7. (...) (5) Copyright does not include the right to control temporary acts of reproduction, which are transient or incidental reproductions, such as acts which enable browsing as well as acts of caching, including those which enable transmission systems to function efficiently, provided that the intermediary does not modify the information and does not interfere with the lawful use of technology, widely recognised and used by industry, to obtain data on the use of the information. Such use is considered legal as long as it is permitted by the owner or is not restricted by law. |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 7(2)(f) of the Cypriot Copyright Act |
| Legal text | Article 7. (...) (2) Copyright does not include the right to control: (...) (f) the quotation of passages from published works if they are compatible with fair practice and their extent does not exceed the extent justified by the purpose, including extracts from newspaper articles and magasines in the form of press summaries, provided that mention is made of the source and of the name of the author which appears on the work thus used; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 38(9) of the Cypriot Copyright Act |
| Legal text | Use of protected content by providers of online content sharing services<br>Article 38. (...) (9)(a) The cooperation between online content-sharing service providers and rightsholders shall not result in the prevention of the availability of works or other protected subject matter uploaded by users, which do not infringe copyright and related rights, including where such works or other subject matter are covered by an exception or limitation.<br>(b) Users who upload works or other subject matter to online content-sharing services are able to rely on the following existing exclusions or limitations:<br>(i) Quotation, criticism, review;<br>(ii) Use for the purpose of caricature, parody or pastiche. (...) |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |

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| Legal provision | Not implemented. |
| Legal text | n/a |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 7(2) of the Cypriot Copyright Act |
| Legal text | Article 7. (…) (2) Copyright does not require the right to control: (…) (j) of any reproduction of a work, which is made by publicly accessible libraries, scientific institutions, educational institutions, museums or archives and which act of reproduction is not intended, directly or indirectly, for any commercial or financial gain; (...). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 27 of the Cypriot Copyright Act |
| Legal text | Preservation of cultural heritage<br>Article 27. (1) Regardless of the exclusive rights in respect of the acts provided for in subparagraphs (i) and (vii) of paragraph (a) of subSection (1) of Article 7, in subSection (3) of Article 7B, in subSections (i), (ii), (iv) and (v) of paragraph (a) of subSection (2) and paragraph (a) of subSection (3) of Article 7C, Article 7F and subSections (1), (2) and (3) of Article 36, cultural heritage institutions are allowed to make copies of works or other subject matter that are permanently in their collections, in any form and by any means, for the purpose of preserving the aforementioned works or other subject matter and to the extent required for the purpose of preservation.<br>(2) Regardless of the provisions of subSection (1), acts of reproduction carried out by cultural heritage institutions or organisations for purposes other than the preservation of works and other subject matter in their permanent collections are subject to the authorisation of the rightsholders, unless such acts may to be carried out pursuant to other exceptions or limitations provided for in the European Union law. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Article 33 of the Cypriot Copyright Act |
| Legal text | Collective licensing with extended effect<br>Article 33. (1) Where a collective management organisation, in accordance with its mandates from rightsholders, enters into a licesing agreement for the exploitation of works or other subject matter:<br>(a) such agreement may be extended to apply to the rights of rightsholders who have not authorised that collective management organisation to represent them by way of assignment, license or any other contractual agreement; or<br>(b) in relation to that agreement, the collective management organisation represents or is presumed to represent rightsholders who have not authorised that organisation accordingly.<br>(2) Collective management organisations that grant licenses with collective power in accordance with the provisions of subSection (1) shall obtain approval from the Intellectual Property and Related Rights Authority to grant such licenses only within clearly defined fields of use, when obtaining licenses from rightsholders on an individual basis is usually burdensome and impractical to the extent that it makes the required act for the granting of a license unlikely, due to the nature of the use or the types of works or other subject matter concerned and the Intellectual Property and Related Rights Authority ensures that the mechanism for granting such licenses ensures the legitimate interests of the rightsholders.<br>(3) For the purposes of implementing subSection (1): |

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| | (a) a collective management organisation must, by virtue of its mandates, be sufficiently representative of the rightsholders in the relevant type of works or other subject-matter and the rights to which the license relates.<br>(b) there shall be equal treatment of all rightsholders, including in relation to the terms of the licence.<br>(c) beneficiaries who have not authorised the licensing body may at any time easily and effectively exclude their works or other subject matter from the licensing mechanism established in accordance with the provisions of this Article.<br>(d) appropriate publicity measures shall be taken, in order to inform rightsholders regarding the ability of collective management organisations to grant licenses for the use of works or other subject matter and regarding the granting of a license that takes place, in accordance with the provisions of this Article, and regarding with the options referred to in paragraph (c) made available to the rightsholders starting from a reasonable period before which the works or other objects of protection are used under the license:<br>Provided that, the publicity measures provided for in this paragraph must be effective, without requiring the information of each beneficiary individually.<br>(4) The Intellectual Property and Related Rights Authority shall decide whether a collective management organisation is sufficiently representative of the rightsholders of the relevant type of works or other subject matter and the rights to which the license relates, taking into account the category of rights managed by the organisation, its capacity organisation to effectively manage rights and the creative field in which it operates and whether the organisation covers a significant number of beneficiaries in the relevant type of works or other protected objects they have assigned, the granting of a license for the relevant type of use, the ability of the organisation to conclude of mutual representation agreements with other organisations, the quality of the revenue distribution system to rightsholders and the level of transparency.<br>(5)(a) The provisions of this Article do not affect the application of collective licensing mechanisms with extended effect in accordance with other provisions of the European Union law, including provisions allowing exceptions or limitations.<br>(b) The provisions of this Article do not apply to the mandatory collective management of rights.<br>(c) The provisions of Article 17 on the Collective Management of Intellectual Property Rights and Related Rights as well as on the Granting of Multi-territorial Licenses for Online Uses of Prefecture Musical Works shall apply to the licensing mechanism provided for in this article.<br>(6) The Intellectual Property and Related Rights Authority informs the European Commission about:<br>(a) the scope of the provisions of this Article.<br>(b) the purposes and types of licenses established under the provisions of this article.<br>(c) the contact details of the organisations granting licenses under this licensing mechanism; and<br>(d) the means by which information can be obtained regarding the granting of a license and regarding the options available to rightsholders as provided for in paragraph (c) of subSection (3). |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Article 7B(2) of the Cypriot Copyright Act |
| Legal text | Nature of copyright in computer programme<br>Article 7B. (...) (2) The protection according to this Law applies to every form of expression of a computer programme. The ideas and principles underlying any component of a computer programme, including those underlying its interconnection systems, are not protected by copyright. (...) |
| Relevant EU provision | Article 14 CDSMD |

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| Legal provision | Article 35 of the Cypriot Copyright Act |
| Legal text | Works of visual arts in the public domain<br>Article 35. In the event that the term of protection of a work of visual arts has expired, any material resulting from an act of reproduction of the work shall not be subject to intellectual property rights or related rights, unless the material resulting from the act of reproduction is original, in the sense that it is a personal intellectual creation of the creator. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 3 paragraphs (2) and (3) of the Cypriot Copyright Act |
| Legal text | Article 3. (...) (2) An object is not protected under this Law, which<br>(a) has not been fixed in writing, recorded, recorded in any way by electronic or other means, or otherwise displayed in any material form, and<br>(b) is not original.<br>It is understood that a work is original if it is a personal intellectual creation of its creator and not a copy of an already existing work or a draft or prototype of a work. The recognition of protection does not depend on the application of any additional criteria.<br>(3)(a) Under no circumstances shall the protection recognised under this Law extend to the ideas, processes, systems, methods (including operating methods), principles and elements expressed in the protected object.<br>(b) If an idea, process, system, method (including operating methods), principle and element can only be expressed in one and only one way, this unique way (expression) is not accorded protection under this Law. (...) |

### 1.4.6. CZECHIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 66(1) |
| Legal text | "Section 66 Limitation of the scope of the author's rights over the computer programme<br>(1) A lawful user of a computer programme or a copy thereof does not interfere with copyright if they:<br>a) reproduce, translate, process, modify or otherwise change a computer programme, if this is necessary to use the legally acquired copy of the computer programme, and if they do so during the introduction and operation of the computer programme or if they correct errors in the computer programme,<br>b) otherwise reproduce, translate, process, modify or otherwise change the computer programme, if this is necessary to use the legally acquired copy of the computer programme in accordance with its purpose, unless otherwise agreed,<br>c) make a back-up copy of the computer programme if it is necessary for its use,<br>d) examine, study or test the functionality of the computer programme by themselves or by a person authorised by them in order to find out the ideas and principles on which any element of the computer programme is based, if they do so during such introduction, storage of the computer programme in the computer memory or when it is displayed, operation or transmission to which they are entitled, (...)." |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 66 |
| Legal text | "Section 66 Limitation of the scope of the author's rights over the computer programme |

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| | (1) A lawful user of a computer programme or a copy thereof does not interfere with copyright if they:<br>(...)<br>e) reproduce the code or translate its form when reproducing a computer programme or during its translation or other processing, modification or other change, if they are authorised to do so, independently or through a person authorised by them, if such reproduction or translation is necessary to obtaining information necessary to achieve interoperability of an independently created computer programme with other computer programmes, if the information necessary to achieve interoperability is not previously easily and quickly available to such persons, and this activity is limited to those parts of the computer programme that are necessary for achieving interoperability (...). " |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 36 |
| Legal text | "Section 36 Limitation of copyright to collection of works<br>Copyright over a collection of works, which is a database, shall not be infringed by the lawful user of the collection of works if they use such work for the purposes of accessing its content and for the normal use of its content. " |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 91 |
| Legal text | "Section 91 Limitation of the special right of the database creator<br>The right of the creator of a database that has been made available to the public in any way is not interfered with by an lawful user who extracts or uses qualitatively or quantitatively insignificant parts of the content of the database or its parts, for any purpose, provided that this user uses the database normally and reasonably, not systematically or repeatedly, and without harming the legitimate interests of the database creator, and that it does not cause harm to the author or the holder of rights related to the copyright to the works or other objects of protection contained in the database." |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 92(a) Section 92(b) Section 92(c) |
| Legal text | "Section 92 Free Uses<br>A lawful user who extracts or utilises a substantial part of the database content does not interfere with the right of the maker of the database, if:<br>a)these acts are conducted for personal use; while the provision of Section 30, paragraph 3 remains unaffected, (...)."<br>b) they use it, to the extent justified by the non-profit purpose pursued, for scientific or teaching purposes, as long as the source is indicated, (...)."<br>c) they use it for the purposes of public security or administrative or judicial proceedings." |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 31(1)(c) |
| Legal text | "Section 31 Quotations<br>(1) Copyright is not infringed by anybody who: |

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| | (...) c) uses the work in teaching for illustration purposes or during scientific research, without seeking to achieve direct or indirect economic or commercial advantage and does not exceed the extent adequate to the given purpose; however, if possible, the name of the author, unless the work is an anonymous work, or the pseudonym of the author and the title of the work and source, shall always be indicated." |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 39d |
| Legal text | "Section 39d Text and data mining for the purposes of scientific research<br>Copyright is not infringed by research organisations and cultural heritage institutions reproducing the works in order to carry out, for the purposes of scientific research, text and data mining of works; such lawfully made reproduction shall be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results. Arrangements excluding or restricting a statutory license under this provision shall not be taken into account." |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 39c |
| Legal text | "Section 39c Text and data mining<br>(1) For the purpose of this Section and the Section 39d, the following definitions apply:<br>a) text and data mining shall mean any automated activity aimed at analysing text and data in digital form in order to generated information which includes but is not limited to patterns, trends and correlations,<br>b) research organisation shall mean a university, a research institute or any other entity, the primary goal of which is to conduct scientific research or to carry out educational activities involving also the conduct of scientific research, in such a way that the access to the results generated by such scientific research cannot be enjoyed on a preferential basis by an entrepreneur exercising a decisive influence upon such organisation, and at the same time, that the research is in compliance with the tasks in the public interest, or is carried out on a non-profit basis or by reinvesting all the profits in the scientific research of the organisation.<br>(2) Copyright is not infringed by anyone who reproduces the work for the purposes of text and data mining; these reproductions may be retained for as long as is necessary for the purposes of text and data mining pursuant to paragraph 1. Arrangements excluding or restricting a statutory license under this provision shall not be taken into account.<br>(3) Paragraph 2 shall apply on condition that the use of works referred to in that paragraph has not been expressly reserved by their authors in an appropriate manner, such as machine-readable means in the case of content made publicly available pursuant to Article 18 paragraph 2.<br>(4) Paragraph 2 shall not affect the Section 39d. " |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 31 |
| Legal text | "Section 31 Quotations<br>(1) Copyright is not infringed by anybody who:<br>a) in their own work use excerpts from works of other authors which were made public, however to a justified extent, |

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| | b) uses excerpts of a work or the entirety of small works, for the purposes of critique or review related to such a work and for the purposes of scientific or professional work, as long as such use is in accordance with fair practices and to the extent required by the specific purpose, (...);<br>However, if possible, the name of the author, unless the work is an anonymous work, or the pseudonym of the author, and the title of the work and source, shall be indicated.<br>(2) Copyright shall likewise not be infringed by anybody who makes further use of excerpts from a work, or small works in their entirety, as referred to in paragraph (1) (a) or (b); provisions of paragraph (1) after the semicolon shall similarly. " |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 37(1)(c) |
| Legal text | "Section 37 Exceptions for Libraries<br>1) Copyright is not infringed by a library, archive, museum, gallery, school, university and other non-profit school-related and educational establishment:<br>(...) c) if it makes available a work, including the making of a reproduction needed for such availability, which constitutes a part of its collections and the use thereof is not subject to purchase or licensing terms, except the communication of the work in the way specified in Section 18(2), to members of the public by dedicated terminals located on its premises, such a work being so made available exclusively for the purposes of research or private study of such members of the public, provided that such members of the public are prevented from making reproductions of the work; this is without prejudice to the provisions of Section 30a(1)(c) and (d); (...)." |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Section 37(1)(b) |
| Legal text | "Section 37 Exceptions for Libraries<br>(1) Library, archive, museum, gallery, school, university and other non-profit educational and educational facilities do not interfere with copyright,<br>(...) b) if they make a reproduction of a work, which has been damaged or lost, and of which it can be ascertained, on the basis of reasonable efforts, that it is not offered for sale, or a printed reproduction of a small part of the work which has been damaged or lost; can also lend such a legally made copy in accordance with paragraph 2, (...)." |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Section 37(1)(a) |
| Legal text | "Section 37 Exceptions for Libraries<br>(1) Library, archive, museum, gallery, school, university and other non-profit educational and educational facilities do not interfere with copyright,<br>a) if they make a copy of a work that does not serve a direct or indirect economic or commercial purpose, for archival and conservation needs, in the numbers and formats necessary for the permanent preservation of the work, (...)." |

| Licensing schemes | |
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| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 97e |
| Legal text | Section 97e<br>Extended collective management<br>(1) If a collective management organisation grants, by a collective agreement pursuant to Section 98a paragraph 2, authorisation to exercise the rights to use the subject of protection in the manner specified in paragraph 4, it applies that this authorisation is granted in relation to the relevant subjects of protection not only to the holders of the rights for which it exercises collective management on the basis of the contract, but also all others who are then considered to be the holders of rights for which it performs collective management according to this law.<br>(2) Paragraph 1 does not apply to audiovisual works or audiovisually used works, with the exception of audiovisually used musical works, as regards the use according to paragraph 4 letter c) ae), nor for such rightsholder for whom collective managment is performed according to paragraph 1 and who excludes the effects of the collective agreement for a specific case or for all cases against the relevant collective administrator; however, it cannot exclude the effects of a collective agreement in the case of use according to paragraph 4 letter d).<br>(3) If the holder of rights, for whom collective management is exercised pursuant to paragraph 1, expresses the will to exclude the effects of the collective agreement when providing a free authorisation to exercise rights, the effects of the collective agreement to the extent of the authorisation thus granted are excluded vis-à-vis the collective administrator at the moment when the collective manager learns about the provision of such authorisation.<br>(4) Paragraphs 1 to 3 shall apply to the authorisation to exercise the right to<br>a) operating an artistic performance from a sound recording released for commercial purposes or for operating such a recording,<br>b) non-theatrical performance of a musical work with or without text from an audio recording released for commercial purposes,<br>c) broadcast of the work by radio or television,<br>d) operating a radio or television broadcast of a work of art performance, audio recording or audiovisual recording,<br>e) lending an original or reproduction of a work or lending a work or performance of a performing artist recorded on an audio or audio-visual recording and for the lending of such recordings; this provision does not apply to computer programmes,<br>f) making the work available in intangible form, including the making of its reproduction necessary for such making available, by the library in accordance with the Library Act to individuals from the public through the technical devices designated for this purpose located in its premises according to Section 37 paragraph 1 letter c), if it is a work that is not part of its collections; this provision does not apply to computer programmes,<br>g) live non-theatrical performance of the work, if such performance is not aimed at achieving direct or indirect economic or commercial benefit,<br>h) making a published work available upon request in accordance with Section 18, paragraph 2, including the making of its reproduction necessary for such making available, by a library according to the Library Act) to individuals from the public, exclusively for the purposes of research or private study; this provision does not apply to computer programmes, to works or artistic performances recorded on an audio or audio-visual recording, to published sheet music of a musical or musical dramatic work and to works whose access by this library is the subject of other license agreements, |

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| | i) making a copy of a work included in the list of works unavailable on the market and making such a copy of the work available in accordance with Section 18 paragraph 2 by the library according to the Library Act) to individuals from the public for a period not exceeding 5 calendar years, even repeatedly,<br>j) production of a printed copy of a published sheet music recording of a musical or musical dramatic work by a person specified in Section 37 paragraph 1 for his own internal use or on order for the personal use of a natural person or for use in teaching or scientific research, if the production of such a copy does not aim to achieve direct or indirect economic or commercial benefit,<br>k) making a printed copy of the work beyond the scope of Section 29 and 30a paragraph 1 and distributing such a copy by a school, school facility or university, exclusively for educational purposes and not to achieve direct or indirect economic or commercial benefit.<br>(5) Paragraphs 1 to 4 shall also be used for collective claims for damages and for the issuance of unjustified enrichment. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 60 |
| Legal text | "Section 60 School work<br>(1) A school or a school-related or educational facility has the right under usual conditions to conclude a license agreement for the use of a school work (Section 35, paragraph 3). If the author of such a work refuses to grant permission without a serious reason, these persons may demand the replacement of the missing manifestation of the author's will in court. The provision of Section 35, paragraph 3, remains unaffected. (...)" |
| Public domain | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 2(6) |
| Legal text | "Section 2 Author's work<br>(…) (6) The subject matter not considered as work shall include inter alia theme (subject) of a work as such, the news of the day and any other fact as such, an idea, procedure, principle, method, discovery, scientific theory, mathematical and similar formula, statistical graph and similar subject matter as such. " |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 3 |
| Legal text | "Section 3 Public interest exceptions from copyright protection<br>Copyright protection shall not apply to:<br>a) an official work, such as a legal regulation, decision, public charter, publicly accessible register and collection of its documents, and also any official draft of an official work and other preparatory official documentation including the official translation of such work, Chamber of Deputies and Senate publications, a memorial chronicle of a municipality (municipal chronicles), a State symbol and symbol of a municipality, and any other such works where there is public interest in their exclusion from copyright protection,<br>b) creations of traditional folk culture, unless the real name of the author is commonly known or the work is an anonymous or pseudonymous one (Section 7); such works may only be used in a way that shall not detract from their value. " |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 28 |
| Legal text | "Section 28 Free work<br>A work for which the duration of intellectual property rights has expired can be freely used by anyone without further ado; (…)." |

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| Relevant EU provision | Article 1(2) Software |
| Legal provision | Section 65 |
| Legal text | "Section 65 General conditions<br>(…) (2) The ideas and principles which underlie any element of a computer programme, including those which underlie its interfaces, are not protected under this Act. " |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |

### 1.4.7. DENMARK

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 36 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 36<br>1. Anyone who has the right to use a computer programme may:<br>1) produce copies of the programme and make such changes to the programme that are necessary for the person concerned to be able to use it according to its purpose, including correcting errors,<br>2) produce a security copy of the programme insofar as it is necessary for its use, and<br>3) inspect, examine or test the computer programme to determine which ideas and principles underlie the individual elements of the programme, if this occurs in connection with such loading, display on screen, running, transfer, storage or the like of the programme that they are entitled to carry out.<br>PCS. 2. The person who has the right to use a database may take such actions as are necessary for the person concerned to gain access to the contents of the database and make normal use of it.<br>PCS. 3. The provisions in subSection 1, no. 2 and 3, as well as subSection 2 cannot be waived by agreement. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 37 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 37<br>1. Making copies of a computer programme's code and translating the form of the code is permitted when this is a prerequisite for obtaining the information necessary to provide interoperability between an independently developed computer programme and other computer programmes, if:<br>1) the actions are performed by the licensee or by another person who has the right to use a copy of a computer programme, or on their behalf by a person who has permission to do so,<br>2) the information necessary to provide interoperability has not previously been easily and quickly available to the persons mentioned in no. 1, and<br>3) the actions are limited to those parts of the original computer programme that are necessary to achieve interoperability.<br>PCS. 2. The information obtained in connection with the application of subSection 1, may not<br>1) is used for purposes other than making the independently developed computer programme interoperable, |

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| | 2) is passed on to third parties, except when this is necessary to make the independently developed computer programme interoperable, or<br>3) is used for the development, production or marketing of a computer programme which, in its form of expression, corresponds to a large extent to the original, or for any other act which infringes copyright.<br>PCS. 3. The provisions in subSection 1 and 2 cannot be waived by agreement. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 36 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 36<br>1. Anyone who has the right to use a computer programme may:<br>1) produce copies of the programme and make such changes to the programme that are necessary for the person concerned to be able to use it according to its purpose, including correcting errors,<br>2) produce a security copy of the programme insofar as it is necessary for its use, and<br>3) inspect, examine or test the computer programme to determine which ideas and principles underlie the individual elements of the programme, if this occurs in connection with such loading, display on screen, running, transfer, storage or the like of the programme that he is entitled to carry out.<br>PCS. 2. The person who has the right to use a database may take such actions as are necessary for the person concerned to gain access to the contents of the database and make normal use of it.<br>PCS. 3. The provisions in subSection 1, no. 2 and 3, as well as subSection 2 cannot be waived by agreement. |
| Relevant EU provision | Article 8 Database |
| Legal provision | n/a |
| Legal text | n/a |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 71 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 71<br>(…) PCS. 5. The provisions in Section 2, subSection 2-4, Sections 6-9, § 11, subSection 2 and 3, Section 12, subSection 1 piece. 2, no. 4, subSection 4, no. 3, and subSection 5, 2nd pt., Sections 13-17, § 18, subSection 1 and 2, Section 19, subSection 1 and 2, Sections 20-22, 25, 27, 28, 30-32, 34 and 35, Section 36, subSection 2 and 3, Section 47 and Sections 49-52 apply correspondingly to the catalogues, tables, databases etc. mentioned in subSection 1. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 23 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 23<br>1. Published works of art and works of a descriptive nature, cf. Section 1, subSection 2, may be reproduced in critical or scientific presentations in connection with the text, when this is done in accordance with good practice and to the extent determined by the purpose. The reproduction may not be made for commercial purposes. (...) |

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| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 23 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 22<br>It is permitted to quote from a published work in accordance with good practice and to the extent determined by the purpose. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section 52c of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 52c<br>PCS. 10. Users of online content sharing services may upload and make user-generated content containing works and creations protected under Sections 65-71 available on the online content sharing services when this is done for the purpose of caricature, parody or pastiche. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 16a of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 16a<br>1. Published works can be made available to individuals on the basis of Section 16, subSection 1 [public archives, public libraries and other libraries that are wholly or partly financed by the public, as well as state museums and museums approved under the Museums Act], said institutions for personal inspection or study on site using technical equipment. (...) |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Section 16b of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 16b<br>1. Public archives, public libraries and other libraries that are wholly or partly financed by the public, as well as state museums and museums approved under the Museums Act, may reproduce and distribute copies of works for use in their business in accordance with the provisions of PCS. 2-6, if it is not done for business purposes. However, this does not apply to computer programmes in digital form, apart from computer games.<br>PCS. 2. The institutions may produce copies for security and protection purposes.<br>PCS. 3. If a copy in an institution's collection is incomplete, the institution must produce copies of the missing parts, unless the work can be acquired in general trade or from the publisher. |

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| | PCS. 4. Libraries may produce copies of published works that should be available in the library's collections, but which cannot be acquired in general trade or from the publisher.<br>PCS. 5. Copyright does not prevent the production of copies in accordance with the provisions of the Transfer of Duty Act.<br>PCS. 6. Copies produced in accordance with subSection 3-5 or submitted in accordance with the Act on compulsory submission of published material, may be lent to users. The same applies in special cases to specimens produced in accordance with subSection 2. The provisions in 1st and 2nd point does not apply to image recordings and copies produced in digital form or in the form of sound recordings.<br>PCS. 7. The right to further use the copies produced in accordance with subSection 2-5, depends on the otherwise applicable rules.<br>(...) |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | n/a |
| Legal provision | Section 9 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |
| Legal text | Section 9<br>1. Laws, administrative regulations, court decisions and similar public documents are not subject to copyright.<br>PCS. 2. The provision in subSection 1 does not apply to works that appear as independent contributions in those in subSection 1 mentioned documents. However, such works must be reproduced in connection with the document. The right to further exploitation depends on the otherwise applicable regulations. |

### 1.4.8. ESTONIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | § 24 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 24 |

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| | (1) Unless otherwise prescribed by contract, the lawful user of a computer programme may, without the authorisation of the author of the programme and without payment of additional remuneration, reproduce, translate, adapt and transform the computer programme in any other manner and reproduce the results obtained if this is necessary for:<br>1) the use of the programme on the device or devices, to the extent and for the purposes for which the programme was obtained.<br>2) the correction of errors in the programme.<br>(2) The lawful user of a computer programme is entitled, without the authorisation of the author of the programme or the legal successor of the author and without payment of additional remuneration, to make a back-up copy of the programme provided that it is necessary for the use of the computer programme, or to replace a lost or destroyed programme or a programme rendered unusable.<br>(3) The lawful user of a computer programme is entitled, without the authorisation of the author of the programme and without payment of additional remuneration, to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme if he or she does so while performing any act of loading, displaying, running, transmitting or storing the programme which he or she is entitled to do.<br>(5) Any contractual provisions which prejudice the exercise of the rights specified in subSection (2) or (3) are void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | § 25 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 25<br>(1) The lawful user of a computer programme may reproduce and translate a computer programme without the authorisation of the author of the programme and without payment of additional remuneration if these acts are indispensable to obtain information necessary to achieve the interoperability of a programme created independently of the original programme with other programmes provided that the following conditions are met:<br>1) these acts are performed by the lawful user of the programme or, on the behalf of the lawful user of the programme, by a person authorised to do so.<br>2) the information necessary to achieve the interoperability of programmes has not previously been available to the persons specified in clause 1) of this subSection.<br>3) these acts are confined to the parts of the original programme which are necessary to achieve interoperability.<br>(2) Information obtained as a result of the acts prescribed in subSection (1) of this Section shall not be:<br>1) used for goals other than to achieve the interoperability of the independently created programme.<br>2) disclosed to third persons except when necessary for the interoperability of the independently created programme.<br>3) used for the development, production or marketing of a computer programme substantially similar in its expression, or for any other act which infringes the copyright of the author of the original programme.<br>(3) Any contractual provisions which prejudice the exercise of the rights specified in this Section are void. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | § 25/1 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 25/1<br>The lawful user of a database or of a copy thereof is entitled, without the authorisation of the author and without payment of additional remuneration, to perform any acts which are necessary for the purposes of access to the contents of the database and normal use |

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| | of its contents. If the lawful user is authorised to use only part of the database, this provision shall only apply to the corresponding part of the database or of a copy thereof. Any contractual provisions which prejudice the exercise of the right are void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | § 75/5 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 75/5<br>(1) A lawful user of a database which is made available to the public in whatever manner has the right to make extractions and to re-utilise insubstantial parts of its contents, evaluated qualitatively or quantitatively, for any purposes whatsoever. Where the person is authorised to use only part of the database in the manner provided for in this subSection, the provisions of this subSection shall apply only to that part.<br>(2) A lawful user of a database which is made available to the public in whatever manner shall not prejudice the copyright or related rights in the works or other economics contained in the database.<br>(3) A lawful user of a database which is made available to the public in whatever manner shall not perform acts that conflict with normal use of the database or unreasonably prejudice the legitimate interests of the maker of the database.<br>(4) Any contractual provisions which prejudice the exercise of the rights provided for in this Section by a lawful user of a database are void |
| Relevant EU provision | Article 9 Database |
| Legal provision | § 75/6 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 75/6<br>A legitimate user of a database lawfully disclosed to the public in any way may, without the consent of the creator of the database and without payment of a fee, take extracts from a significant part of the contents of the database or reuse it in the event that:<br>1) the contents of the non-electronic database are extracted for personal needs; (...) |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | § 19 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 19<br>The following is permitted without the authorisation of the author and without payment of remuneration if mention is made of the name of the author of the work, if it appears thereon, the name of the work and the source publication: (...)<br>3) the reproduction of a lawfully published work for the purpose of teaching or scientific research to the extent justified by the purpose in educational and research institutions whose activities are not carried out for commercial purposes; (...). |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | § 17/1, 19/1 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 17/1. Concepts<br>(1) Text and data mining within the meaning of this Act is an automated analysis method that analyses texts and data in digital form in order to obtain information on, among other things, patterns, trends and correlations. |

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| | (2) For the purposes of this Act, a research institution is a legal entity specified in subSection 1 of § 3 of the Organisation of Research and Development Act, including a university and its library, as well as a research institute or other institution, the main purpose of which is to carry out scientific research or engage in teaching, which also includes scientific research, and it does so on a not-for-profit basis or by reinvesting all profits in its research or by carrying out tasks in the public interest in such a way that the results of research are not available on preferential terms to an entrepreneur who has a decisive influence over such an institution.<br>(3) For the purposes of this Act, a cultural heritage institution is a public library, museum, archive or an institution dealing with the preservation of film or audio heritage.<br>§ 19/1. Free use of work in scientific research for the purpose of text and data mining<br>(1) Research organisations and cultural heritage institutions have the right, without the authorisation of the author and without payment of remuneration, to reproduce works to which they have lawful access, for the purpose of text and data mining.<br>(2) Copies of works made in compliance with subSection 1 of this Section must be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results.<br>(3) Authors have the right to apply measures to ensure the security and integrity of the networks and databases where their works are hosted. Such measures may not go beyond what is necessary to achieve that objective.<br>(4) Any contractual provisions which prejudice the free use of a work in a manner specified in subSection 1 of this Section are void. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | § 17/1, 19/2 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 17/1. Concepts<br>(1) Text and data mining within the meaning of this Act is an automated analysis method that analyses texts and data in digital form in order to obtain information on, among other things, patterns, trends and correlations.<br>(2) For the purposes of this Act, a research institution is a legal entity specified in subSection 1 of § 3 of the Organisation of Research and Development Act, including a university and its library, as well as a research institute or other institution, the main purpose of which is to carry out scientific research or engage in teaching, which also includes scientific research, and it does so on a not-for-profit basis or by reinvesting all profits in its research or by carrying out tasks in the public interest in such a way that the results of research are not available on preferential terms to an entrepreneur who has a decisive influence over such an institution.<br>(3) For the purposes of this Act, a cultural heritage institution is a public library, museum, archive or an institution dealing with the preservation of film or audio heritage.<br>§ 19/2. Free use of work for the purpose of text and data mining for purposes other than scientific research<br>(1) Without prejudice to the application of § 19/1 of this Act, reproduction of lawfully accessible works for the purposes of text and data mining is allowed without the authorisation of the author and without payment of remuneration.<br>(2) The author may expressly and in an appropriate manner reserve the free use provided in subSection 1 of this Section, including by machine-readable means in the case of content made publicly available online.<br>(3) Copies of works made in compliance with subSection 1 of this Section may be stored for as long as it is necessary for the purposes of text and data mining. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | § 19(1) of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |

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| Legal text | § 19(1).<br>The following is permitted without the authorisation of the author and without payment of remuneration if mention is made of the name of the author of the work, if it appears thereon, the name of the work and the source publication:<br>1) making summaries of and quotations from a work which has already been lawfully made available to the public, provided that its extent does not exceed that justified by the purpose and the idea of the work as a whole which is being summarised or quoted is conveyed correctly; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | § 57/9(5) of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 57/9<br>(...) (5) The platform provider must, in fulfilling the requirements specified in points 2 and 3 of subSection 3 of this Section, take measures in order to enable users to lawfully transmit the objects of rights to the public or make them available to the public, including on the basis of the case of free use provided for in Chapter IV of this Act, based on, among other things, economic and the standard of the field of professional activity. (...). |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | § 20 of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 20<br>(...) (4) Without the consent of the author and without payment of a fee, the cultural heritage institution has the right to use a work in their collections, upon the request of a natural person:<br>1) to make it available locally through special equipment.<br>2) to make it available for individual on-site use.<br>(5) The activity specified in this Section may not be carried out for commercial purposes.<br>(6) The condition of the contract, which restricts the free use of the work in the manner specified in clause 1, clause 2 of this Section, is null and void. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | § 20(1) of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 20(1)<br>(1) A cultural heritage institution has the right to reproduce works included in their collection without the authorisation of its author and without payment of remuneration, in order to:<br>1) replace works which have been lost, destroyed or rendered unusable.<br>2) make copies in any format or medium, including digital form, for purposes of preservation of such works and to the extent necessary for such preservation.<br>3) replace works which belonged to the permanent collection of another cultural heritage institution if the works are lost, destroyed or rendered unusable. |

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| | 5) make a copy for a natural person for the purposes specified in § 18 of this Act.<br>6) make a copy on the order of a court or a state authority for the purposes prescribed in clause 19/5. of this Act.<br>(2) The provisions of clauses 1 and 3 of subSection 1 of this Section apply in cases where acquisition of another copy of the work is impossible.<br>(3) A cultural heritage institution has the right to use a work included in their collection without the authorisation of its author and without payment of remuneration for the purposes of an exhibition or the promotion of the collection to the extent justified by the purpose. (...)<br>(5) The activities specified in this Section shall not be carried out for commercial purposes.<br>(6) Any contractual provisions which prejudice the free use of a work in the manner specified in clause 2 of subSection 1 of this Section are void. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | § $57^1$ of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § $57^1$<br>Extended Collective License Agreement<br>(1) A license agreement concluded by a collective management organisation for the use of works or objects of rights accompanying copyright within the limits of the authorisations received from the rightsholders may, by agreement with the other contracting party under the conditions specified in this Section, be extended and applied also to the rights of such rightsholders who have not authorisedthe collective management organisation to represent itself (hereinafter Extended Collective License Agreement ).<br>(2) When concluding an extended collective license agreement, the following conditions must be taken into account:<br>1) agreements are concluded only in the areas of use clearly defined in the agreement, where obtaining authorisation from each individual rightsholder is usually so disproportionately burdensome due to the nature or type of objects of the relevant works or rights accompanying the copyright that it makes the extended collective the conclusion of a license agreement is unlikely.<br>2) the collective representation organisation entering into extended collective license agreements must, on the basis of the authorisations received from the rightsholder, represent the vast majority of the right holders of the relevant types of works or objects of rights accompanying copyright in the Republic of Estonia and exercise the rights covered by the license.<br>3) all rightsholders must be treated equally.<br>4) within a reasonable period of time before the works or objects of copyright rights are used in accordance with the extended collective license agreement, the right holders must be informed that the collective management organisation can enter into extended collective license agreements for the use of the work or the object of copyright rights, as well as of the conclusion of extended collective license agreements and the options available to the right holders referred to in subSection 3 of this Section, and it is not necessary to notify each right holder separately.<br>(3) A rightsholder who has not authorisedthe collective management organisation concluding the extended collective license agreement may at any time exclude the use of his work or the object of the rights accompanying the copyright on the basis of the extended collective license agreement by notifying the collective management organisation, which in turn immediately informs the other contracting party.<br>(4) The procedure provided for in this Section shall not be applied in the case of compulsory collective exercise of the rights specified in subSection 3 of § 79 of this Act. |

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| | (5) The provisions of §§ 79/3 and 79/9 of this Act shall be used when concluding the extended collective license agreements specified in subSection 1 of this Section. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | §5(8) of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 5.<br>This Act does not apply to:<br>(...) 8) ideas and principles which underlie any element of a computer programme, including those which underlie its user interfaces; (…). |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | §5(9) of Copyright Act (Riigi Teataja) of 11 November 1992 (as amended in 2021) |
| Legal text | § 5.<br>This Act does not apply to:<br>(...) 9) materials resulting from the reproduction of any work of visual art, if the term of protection of such work has expired pursuant to the provisions of Chapter VI of this Act, unless the material resulting from the reproduction is original in the sense that it is the author's own intellectual creation. |

### 1.4.9. FINLAND

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 25j(1)-(3) Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 25j.<br>Whoever has legally acquired a computer programme may make such copies of the programme and make such alterations to the programme as are necessary for the use of the programme for the intended purpose. This shall also apply to the corrections of errors.<br>Whoever has a right to use a computer programme may make a back-up copy of the programme, necessary for the use of the programme<br>Whoever has a right to use a computer programme shall be entitled to observe, study, or test the functioning of the computer programme in order to determine the ideas and principles which underlie any element of the programme if he does so while performing the acts of loading, displaying, running, transmitting or storing the programme.<br>Whoever has a right to use a database may make copies of it and perform all other acts necessary for accessing the database and for normal use of its contents.<br>Any contractual provision limiting use in accordance with subSections 2–4 shall be without effect. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 25k Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 25k |

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| | Reproduction of the code of the programme and decompilation of its form is permitted if these actions are necessary to obtain information that can be used to achieve interoperability between the independently created computer programme and other programmes, and the following conditions are met:<br>1) these measures are performed by the licensee or another person who has the right to use the copy of the programme, or on their behalf by a person who has the right to do so.<br>2) in terms of achieving interoperability, the necessary information has not previously been easily and quickly available to the persons referred to in paragraph 1; as long as<br>3) these measures are limited to those parts of the original programme that are necessary in terms of achieving interoperability.<br>Information obtained under the provisions of subSection 1 cannot be obtained under these provisions:<br>1) use for a purpose other than to achieve interoperability of an independently created computer programme.<br>2) give to others, unless it is necessary for the interoperability of the independently created computer programme; and not<br>3) uses its form of expression to a considerable extent for the development, production or marketing of a similar computer programme or for other copyright-infringing activities.<br>A condition of the agreement that restricts the use of the computer programme in accordance with this Section is ineffective. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 25j(4) Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 25j<br>Whoever has a right to use a database may make copies of it and perform all other acts necessary for accessing the database and for normal use of its contents.<br>Any contractual provision limiting use in accordance with subSections 2–4 shall be without effect. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 9 Database |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 14(2)(3) Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 14.<br>A work made public may, by virtue of extended collective licence, as provided in Section 26, be reproduced for use in educational activities or in scientific research and be used in this purpose for communication to the public by means other than transmitting on radio or television. The provisions of this subSection shall not apply to reproduction by photocopying or by corresponding means.<br>In educational activities, a work made public, performed by a teacher or a student, may be reproduced by direct recording of sound or image for temporary use in educational activities. A copy thus made may not be used for other purposes. |

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| | Parts of a literary work that has been made public or, when the work is not extensive, the whole work, may be incorporated into a test constituting part of the matriculation examination or into any other corresponding test.<br>The provisions of subSection 1 concerning works other than those transmitted on radio or television shall not apply to a work whose author has prohibited the reproduction or communication of the work. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 22 Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 22 A work made public may be quoted, in accordance with proper usage to the extent necessary for the purpose. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 16a-b-c Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 16a<br>Preparing copies of works for the public and passing the works on to the public<br>(...) (2) An archive and a library or museum open to the public regulated by a decree of the Government may, if the purpose is not to generate direct or indirect financial benefit, transmit a published work in its own collections to a person belonging to the public for research or private study on the premises of the institution using equipment reserved for transmission to the public. The condition is that the transfer can take place without being hindered by the purchase, license, and other contractual conditions regarding the use of the work and that the digital production of a copy of the work other than that required for the use referred to in this paragraph is prevented, and if further transfer of the work is prevented.<br>Sect. 16b.<br>Use of works in libraries preserving cultural material<br>(1) A library entitled to a legal deposit of a copy of a work under the Act on Deposit and Preservation of Cultural Material (1433/2007) may:<br>(...) 2) communicate a work made public that it has in its collections to a member of the public for purposes of research or private study on a device reserved for communication to the public, if the digital reproduction of the work other than reproduction required for use referred to in this paragraph is prevented and if the further communication of the work is prevented, on the premises of a |

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| | library in whose collections the material is deposited under the Act on Deposit and Preservation of Cultural Material, and in the Library of Parliament and in the National Audiovisual Institute; (...)<br>(2) The provisions of paragraphs 1 and 4 of subSection 1, shall also apply to libraries in whose collections the library referred to in subSection 1 deposits the material under the Act on Deposit and Preservation of Cultural Material.<br>Sect. 16c<br>Using works at the National Audiovisual Institute<br>The National Audiovisual Institute may:<br>(...) 2) transmits a work in his collection to a person belonging to the public for research or private study in the premises of the library referred to in Section 16b, in the parliamentary library and in the communication, media and theatre unit of the University of Tampere using devices reserved for transmission to the public, if the digital production of a copy other than that required for the use of the work is prevented as well as if further transmission of the work is blocked; (...)<br>What is stipulated in subSection 1, paragraphs 1 and 2, does not apply to a film work deposited by a foreign producer.<br>The work in the institute's collections may, with the exception of a film deposited by a foreign producer, be used for research and university-level film teaching.<br>What is stipulated in subSections 1–3 also applies to such material falling within the scope of the obligation to deposit, which is stored in a storage facility approved in accordance with the Act on the Deposit and Preservation of Cultural Materials. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Section 16 Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 16.<br>Reproduction in archives, libraries, and museums<br>An archive, and a library or a museum open to the public, may, unless the purpose is to generate direct or indirect financial gain, make copies of a work in its own collections:<br>1) for the purpose of preserving material and safeguarding its preservation;<br>2) for the purpose of technically restoring and repairing material;<br>3) for the purpose of administering and organising collections and for other internal purposes required by the maintenance of the collection;<br>4) for the purpose of supplementing a deficient item or completing a work published in several parts if the necessary complement is not available through commercial distribution or communication. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 26 Copyright Act No. 404 of 8 July 1961 |

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| Legal text | Sect. 26.<br>Extended collective license<br>The provisions of this Act regarding extended collective licenses shall apply to an agreement made on the use of works of authors in a given field between the user and the organisation which is approved by the Ministry of Education and Culture and which represents, in this field, numerous authors of works used in Finland. An approved organisation is with regard to this agreement deemed to represent authors of other works in the same field. A licensee who has obtained an extended collective license by virtue of aforementioned agreement, may, under terms determined in the agreement, use all works by authors in the same field.<br>The Ministry of Education and Culture shall approve the organisation on application for a fixed period, for a maximum of 5 years. The organisation to be approved must have the financial and operational prerequisites and capacity to manage the affairs in accordance with the approval decision. The organisation shall annually submit an account to the Ministry of Education and Culture of the actions it has carried out pursuant to the approval decision. The organisation, or organisations, where the representation of the authors can be achieved only through the approval of several organisations, must represent a substantial proportion of the authors of works of different fields whose works are used under a given provision on extended collective license. When several organisations are approved to grant license for a given use of works, the terms of the approval decisions shall ensure, where needed, that the licenses are granted simultaneously and on compatible terms. The approval decision may also lay down terms guiding practical licensing in general for the organisation.<br>The decision of the Ministry of Education and Culture shall be complied with, notwithstanding an appeal pending until the matter has been resolved by means of a valid decision. The approval may be reversed if the organisation commits serious or essential breaches or dereliction of duty in breach of the approval decision and its terms and if notices to comply or warnings issued to the organisation have not led to the rectification of the shortcomings in its operation.<br>Possible stipulations by the organisation referred to in subSection 1 concerning the distribution of remunerations for the reproduction, communication or transmission of works among the authors it represents or the use of the remunerations for the authors' common purposes shall also apply to authors in the same field whom the organisation does not represent, as referred to in subSection 1.<br>If the stipulations of the organisation referred to in subSection 4 do not provide the right to individual remuneration for the authors represented by the organisation, an author in the same field referred to in subSection 1 and not represented by the organisation shall, however, have the right to claim an individual remuneration. The remuneration shall be paid by the organisation referred to in subSection 1. The right to individual remuneration shall expire if a claim concerning it has not verifiably been presented within 3 years from the end of the calendar year during which the reproduction, communication or transmission of the work took place. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Sections 14, 16 Copyright Act No. 404 of 8 July 1961 |

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| Legal text | Sect. 14<br>Use of works for educational activities and scientific research.<br>A work made public may, by virtue of extended collective license, as provided in Section 26, be reproduced for use in educational activities or in scientific research and be used in this purpose for communication to the public by means other than transmitting on radio or television. The provisions of this subSection shall not apply to reproduction by photocopying or by corresponding means.<br>In educational activities, a work made public, performed by a teacher or a student, may be reproduced by direct recording of sound or image for temporary use in educational activities. A copy thus made may not be used for other purposes.<br>Parts of a literary work that has been made public or, when the work is not extensive, the whole work, may be incorporated into a test constituting part of the matriculation examination or into any other corresponding test.<br>The provisions of subSection 1 concerning works other than those transmitted on radio or television shall not apply to a work whose author has prohibited the reproduction or communication of the work.<br>Sect. 16d<br>Use of works in archives, libraries and museums by virtue of extended collective license.<br>An archive, and a library or a museum open to the public, to be determined in a Government Decree, may, by virtue of extended collective license, as provided in Section 26:<br>make a copy of a work in its collections in cases other than those referred to in Sections 16 and 16a−16c; communicate a work in its collections to the public in cases other than those referred to in Sections 16a−16c.<br>The provisions of subSection 1 shall not apply to a work whose author has prohibited the reproduction or communication of the work. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | n/a |
| Legal provision | Section 9 Copyright Act No. 404 of 8 July 1961 |
| Legal text | Sect. 9<br>Works excluded from copyright protection<br>There shall be no copyright:<br>1) in laws and decrees.<br>2) other decisions, regulations and other documents to be published according to the Act on the Collection of Finnish Statutes (188/2000) and the Act on the Collections of Regulations of Ministries and Other State Authorities (189/2000).<br>3) State treaties and other similar documents containing international obligations.<br>4) decisions and statements of an authority or other public institution.<br>5) translations made or commissioned of the documents referred to in paragraphs 1–4 by an authority or other public institution.<br>The provisions of subSection 1 shall not apply to independent works contained in the documents referred to in the subSection. |

## 1.4.10. FRANCE

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article L122-6-1 CPI |
| Legal text | Art. L122-6-1<br>I. The acts provided for in 1° [reproduction] and 2° [translation, adaptation, arrangement and any other modification] of Article L122-6 are not subject to the authorisation of the author when they are necessary to allow the use of the software, in accordance with its intended purpose, including to correct errors, by the person having the right to use it.<br>However, the author is authorised toreserve by contract the right to correct errors and to determine the specific terms to which the acts provided for in 1° and 2° of Article L122-6 will be subject, even if such acts are necessary to allow the use of the software, in accordance with its intended purpose, by the person having the right to use it.<br>II. The person having the right to use the software can make a back-up copy when this is necessary to preserve the use of the software.<br>III. The person having the right to use the software can without the authorisation of the author observe, study or test the functioning or the security of this software in order to determine the ideas and principles which are underlie any element of the software, when these are performed while the loading, displaying, running, transmitting or storing the software which they are entitled to perform.<br>(...)<br>VIII. This Article cannot be interpreted as allowing to interfere with the normal use of the software or to cause unjustified prejudice to the legitimate interests of the author.<br>Any stipulation contrary to the provisions of II, III and IV of this Article is null and void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article L122-6-1 CPI |
| Legal text | Art. L122-6-1<br>(...) IV. The reproduction of the software code or the translation of the form of this code is not subject to the authorisation of the author when the reproduction or the translation within the meaning of 1° [reproduction] or 2° [translation, adaptation, arrangement and any other modification] of Article L122-6 is essential to obtain the information necessary for the interoperability of independently created software with other software, provided that the following conditions are met:<br>1° These acts are carried out by the person having the right to use a copy of the software or on their behalf by a person authorised for this purpose.<br>2° The information necessary for interoperability has not already been made easily and quickly accessible to the persons mentioned in 1 ° above.<br>3° And these acts are limited to the parts of the original software necessary for this interoperability.<br>The information thus obtained cannot be:<br>1° Used for purposes other than achieving the interoperability of independently created software; |

2° Communicated to third parties unless this is necessary for the interoperability of the software created independently;
3° Used for the development, production or marketing Software the expression of which is substantially similar or for any other act infringing copyright.
(...)
VIII. This Article cannot be interpreted as allowing to interfere with the normal use of the software or to cause unjustified prejudice to the legitimate interests of the author.
Any stipulation contrary to the provisions of II, III and IV of this Article is null and void.

| **Access to and reuse of databases** | |
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| Relevant EU provision | Article 6 Database |
| Legal provision | Article L122-5-5° CPI |
| Legal text | Art. L122-5<br>When the work has been disclosed, the author cannot prohibit:<br>(…) 5° The acts necessary for access to the content of an electronic database for the needs and within the limits of the use provided for by contract; (…). |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article L342-3 CPI |
| Legal text | Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>1° The extraction or reuse of an insubstantial part, which is assessed qualitatively or quantitatively, of the contents of the database, by the person who has lawful access to it;<br>2° The extraction for private purposes of a qualitatively or quantitatively substantial part of the content of a non-electronic database, subject to compliance with copyright or related rights on the works or elements incorporated in the database; (...).<br>Any clause contrary to 1° or 6° above is void.<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database.<br>The methods of application of this Article are specified by Decree in Council of State. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article L342-3-2° CPI |
| Legal text | Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>(...) 2° The extraction for private purposes of a qualitatively or quantitatively substantial part of the content of a non-electronic database, subject to compliance with copyright or related rights on the works or elements incorporated in the database; (...).<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database. |

The methods of application of this Article are specified by Decree in Council of State.

| Access to and reuse of works and other subject-matters | |
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| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article L122-5-3° e) CPI<br>Article L342-3-4° CPI<br>Article L342-3-4° bis CPI |
| Legal text | Art. L122-5<br>Once a work has been disclosed, the author may not prohibit:<br>(...) 3° on condition that the name of the author and the source are clearly stated:<br>(...) e) The representation or reproduction of excerpts from works, subject to works designed for educational purposes and musical scores, for the exclusive purposes of illustration in the context of research, including for the development and dissemination of subjects for examinations or competitions organised as an extension of the lessons to the exclusion of any educational playful activities or recreational activity, provided that this representation or reproduction is intended, in particular by means of digital work space, to an audience composed mainly of pupils, students, teachers or researchers directly concerned by the act of teaching, training or research activity requiring this representation or reproduction, which is not the subject of any publication or distribution to a third party or the public thus constituted, that the use of this representation or this reproduction does not give rise to any commercial exploitation and that it is compensated by a remuneration negotiated on a basis flat-rate without prejudice to the transfer of the reproduction right by reprography mentioned in Article L122-10; (...).<br>Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>(...) 4° The extraction and reuse of a substantial part, assessed qualitatively or quantitatively, of the content of the database, subject to databases designed for educational purposes and databases produced for a digital edition of the written version, for the exclusive purposes of illustration in the context of research, to the exclusion of any educational playful activity or recreational activity, since the public for which this extraction and this reuse are intended is composed mainly of researchers directly concerned, that the source is indicated, that the use of this extraction and this reuse does not give rise to any commercial exploitation and that it is compensated by remuneration negotiated on a fixed basis;<br>4° bis The extraction and reuse of a substantial part, assessed qualitatively or quantitatively, of the content of the database for the exclusive purposes of illustration in the context of education and professional training, under the conditions provided for in Article L122-5-4. For the application of this article, the author means the beneficiary of the rights and the representation and reproduction of extracts of works means the extraction and reuse of a substantial part of a database; (…).<br>Any clause contrary to 1° or 6° above is void.<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database.<br>The methods of application of this Article are specified by Decree in Council of State. |

| Relevant EU provision | Article 5 CDSMD |
|---|---|
| Legal provision | Article L122-5-12° CPI<br>Article L122-5-4 CPI<br>Article L122-6-1 CPI<br>Article L211-3-3° e) CPI |
| Legal text | Art. L. 122-5-12° CPI<br>When the work has been disclosed, the author cannot prohibit:<br>(...) 12° The representation or reproduction of extracts from works for the exclusive purposes of illustration within the framework of education and professional training, under the conditions provided for in Article L122-5-4; (...).<br>Art. L. 122-5-4 CPI<br>I. Pursuant to 12° of Article L122-5, and subject to the provisions of II and III of this Article, the representation or reproduction of extracts from works may be carried out without the authorisation of the authors to exclusively for illustrative purposes in the context of education and vocational training, including apprenticeship, and for the development and dissemination of subjects for exams or competitions organised as an extension of the teachings, at the exclusion from any activity for recreational purposes and to the extent justified by the non-commercial purpose pursued.<br>This representation or reproduction takes place under the responsibility of an educational institution:<br>- in its premises or in other places, for an audience composed mainly of pupils, students or teachers directly concerned by the act of education or training requiring this representation or reproduction;<br>-or by means of a secure digital environment accessible only to pupils, students and teaching staff of this establishment.<br>In the event that the acts of representation and reproduction are carried out by means of a digital environment in a cross-border framework within the European Union, they are deemed to take place only on the territory of the State where the establishment is established.<br>Acts of representation or reproduction of extracts from works mentioned in this Article are compensated by a remuneration negotiated on a lump sum basis.<br>II. The provisions of I do not apply to acts of reproduction and representation in digital form when adequate licenses authorising these acts for illustrative purposes in the context of education and vocational training and responding to the needs and specificities of the establishments are offered in a visible manner to the educational establishments. A Council of State Secree defines the conditions for the visibility of the proposals and fixes the list of establishments for which the proposal is addressed to the competent ministers.<br>The conditions for granting licenses mentioned in the previous paragraph are based on objective and transparent criteria. The amount of remuneration requested in return for these licenses is reasonable.<br>Under the conditions provided for in Articles L324-8-1 to L324-8-6, the appropriate licenses issued by an approved collective management organisation may be extended to rightsholders who are not members of this organisation by order of the minister in charge of the culture.<br>Art. L122-6-1<br>(...) VII. The acts mentioned in Article L122-6 are not subject to the authorisation of the author when they are carried out for the purposes and under the conditions mentioned in 12 ° and 13 ° of Article L122-5. (...)<br>Art. L211-3 |

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| | Beneficiaries of the rights granted under this Title may not prohibit:<br>(...) 3° Subject to sufficient identification of the source:<br>(...) e) The communication to the public or the reproduction of extracts of objects protected by a related right, for the exclusive purposes of illustration in the context of education and professional training under the conditions provided for in Article L. 122-5-4. For the application of this article, the author means the beneficiary of the related rights, the works mean objects protected by a related right and the performance means communication to the public; (...).<br>III. The provisions of I do not apply to acts of reproduction and representation in a form other than digital works designed for educational purposes and musical scores.<br>IV. The provisions of this article do not apply to the transfer of the reproduction right by reprography mentioned in article L. 122-10. |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article L122-5-3-3 CPI<br>Article L211-3-8° CPI<br>Article L122-6-1-6 CPI<br>Article L342-3-6° CPI |
| Legal text | Art. L122-5-3-II<br>I. Text and data mining is understood to mean, within the meaning of 10° of Article L122-5, the implementation of a technique for the automated analysis of texts and data in digital form in order to derive information from them, in particular constants, trends and correlations.<br>II. Digital copies or reproductions of works to which it has been lawfully accessed may be made without authorisation from the authors for the purposes of text and data mining carried out for the sole purpose of scientific research by research organisations, libraries accessible to the public, museums, archives or institutions depositing cinematographic, audiovisual or sound heritage, or on their behalf and at their request by other persons, including within the framework of a partnership non-profit with private actors.<br>The provisions of the previous paragraph are not applicable when a company, shareholder or partner of the body or institution commissioning the text and data mining has privileged access to their results.<br>Digital copies and reproductions made during text and data mining are stored with an appropriate level of security and may be kept for the sole purpose of scientific research, including for verification of research results.<br>Copyright holders may take proportionate and necessary measures to ensure the security and integrity of the networks and databases in which works are hosted.<br>An agreement concluded between the representative organisations of copyright owners and the organisations and institutions mentioned in the first paragraph of this II may define good practices relating to the implementation of its provisions. (...)<br>Art. L211-3<br>Beneficiaries of the rights granted under this Title may not prohibit:<br>(...) 8° Digital copies or reproductions of a performance, phonogram, videogram, programme or press publication for the purpose of text and data mining carried out under the conditions provided for in Article L122-5-3. For the application of this Article, the author means the artist-performer, the producer, the audiovisual communication company, the press publisher or |

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| | the press agency beneficiary of a right neighbor, works means interpretations, phonograms, videograms, programmes or press publications and copyright means neighboring rights; (...).<br>Art. L122-6-1<br>(...) VI. The acts mentioned in 1° and 2° of Article L122-6 are not subject to the authorisation of the author when they are carried out for the purposes and under the conditions mentioned in III of the Article L122-5-3.<br>Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>(...) 6° Extractions, copies or digital reproductions of a database, with a view to searching texts and data carried out under the conditions provided for in Article L122-5-3. For the purposes of this Article, authors and copyright holders mean database producers and digital copies or reproductions of works mean digital extractions, copies or reproductions of databases; (...).<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database.<br>The methods of application of this Article are specified by Decree in Council of State.<br>These reproductions of performances are stored with an appropriate level of security and may be kept for scientific research purposes, including for the verification of research results.<br>Holders of related rights are authorised toapply measures intended to ensure the security and integrity of the networks and databases where the services are hosted, provided that these measures do not go beyond what is necessary. to reach this goal; (...).<br>Art. XI.299. (...) § 5. The authorisation of the rightsholder is not required for reproductions of accessible works in a lawful manner, within the meaning of Article XI.298, a) and b), for the purposes of text and data mining, provided that the use of these works has not been expressly reserved by the appropriately entitled.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These reproductions may be kept for as long as necessary for the purposes of text and data mining. (...).<br>Art. XI.310. (...) § 3. The producer's authorisation is not required for:<br>(...) 2° the extraction of the content of a lawfully accessible database, including works or services, for the purposes of text and data mining, provided that the use of the content of a database has not been expressly reserved by the database producers in an appropriate manner.<br>With regard to the contents made available to the public online, the reservation is considered appropriate only if it is made by means of machine-readable processes.<br>These extractions may be kept for as long as necessary for the purposes of text and data mining. (...) |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article L122-5-3-3 CPI<br>Article L211-3-8° CPI<br>Article L122-6-1-6 CPI<br>Article L342-3-6° CPI |
| Legal text | Art. L122-5-3-III |

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| | I. Text and data mining is understood to mean, within the meaning of 10° of Article L122-5, the implementation of a technique for the automated analysis of texts and data in digital form in order to derive information from them, in particular constants, trends and correlations.<br>(...)<br>III. Without prejudice to the provisions of II, digital copies or reproductions of works to which it has been lawfully accessed may be made with a view to text and data searches carried out by any person, whatever the purpose is, unless the author has objected to it in an appropriate manner, in particular by means of machine-readable processes for content made available to the public online. Copies and reproductions are stored with an appropriate level of security and then destroyed after text and data mining.<br>Art. L211-3<br>Beneficiaries of the rights granted under this Title may not prohibit:<br>(...) 8° Digital copies or reproductions of a performance, phonogram, videogram, programme or press publication for the purpose of text and data mining carried out under the conditions provided for in Article L122-5-3. For the application of this Article, the author means the artist-performer, the producer, the audiovisual communication company, the press publisher or the press agency beneficiary of a right neighbor, works means interpretations, phonograms, videograms, programmes or press publications and copyright means neighboring rights; (...).<br>Art. L122-6-1<br>(...) VI. The acts mentioned in 1° and 2° of Article L122-6 are not subject to the authorisation of the author when they are carried out for the purposes and under the conditions mentioned in III of the Article L122-5-3.<br>Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>(...) 6° Extractions, copies or digital reproductions of a database, with a view to searching texts and data carried out under the conditions provided for in Article L122-5-3. For the purposes of this Article, authors and copyright holders mean database producers and digital copies or reproductions of works mean digital extractions, copies or reproductions of databases; (...).<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database.<br>The methods of application of this Article are specified by Decree in Council of State. |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article L122-5-3° a) CPI<br>Article L211-3-3° a) CPI |
| Legal text | Art. L122-5<br>Once a work has been disclosed, the author may not prohibit:<br>(...) 3° on the condition that the name of the author and the source are clearly stated:<br>a) analyses and short quotations justified by the critical, polemic, educational, scientific or informatory nature of the work in which they are incorporated; (...). |

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| | Art. L211-3<br>Beneficiaries of the rights granted under this Title may not prohibit:<br>(...) 3° Subject to sufficient identification of the source:<br>a) Analyses and short quotations justified by the critical, polemical, educational, scientific or informative nature of the work in which they are incorporated; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article L137-4-I CPI<br>Article L219-4-I CPI |
| Legal text | Art. L137-4<br>I. The provisions of this chapter cannot oppose the free use of the work within the limits of the rights provided for by this code, as well as those granted by the holders of rights. In particular, they must not have the effect of depriving users of online content sharing service providers of the effective benefit of the exceptions to copyright provided for by this code. (...).<br>Art. L219-4<br>I. The provisions of this chapter cannot oppose the free use of the protected object within the limits of the rights provided for by this code, as well as those granted by the holders of rights. In particular, they must not have the effect of depriving users of online content sharing service providers of the effective benefit of the exceptions to neighboring rights provided for by this code. (...) |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article L122-5-8° CPI<br>Article L211-3-7° CPI |
| Legal text | Art. L122-5<br>When the work has been disclosed, the author cannot prohibit:<br>(...) 8° The reproduction of a work and its representation carried out for conservation purposes or intended to preserve the conditions of its consultation for purposes of research or private study by individuals, on the premises of the establishment and on dedicated terminals by libraries accessible to the public, by museums or by archives, provided that these do not seek any economic or commercial advantage; (...).<br>Art. L211-3<br>Beneficiaries of the rights granted under this Title may not prohibit:<br>(...) 7° Acts of reproduction and representation of an interpretation, a phonogram, a videogram, a programme or a press publication carried out for preservation purposes or intended to preserve the conditions of its consultation for the purposes of research or private study by individuals, on the premises of the establishment and on dedicated terminals, carried out by libraries accessible to the public, by museums or by archives services, provided that they do not seek any economic or commercial advantage; (...). |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |

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| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article L122-5-8° CPI<br>Article L122-6-1-5 CPI<br>Article L342-3-5° CPI |
| Legal text | Art. L122-5-8° CPI<br>When the work has been disclosed, the author cannot prohibit:<br>(...) 8° The reproduction of a work and its representation carried out for conservation purposes or intended to preserve the conditions of its consultation for purposes of research or private study by individuals, on the premises of the establishment and on dedicated terminals by libraries accessible to the public, by museums or by archives, provided that these do not seek any economic or commercial advantage; (...).<br>Art. L122-6-1<br>(...) V. The acts mentioned in 1° of Article L122-6 are not subject to the authorisation of the author when they are carried out for the purposes and under the conditions mentioned in 8° of Article L122-5.<br>Art. L342-3<br>When a database is made available to the public by the rightsholder, the latter may not prohibit:<br>(...) 5° The extraction and reuse of a database under the conditions defined in 8° of Article L122-5; (...).<br>Any clause contrary to 1° or 6° above is void.<br>The exceptions listed in this Article cannot interfere with the normal exploitation of the database or cause unjustified prejudice to the legitimate interests of the producer of the database.<br>The methods of application of this Article are specified by Decree in Council of State. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |

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| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article L123-1 CPI |
| Legal text | Article L123-1 CPI The author enjoys, throughout his life, the exclusive right to exploit his work in any form whatsoever and to derive a pecuniary profit from it. On the death of the author, this right persists for the benefit of his successors in title during the current calendar year and the 70 years that follow. |
| **Secondary Publishing Right** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article L533-4 CPI |
| Legal text | Art. L533-4<br><br>I.-When a scientific writing resulting from a research activity financed at least half by grants from the State, local authorities or public establishments, by grants from national funding agencies or by funds of the European Union is published in a periodical appearing at least once a year, its author has, even after having granted exclusive rights to a publisher, the right to make available free of charge in an open format, by digital means, subject to with the agreement of any co-authors, the final version of his manuscript accepted for publication, as long as the publisher himself makes it available free of charge digitally or, failing that, at the expiration of a deadline current from the date of first publication. This period is a maximum of 6 months for a publication in the field of science, technology and medicine and 12 months in that of the human and social sciences.<br><br>The version made available pursuant to the first paragraph cannot be used as part of a commercial publishing activity.<br><br>II.-As long as the data resulting from a research activity financed at least half by grants from the State, local authorities, public establishments, subsidies from national funding agencies or by funds from the European Union are not protected by a specific law or particular regulation and they have been made public by the researcher, the establishment or the research organization, their reuse is free.<br><br>III.-The publisher of a scientific writing mentioned in I cannot limit the reuse of research data made public as part of its publication.<br><br>IV.-The provisions of this article are of public order and any clause contrary to them is deemed unwritten. |

## 1.4.11. GERMANY

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 69d(1)-(3) UrhG-G |
| Legal text | Section 69d<br>Exceptions to restricted acts<br>(1) Unless otherwise provided by special contractual provisions, the acts referred to in Section 69c nos. 1 and 2 [the permanent or temporary reproduction, in whole or in part, of a computer programme by any means and in any form; loading, displaying, running, transmission or storage of the computer programme; the translation, adaptation, arrangement and other modifications of a computer programme, as well as the reproduction of the results thereof] do not require authorisation by the rightsholder if they are necessary for the use of the computer programme in accordance with its intended purpose, including for the correction of errors, by any person authorised to use a copy of the programme.<br>(2) The making of a back-up copy by a person having a right to use the computer programme may not be prevented by contract if it is necessary to secure future use. Section 60e (1) and (6) and Section 60f (1) and (3) apply to reproductions made for the purpose of preservation.<br>(3) The person having a right to use a copy of a computer programme is entitled, without the rightsholder's authorisation, to observe, study or test the functioning of that programme in order to determine the ideas and principles which underlie any element of the programme if this occurs whilst performing any acts of loading, displaying, running, transmitting or storing the programme to which that person is entitled. (...) |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 69e UrhG-G |
| Legal text | Section 69e<br>Decompilation<br>(1) The rightsholder's consent is not required where reproduction of the code or translation of its form within the meaning of Section 69c nos. 1 and 2 [the permanent or temporary reproduction, in whole or in part, of a computer programme by any means and in any form; loading, displaying, running, transmission or storage of the computer programme; the translation, adaptation, arrangement and other modifications of a computer programme, as well as the reproduction of the results thereof] is indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that the following conditions are met:<br>1. the acts are performed by the licensee or by another person authorised to use a copy of a programme or on their behalf by a person empowered to do so.<br>2. the information necessary to achieve interoperability has not previously been made readily available to the persons referred to in no. 1;<br>3. the acts are confined to those parts of the original programme which are necessary to achieve interoperability.<br>(2) Information obtained through acts as referred to in subSection (1) may not be |

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| | 1. used for purposes other than to achieve the interoperability of the independently created programme,<br>2. given to third parties, except when necessary for the interoperability of the independently created programme,<br>3. used for the development, production or marketing of a computer programme which is substantially similar in its expression or for any other acts which infringe copyright.<br>(3) SubSections (1) and (2) are to be interpreted such that their application neither conflicts with the normal exploitation of the work nor unreasonably damages the rightsholder's legitimate interests. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 55a UrhG-G |
| Legal text | Section 55a<br>Use of database work<br>The adaptation or reproduction of a database work is permitted for the owner of a copy of the database work which was put into circulation by sale with the author's consent, that person who is otherwise authorised to use the database work or that person who is given access to the database work on the basis of a contract concluded with the author or, with the author's consent, with a third party if and insofar as the adaptation or reproduction is necessary to gain access to the elements of the database work and for its customary use. If, on the basis of the contract in accordance with sentence 1, access is given only to a part of the database work, only the adaptation and reproduction of that part is permitted. Any contractual agreements to the contrary are null and void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 87b UrhG-G |
| Legal text | Section 87b<br>Rights of makers of database<br>(1) The producer of the database has the exclusive right to reproduce and distribute the database as a whole or a qualitatively or quantitatively substantial part of the database and to make it available to the public. The reproduction, distribution or communication to the public of a qualitatively or quantitatively substantial part of the database is equivalent to the repeated and systematic reproduction, distribution or communication to the public of qualitatively or quantitatively insubstantial parts of the database insofar as these actions run contrary to a normal utilisation of the database or unreasonably impair the legitimate interests of the producer of the database. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 87c UrhG-G |
| Legal text | Section 87c<br>Limitations on rights of makers of database<br>(1) The reproduction of a qualitatively or quantitatively substantial part of a database is permitted<br>1. for private use; this does not apply to a database whose elements are accessible individually by electronic means,<br>2. for the purposes of scientific research pursuant to Section 60c,<br>3. for the purpose of illustration in teaching in educational establishments pursuant to Sections 60a and 60b, |

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| | 4. for the purposes of text and data mining pursuant to Section 44b,<br>5. for the purposes of text and data mining for scientific research purposes pursuant to Section 60d,<br>6. for the purposes of the preservation of a database pursuant to Section 60e (1) and (6) and Section 60f (1) and (3).<br>(2) The reproduction, distribution and communication to the public of a qualitatively or quantitatively substantial part of a database is permitted for use in proceedings before a court, an arbitration tribunal or authority, as well as for the purposes of public security.<br>(3) Sections 45b to 45d and 61d to 61g apply accordingly.<br>(4) The digital distribution and digital communication to the public of a part of a database which is essential in terms of its nature or extent is permitted for the purposes of illustration in teaching in educational establishments in accordance with Section 60a.<br>(5) Section 62 applies accordingly to the acknowledgement of source.<br>(6) In the cases referred to in subSection (1) nos. 2, 3, 5 and 6 and subSection (4), Section 60g (1) applies accordingly. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 60a UrhG-G |
| Legal text | Section 60a<br>Teaching in educational establishments<br>(1) For the purpose of illustration in teaching in educational establishments, up to 15 per cent of a published work may be reproduced, distributed, made available to the public or otherwise communicated to the public on a non-commercial basis<br>1. for teachers and participants at the respective event,<br>2. for teachers and examiners at the same educational establishment and<br>3. for third persons insofar as this serves the presentation of lessons or lectures or the results of tuition or training or learning outcomes at the educational establishment.<br>(2) In derogation from subSection (1), full use may be made of illustrations, individual articles from the same professional or scientific journal, other small-scale works and out-of-commerce works.<br>(3) SubSections (1) and (2) do not authorise the following uses:<br>1. reproduction of a work by means of recording onto video or audio recording mediums or communication to the public of a work whilst it is being publicly recited, performed or presented,<br>2. reproduction, distribution and communication to the public of a work in schools which is exclusively suitable, intended and labelled for teaching in schools and<br>3. reproduction of graphic recordings of musical works to the extent that such reproduction is not required for making content available to the public in accordance with subSections (1) or (2).<br>Sentence 1 only applies where licences for such uses are easily available and traceable, they meet the needs and specificities of educational establishments and permit uses in accordance with sentence 1 nos. 1 to 3.<br>(3a) Where works are used in secure electronic environments for the purposes referred to in subSection (1) no. 1 and no. 2 and subSection (2) in Member States of the European Union and Contracting Parties of the Agreement on the European Economic |

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| | Area, such use is deemed only to have been effected in the Member State or Contracting Party in which the educational establishment is domiciled.<br>(4) 'Educational establishment' means early childhood educational establishments, schools, universities, vocational schools, and other training and further education institutions.<br>Section 83<br>Limitations of exploitation rights<br>The provisions of Part 1 Division 6 apply accordingly to the rights afforded to the performer under Sections 77 and 78 and to the organiser under Section 81.<br>Section 85<br>Exploitation rights<br>(...) (4) Section 10(1) and Sections 23 and 27(2) and (3), as well as the provisions of Part 1 Division 6 apply accordingly.<br>Section 87<br>Broadcasting organisations<br>(...) (4) Section 10(1) and the provisions of Part 1 Division 6, with the exception of Section 47(2) sentence 2 and Section 54(1), apply accordingly. (...) |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 60c UrhG-G<br><br>Section 60c<br>Scientific research<br>(1) Up to 15 per cent of a work may be reproduced, distributed and made available to the public for the purpose of non-commercial scientific research<br>1. for a specifically delimited circle of persons for their personal scientific research and<br>2. for individual third persons insofar as this serves the monitoring of the quality of scientific research.<br>(2) Up to 75 per cent of a work may be reproduced for personal scientific research.<br>(3) In derogation from subSections (1) and (2), full use may be made of illustrations, individual articles from the same professional or scientific journal, other small-scale works and out-of-commerce works.<br>(4) SubSections (1) to (3) do not authorise the recording of the public recitation, performance or presentation of a work onto a video or audio recording medium and the subsequent making available to the public of that recording.<br>Section 83<br>Limitations of exploitation rights<br>The provisions of Part 1 Division 6 apply accordingly to the rights afforded to the performer under Sections 77 and 78 and to the organiser under Section 81.<br>Section 85<br>Exploitation rights<br>(...) (4) Section 10(1) and Sections 23 and 27(2) and (3), as well as the provisions of Part 1 Division 6 apply accordingly.<br>Section 87<br>Broadcasting organisations |

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| | (...) (4) Section 10(1) and the provisions of Part 1 Division 6, with the exception of Section 47(2) sentence 2 and Section 54(1), apply accordingly. (...) |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 60b UrhG-G |
| Legal text | Section 60b<br>Media collections for teaching<br>(1) Producers of media collections for teaching may reproduce, distribute or make available to the public up to 10 per cent of a published work for such collections.<br>(2) Section 60a (2) and (3) sentence 1 applies accordingly.<br>(3) For the purposes of this Act, 'media collections for teaching' means collections which bring together a significant number of authors and which are suitable, intended and labelled accordingly for the exclusive purpose of non-commercial illustration in teaching in educational establishments (Section 60a). |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 60d UrhG-G |
| Legal text | Section 60d<br>Text and data mining for scientific research purposes<br>(1) It is permitted to make reproductions to carry out text and data mining (Section 44b (1) and (2) sentence 1) for scientific research purposes in accordance with the following provisions.<br>(2) Research organisations are authorised to make reproductions. 'Research organisations' means universities, research institutes and other establishments conducting scientific research if they<br>1. pursue non-commercial purposes,<br>2. reinvest all their profits in scientific research or<br>3. act in the public interest based on a state-approved mandate.<br>The authorisation under sentence 1 does not extend to research organisations cooperating with a private enterprise which exerts a certain degree of influence on the research organisation and has preferential access to the findings of its scientific research.<br>(3) The following are, further, authorised to make reproductions:<br>1. libraries and museums, insofar as they are accessible to the public, and archives or institutions in the field of cinematic or audio heritage (cultural heritage institutions),<br>2. individual researchers, insofar as they pursue non-commercial purposes.<br>(4) Those authorised in accordance with subSections (2) and (3) and pursuing non-commercial purposes may make reproductions made pursuant to subSection (1) available to the following persons:<br>1. a specifically delimited circle of persons for their joint scientific research and<br>2. individual third persons for the purpose of monitoring the quality of the scientific research.<br>The making available to the public must be terminated as soon as the joint scientific research or the monitoring of the quality of the scientific research has been concluded. |

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| | (5) Those authorised under subSections (2) and (3) no. 1 may retain reproductions made pursuant to subSection (1), thereby taking appropriate security measures to prevent unauthorised use, for as long as they are needed for the purposes of the scientific research or the monitoring of the quality of the scientific findings.<br>(6) Rightsholders are authorised to take necessary measures to prevent the security and integrity of their networks and databases being put at risk on account of reproductions made in accordance with subSection (1). |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 44b UrhG-G |
| Legal text | Section 44b<br>Text and data mining<br>(1) 'Text and data mining' means the automated analysis of individual or several digital or digitised works for the purpose of gathering information, in particular regarding patterns, trends and correlations.<br>(2) It is permitted to reproduce lawfully accessible works in order to carry out text and data mining. Copies are to be deleted when they are no longer needed to carry out text and data mining.<br>(3) Uses in accordance with subSection (2) sentence 1 are permitted only if they have not been reserved by the rightsholder. A reservation of use in the case of works which are available online is effective only if it is made in a machine-readable format. |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary Reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Section 44a UrhG-G |
| Legal text | Section 44a<br>Temporary acts of reproduction<br>Those temporary acts of reproduction are permitted which are transient or incidental and constitute an integral and essential part of a technical process and whose sole purpose is to enable<br>1. a transmission in a network between third parties by an intermediary or<br>2. a lawful use<br>of a work or other protected subject matter to be made and which have no independent economic significance. |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 51 UrhG-G |
| Legal text | Section 51<br>Quotations<br>It is permitted to reproduce, distribute and communicate to the public a published work for the purpose of quotation insofar as such use is justified to that extent by the particular purpose. This is, in particular, permitted where<br>1. subsequent to publication individual works are included in an independent scientific work for the purpose of explaining its content, |

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| | 2. subsequent to publication passages from a work are quoted in an independent literary work,<br>3. individual passages from a released musical work are quoted in an independent musical work.<br>The authorisation to quote under sentences 1 and 2 includes the use of an illustration or other reproduction of the cited work, even if this is itself protected by copyright or a related right. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section 5 of the German Act on Copyright Liability of Online Content Sharing Service Providers (UrhDaG) |
| Legal text | Section 5<br>Legally Permitted Uses; Author's Remuneration<br>(1) The reproduction of copyrighted works and parts of works by the user of a service provider is permitted for the following purposes:<br>1. for quotations according to Section 51 of the Copyright Act,<br>2. for caricatures, parodies and pastiches according to Section 51a of the Copyright Act and<br>3. for legally permitted cases of public reproduction not covered by numbers 1 and 2 under Part 1 Section 6 of the Copyright Act.<br>(2) The service provider shall pay the author appropriate remuneration for public communication pursuant to subSection 1 number 2. The right to remuneration cannot be waived and can only be assigned in advance to a collecting society. It can only be asserted by a collecting society. Section 63a paragraph 2 of the Copyright Act and Section 27a of the Collecting Societies Act shall apply.<br>(3) The service provider must inform the user of the legal permissions according to paragraph 1 in his general terms and conditions. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 60e(4) UrhG-G |
| Legal text | Section 60e<br>Libraries<br>(...)<br>(4) Libraries may make a work from their holdings available to their users for personal research or private studies at terminals on their premises. They may enable users, for non-commercial purposes, to reproduce up to 10 per cent of a work per session and to make reproductions of individual illustrations, articles from the same professional or scientific journal, other small-scale works and out-of-commerce works. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD<br>Article 6 CDSMD |
| Legal provision | Section 60e UrhG-G<br>Section 60f UrhG-G |
| Legal text | Section 60e<br>Libraries<br>(1) Publicly accessible libraries which neither directly nor indirectly pursue commercial purposes (libraries) may reproduce a work from their holdings or exhibitions, or have such a work reproduced, for the purpose of making available, indexing, cataloguing, preservation and restoration, including more than once and with technically necessary alterations. |

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| | (2) For restoration purposes, libraries may distribute reproductions of a work from their holdings to other libraries or to institutions as referred to in Section 60f. They may lend restored works as well as copies of newspapers, out-of-commerce works or damaged works from their holdings.<br>(3) Libraries may distribute reproductions of a work as referred to in Section 2 (1) nos. 4 to 7 insofar as this is done in connection with their public exhibitions or with the documentation of their holdings.<br>(4) Libraries may make a work from their holdings available to their users for personal research or private studies at terminals on their premises. They may enable users, for non-commercial purposes, to reproduce up to 10 per cent of a work per session and to make reproductions of individual illustrations, articles from the same professional or scientific journal, other small-scale works and out-of-commerce works.<br>(5) In response to individual orders, libraries may, for non-commercial purposes, transmit reproductions of up to 10 per cent of a published work to users, as well as reproductions of individual articles which have appeared in professional or scientific journals.<br>(6) SubSection (1) applies accordingly to publicly accessible libraries pursuing commercial purposes as regards reproductions made for the purpose of the preservation of a work.<br>**Section 60f**<br>Archives, museums and educational establishments<br>(1) Section 60e applies accordingly, with the exception of subSections (5) and (6), to archives, institutions in the field of cinematic and audio heritage, as well as to publicly accessible museums and educational establishments (Section 60a (4)) which neither directly nor indirectly pursue commercial purposes.<br>(2) Archives which also act in the public interest may reproduce a work or have a work reproduced in order to include it as archival material in their holdings. The agency submitting the work must without delay delete any reproductions in its possession.<br>(3) Section 60e (1) applies accordingly to archives, institutions in the field of cinematic and audio heritage and publicly accessible museums pursuing commercial purposes as regards reproductions made for the purpose of the preservation of a work. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Sections 51-51b of the German Act on Collecting Societies (VGG) |
| Legal text | Section 51<br>Collective licensing with extended effect<br>(1) If a collecting society concludes an agreement concerning the use of its repertoire, it may also, in accordance with the provisions of this Division, grant corresponding rights of use in the work of an external rightsholder (Section 7a).<br>(2) External rightsholders may at any time file an objection to the grant of rights in accordance with subSection (1) with the collecting society.<br>(3) In respect of the grant of rights, external rightsholders have the same rights and obligations in their relationship with the collecting society as if those rights were being managed by contractual arrangement.<br>**Section 51a**<br>Effectiveness of grant of rights and ongoing provision of information<br>(1) The grant of rights in the work of an external rightsholder is effective under the following conditions:<br>1. the collecting society is representative (Section 51b), |

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| | 2. it is unreasonable to expect the user or the collecting society to obtain authorisation for use from all the external rightsholders concerned,<br>3. the grant of rights is limited to uses within Germany,<br>4. the collecting society publishes the following information on its website for an appropriate period of at least 3 months before to the grant of rights:<br>a) the fact that it is in a position to grant collective licences with an extended effect,<br>b) the effects of collective licences with an extended effect for external rightsholders,<br>c) the types of use, types of work and groups of rightsholders which are to be included in the collective licences with an extended effect,<br>d) the right of external rightsholders to object,<br>5. the external rightsholder has not objected to the grant of rights within the period set in no. 4.<br>(2) The collecting society makes the information referred to in subSection (1) no. 4 available on its website on a permanent basis.<br>**Section 51b**<br>Representativity of collecting society<br>(1) A collecting society is representative if it manages, by contractual arrangement, the rights of a sufficiently large number of rightsholders which are to be made the subject of the collective licence.<br>(2) If only one collecting society which has been granted authorisation (Section 77) manages rights in accordance with subSection (1), it is refutably presumed to be representative. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 5 (3) UrhG-G |
| Legal text | Section 5<br>Official works<br>(1) Acts, statutory instruments, official decrees and official notices, as well as decisions and official head notes of decisions do not enjoy copyright protection.<br>(2) The same applies to other official texts published in the official interest for general information purposes, subject to the proviso that the provisions concerning the prohibition of alteration and the acknowledgement of source in Section 62 (1) to (3) and Section 63 (1) and (2) apply accordingly.<br>(3) Copyright in respect of private normative works is not affected by subSections (1) and (2) if acts, statutory instruments, decrees or official notices refer to such works without reproducing their wording. In that case the author is obliged to grant every publisher, on equitable conditions, a right of reproduction and distribution. Where a third party is the owner of the exclusive right of reproduction and distribution, that third party is obliged to grant the right of use under sentence 2. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |

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| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Section 68 UrhG-G |
| Legal text | Section 68<br>Reproductions of works of visual arts in public domain<br><br>Reproductions of works of visual arts in the public domain are not protected by related rights under Parts 2 and 3. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 5(1)(2) UrhG-G |
| Legal text | Section 5<br>Official works<br>(1) Acts, statutory instruments, official decrees and official notices, as well as decisions and official head notes of decisions do not enjoy copyright protection.<br>(2) The same applies to other official texts published in the official interest for general information purposes, subject to the proviso that the provisions concerning the prohibition of alteration and the acknowledgement of source in Section 62 (1) to (3) and Section 63 (1) and (2) apply accordingly. |
| **Secondary Publishing Right** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 38 UrhG-G |
| Legal text | Section 38 - Contributions to collections<br><br>(⋯.) (4) The author of a scientific contribution which results from research activities at least half of which were financed by public funds and which was reprinted in a collection which is published periodically at least twice per year also has the right, if he or she has granted the publisher or editor an exclusive right of use, to make the contribution available to the public upon expiry of 12 months after first publication in the accepted manuscript version, unless this serves a commercial purpose. The source of the first publication must be cited. Any deviating agreement to the detriment of the author is ineffective. |

### 1.4.12. GREECE

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 42(1)-(4) of Law 2121/1993 |
| Legal text | Article 42 |

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| | 1. Unless there is an agreement to the contrary, the lawful user of a computer programme is allowed, without the author's permission and without payment of a fee, to reproduce, translate, adapt, or otherwise transform a computer programme, when these operations are necessary for the intended use of the computer programme, including error correction.<br>2. Reproduction necessary to load, display, execute, transfer, or store the computer programme is not subject to the exception in the preceding paragraph and requires permission from the author.<br>3. The lawful user of a computer programme may not be contractually prevented from producing, without the author's permission and without payment of a fee, a back-up copy of the programme to the extent that this is necessary for use.<br>4. The lawful user of a copy of a computer programme is permitted, without the author's permission and without payment of a fee, to observe, study, or test the operation of the programme in order to identify the ideas and principles underlying any component of the programme, if the actions these are done during an act that constitutes a legal use of the programme. No contrary agreement is allowed.<br>5. Reproduction for private use beyond the cases of the two previous paragraphs of this Article is not permitted.<br>6. The limitation provided for in Article 28A paragraphs 1 to 11 also applies to the rights of the computer programme beneficiary. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 43 of Law 2121/1993 |
| Legal text | Article 43<br>1. The lawful user of a copy of a computer programme is allowed, without the author's permission and without payment of a fee, to perform the actions provided for in paragraphs 1 and 2 of Article 42, as long as it is necessary to obtain the necessary information for the interoperability of an independently created electronic computer programme with other programmes, if the information necessary for interoperability was not already easily and quickly accessible to the legitimate user and as long as the operations are limited to the parts of the original programme, which are necessary for such interoperability.<br>2. The provisions of the previous paragraph do not allow the information obtained in their application:<br>a) to be used for purposes other than achieving the interoperability of the independently created programme;<br>b) to be communicated to other persons except in cases where this is required for the interoperability of the independently created computer programme.<br>c) be used to process, produce or market a computer programme, the expression of which is substantially similar to the original programme, or for any other act that infringes the intellectual property of the creator.<br>3. The provisions of this Article cannot be interpreted in such a way as to allow their application in a way that would conflict with the normal exploitation of the computer programme or to cause unjustified damage to the legitimate interests of its creator. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 3(3) of Law 2121/1993 |
| Legal text | Article 3<br>(...) 3. The database creator has the exclusive right to allow or prohibit:<br>a) the temporary or permanent reproduction of the database by any means and form, in whole or in part,<br>b) the translation, adaptation, arrangement and any other transformation of the contents of the database, |

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| | c) any form of distribution of the database or copies thereof to the public.<br>The first sale of a copy of the database in the Community by the rightsholder, or with his consent, exhausts the right to resell that copy in the Community.<br>d) any announcement, demonstration or presentation of the database to the public,<br>e) any reproduction, distribution, announcement, demonstration or presentation to the public of the results of the operations referred to in item (b).<br>The lawful user of a database or its copies may perform, without the author's permission, any of the above operations which are necessary for accessing the content of the database and its normal use. If the lawful user is authorised to use only a certain part of the database, the preceding provision applies only to that part. |
| Relevant EU provision | Article 8 Database |
| Legal provision | 45A(5) of Law 2121/1993 |
| Legal text | Article 45A<br>(...) 5.The maker of a database that has been made available to the public in any way cannot prevent the lawful user of the database from extracting and/or reusing non-essential parts of its content evaluated qualitatively or quantitatively for any purpose. If the lawful user is entitled to extract and/or reuse only part of the database, this paragraph applies only to that part.<br>The lawful user of a database that has been made available to the public in any way may not:<br>a) perform actions that conflict with the normal exploitation of this database or unjustifiably affect the legitimate interests of its maker,<br>b) cause damage to the holders of copyright or related rights in the works or interpretations or performances contained in the said database. Agreements contrary to the arrangements provided for in this paragraph are void. (...) |
| Relevant EU provision | Article 9 Database |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Access to and reuse of works and other subject-matters** | |
| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 21(1) of Law 2121/1993 |
| Legal text | Article 21<br>It is permitted, without the author's permission and without payment, to reproduce articles lawfully published in a newspaper or magazine, short excerpts of a work or parts of a short work or a work of the visual arts, as long as it is done exclusively for teaching or examinations in an educational institution, to the extent justified by the intended purpose; such use shall comply with fair practices and does not prevent normal exploitation. Reproduction must be accompanied by the indication of the source and the names of the author and publisher, if these names appear in the source. |

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| Relevant EU provision | Article 5 CDSMD |
| Legal provision | Article 21(2) of Law 2121/1993 |
| Legal text | Article 21<br>Use for teaching<br>(...) 2. The following are permitted without the author's permission: Reproduction, communication to the public, making available to the public, on request, for digital use of works for the purpose of the illustration for teaching or examinations in an educational institution, to the extent justified by the non-commercial purpose pursued, provided that such use:<br>(a) is carried out under the responsibility of an educator on the premises of the educational establishment or on other premises; or through a secure electronic environment accessible only to pupils or students, and educational staff of the educational institution,<br>(b) does not exceed five per cent (5 %) of the total scope of the project or does not exceed one article legally published in a newspaper or journal or one a poem or a work of visual arts, including photographic works; and<br>c) is accompanied by an indication of the source, including the name of the author and the publisher, unless this is impossible.<br>3. Paragraph 2 shall not apply if appropriate licences are readily available on the market, which permit the operations referred to in paragraphs 1 and 2 and which meet the needs and specificities of educational institutions. In this case, the collective management organisations shall take the necessary measures, to ensure the availability of the works and other subject-matter, the [relevant] information and easy access for educational institutions to the appropriate licences, by posting on their website and making them available to the Intellectual Property Organisation for the purpose of updating its own website.<br>4. The use of works or other subject-matter for the sole purpose of illustration for teaching by means of a secure electronic environment shall be deemed to take place exclusively in the Member State of the educational institution, provided that it takes place in accordance with paragraphs 1 and 2.<br>5. For the use of works under paragraph 2, users shall pay a reasonable fee to the authors and publishers of the works, which shall be proportionate to the extent of the use made and the value of the works that are used under the exception and the value of the works reproduced.<br>The royalty shall be collected compulsorily by a collective management organisation representing the category of rightsholders concerned.<br>6. Any contractual arrangement contrary to paragraph 2, 3, 4 and 5 shall be null and void. |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 21A of Law 2121/1993 |
| Legal text | Article 21A<br>1. For the purposes of this Article the following definitions shall apply:<br>α) 'Text and data mining' means any automated analytical technique that aims to analyse text and data in digital form with the aim of producing information, such as patterns, trends and correlations. |

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| | (b) 'Research organisation' means the university, including its libraries, a research institute or any other entity with the primary objective of conducting scientific research or the performance of educational activities which also include the conduct of scientific research<br>(ba) on a non-profit basis or through the externalisation of research reinvesting all its profits in its scientific research; or<br>(bb) within the framework of a mission in the public interest, in such a way that an undertaking which exercising decisive influence over such an organisation cannot benefit primarily as access to the results of such scientific research.<br>(c) 'Cultural heritage institution' means a library or museum, archive or institution accessible to the public, and film or sound heritage institution.<br>2. Reproduction of works or other subject-matter for text and data mining for the purposes of scientific research carried out by research institutions is permitted if performed by research organisations and cultural heritage institutions.<br>Text and data mining is permitted on any material to which research organisations and institutions cultural heritage institutions have legal access.<br>3. Copies of works or other subject-matter created in accordance with paragraph 2 shall be stored under the responsibility of the research organisation and the cultural heritage institution with an appropriate level of security and may be kept for the purposes of scientific research, including the verification of the results of research.<br>4. Beneficiaries are allowed to implement measures to ensure the security and integrity of networks and databases, where the works or other subject-matter are hosted.<br>Such measures shall be proportionate and shall not go beyond what is necessary to achieve that objective.<br>5. Beneficiaries, research organisations and cultural heritage institutions shall establish common best practices on the implementation of the obligation and measures referred to in the paragraphs 3 and 4 respectively. The Intellectual Property Organisation shall be notified, without delay, about the practices referred to in the first subparagraph, and such practices shall be posted on its website.<br>6. Any contractual arrangement contrary to the exception provided for herein shall be null and void. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 21A(1)(a) of Law 2121/1993<br>Article 21B of Law 2121/1993 |
| Legal text | Article 21A<br>1. For the purposes of this Article the following definitions shall apply:<br>α) 'Text and data mining' means any automated analytical technique that aims to analyse text and data in digital form with the aim of producing information, such as patterns, trends and correlations. (...)<br>Article 21B<br>1. The reproductions and extractions of lawfully accessible works and other subject-matter for the purposes of text and data mining is permitted, if the use of works and other subject-matter has not been expressly reserved by the author or by the rightsholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online.<br>2. Reproductions and extractions made in accordance with paragraph 1 may be preserved for as long as necessary for the purposes of text and data mining. |
| **General E&Ls complementary to research-specific E&Ls** | |

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| **Quotation** | |
| **Relevant EU provision** | Article 5(3)(d) ISD |
| Legal provision | Article 19 of Law 2121/1993 |
| Legal text | Article 19<br>It is permitted, without the author's permission and without payment, to quote short excerpts from the work of another legally published work to support the opinion of the person quoting or to criticise the opinion of the other, as long as the quoting of such excerpts is in accordance with fair practices and the length of passages is justified by the intended purpose. The citation of the excerpt must be accompanied by the indication of the source and the names of the author and publisher, if these names appear in the source. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 66F(8)(a) of Law 2121/1993 |
| Legal text | Article 66F<br>(...) 8. Cooperation between online content service providers and rightsholders shall not prevent the availability of works or other subject-matter uploaded by users which do not infringe intellectual property rights or related rights, including works or other subject-matter covered by an exception or limitation. Users may upload and make available user-generated content on online services, and content sharing services for:<br>(a) quoting, reviewing, commenting; and<br>(b) using it for caricature, parody or pastiche. (...) |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 22 of Law 2121/1993 |
| Legal text | Article 22<br>1. It is permitted, without the permission of the author and without payment, to reproduce an additional copy by non-profit libraries or archives, which have a copy of the work in their permanent collection, in order to preserve this copy or transfer it to another, non-profit library. Reproduction is permitted only if it is impossible to procure such a copy from the market in a short time and on reasonable terms.<br>2. Repealed. |
| Relevant EU provision | Article 6 CDSMD |

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| Legal provision | Article 22A of Law 2121/1993 |
| Legal text | Article 22A<br>Preservation of cultural heritage<br>1. Cultural heritage institutions, defined in Article 22(1) and Article 21A, as well as third parties acting on their behalf and under their responsibility, are permitted to make copies of works or other subject-matter permanently located in their collections, in whatever form or medium, exclusively for the purposes of preservation of those works or other subject-matter and to the extent necessary for such preservation.<br>2. Any contractual arrangement contrary to the exception provided for in paragraph 1 shall be null and void. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Article 7A of Law 2121/1993 |
| Legal text | Article 7A<br>Granting of collective authorisations<br>with extended validity<br>1. With regard to uses of works or other subject-matter, with the exception of audiovisual works, which works, within the territory of Greece, the organisations collective management organisations may, as an alternative, by means of a declaration to the user, may also represent rightsholders who have not authorised them to do so. The representation under this Article shall apply where the following conditions are met:<br>(a) the collective management organsations is, on the basis of the assignments made to it, sufficiently representative of the beneficiaries in the beneficiaries of the relevant type of works or other subject-matter in Greece,<br>(b) the interests of the rightsholders are safeguarded, as provided for by law, and in particular the equal treatment of all beneficiaries, including in relation to terms of the licence and their ability to dispose or not to dispose of their rights to different collective management organisations,<br>(c) by the nature of the intended uses, works or other subject-matter, the acquisition of the authorisation from beneficiaries on an individual basis is burdensome; and impractical, i.e. it could not cover all the beneficiaries involved,<br>(d) the formalities set out in paragraphs (a) and (b) hshall comply with paragraphs (k) and (kb), (c), (k), (kba) and (kc) of paragraph (a) of Article 28.<br>2. Where several organisations meet the above conditions, the legal consequences of the decision taken under paragraph 1 shall take effect when they make the declaration referred to in paragraph 1 all of them jointly.<br>3. Beneficiaries who have not authorised the organisation which grants the benefits referred to in paragraphs 1 and 2 may at any time exclude their works or other subject-matter from the licence scheme envisioned in paragraph 1, by written or electronic notification as referred to in paragraph (k) of Article 28, in accordance with subparagraph (c) or (ca)(1) of Article 28.<br>to it. In this case, the following shall apply<br>shall apply mutatis mutandis. 2 of Article 12 shall apply mutatis mutandis.<br>4. Paragraphs 1 to 3 shall not apply to compulsory collective management.<br>5. Where a collective management organisation grants licences under paragraphs 1, 2 and 3, the beneficiaries who have not authorised it to do so shall have equal rights to treatment as those who have authorised it. |

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| | 6. For the judicial protection of the works and the rightsholders represented by the collective management organisation or by an organisation paragraph 1 of Article 7 shall apply. |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Article of Law 2121/1993 |
| Legal text | Article 2.<br>(...) 3. Without prejudice to the provisions of Chapter 7 of this Law, computer programmes and preparatory material for their design are considered literary works protected under the provisions on intellectual property. Protection is afforded to any form of expression of a computer programme. The ideas and principles underlying any computer programme component, including those underlying its interfacing systems, are not protected under this Act. A computer programme is considered original if it is the personal intellectual creation of its creator. The digital design file with the help of a computer (Computer Aided Design File CAD File) is also an object of protection, (...). |
| Relevant EU provision | Article 31A of Law 2121/1993 |
| Legal provision | Article 14 CDSM |
| Legal text | Article 31A<br>Works of visual arts in the public domain<br>1. When the term of protection of a work of visual art has expired, any material resulting from the reproduction of that work shall not be protected by copyright or related rights, unless the material resulting from such reproduction is original within the meaning that it constitutes the personal intellectual creation of the author of the work.<br>2. This shall apply without prejudice to v. 4858/2021 (A' 220). |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 2 paragraphs (2) and (5) of Law 2121/1993 |
| Legal text | Article 2.<br>(...) 2. Translations, adaptations and other transformations of works or expressions of folklore are also understood as works, as well as collections of works or collections of expressions of folklore or simple facts and elements, such as encyclopedias, and anthologies (and databases), as long as the selection or arrangement of their content is original. The protection of the works referred to in this paragraph is subject to the reservation of the rights to the pre-existing works, which were used as the object of the conversions or collections. (...)<br><br>5. The protection of this Law does not extend to official texts expressing the exercise of State authority and in particular to legislative, administrative or judicial texts, as well as to news and simple facts or facts. |

### 1.4.13. HUNGARY

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 59 SZJT |
| Legal text | "**Sect. 59. (1)** In the absence of specific contractual provisions, the exclusive right of the author does not extend to the reproduction, adaptation, processing, translation, any other modification of the software - including the correction errors - and the reproduction of the result thereof, insofar as these actions are performed by the lawful user and for the normal use of the software.<br>**(2)** Any contractual provision preventing users making a back-up copy of the software, as long as it is necessary for the use of the software, is null and void.<br>**(3)** Lawful user of a copy of the software may observe and study the operation of the software without the permission of the author, and may also test the software during its loading, displaying, running, transmitting or storing the programme with the aim of using an element of the software as a basis get to know the idea or principle that serves." |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 60 SZJT |
| Legal text | "**Sect. 60. (1**) The author's permission is not required for the reproduction or translation of the code, if it is essential to obtain the information necessary for the interoperability of the independently created software with other software, provided that:<br>a) these acts are carried out by the lawful user or other person authorised to use the copy of the software, or by their representative;<br>b) the information required for interoperability has not become easily accessible to the persons mentioned in point a);<br>c) these acts are limited to those parts of the software that are necessary to ensure interoperability.<br>**(2)** Information obtained through the application of paragraph (1):<br>a) cannot be used for purposes other than interoperability with independently created software;<br>b) may not be communicated to others, unless interoperability with independently created software makes this necessary;<br>c) cannot be used for the development, production and marketing of other software that is essentially similar in terms of its expression, nor for any other act involving copyright infringement.<br>**(3)** Paragraph (2) of Section 33 shall be applied mutatis mutandis to the actions regulated in paragraphs (1)-(2).<br>**(4)** Paragraph (4) of Section 16, Paragraph (2) of Section 34, Paragraph (1) of Section 38, Section 48, Section 50/A. §, § 51, § 55 (1), and § 102 do not apply to the software. In the case Software, the deadline regulated in Section 49 (1) is 4 months. " |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 62(1) SZJT |
| Legal text | "**Sect. 62. (1)** The author's permission is not required for the lawful user of a database to perform the actions necessary to access the contents of the database and to use the contents of the database as intended. |

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| | **(2)** If the lawful user is authorised to use only a certain part of the database, the provision contained in paragraph (1) must be applied to this part of the database.<br>**(3)** Paragraph (2) of Section 33 shall be applied mutatis mutandis to the actions regulated in paragraphs (1)-(2).<br>**(4)** Any contractual provisions that differ from those contained in paragraphs (1) and (2) are null and void." |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 84/B SZJT |
| Legal text | "**Sect. 84/B. (1)** The consent of the maker of the database is not required for the lawful user of the disclosed database to extract or reuse an insignificant part of the content of the database - even repeatedly and regularly.<br>**(2)** If the lawful user is authorised to use only a certain part of the database, the provision contained in paragraph (1) must be applied to this part of the database.<br>**(3)** The lawful user of the disclosed database may not perform actions that are detrimental to the normal use of the database or unreasonably damage the legitimate interests of the producer.<br>**(4)** The provisions contained in paragraphs (1) and (2) do not affect the rights of the authors of individual works included in the database, or the neighboring rights regarding other elements of the content of the database.<br>**(5)** Any contractual provisions that differ from those contained in paragraphs (1)-(4) are null and void." |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 84/C(1), (2), (3) SZJT |
| Legal text | **Sect. 84/C. (1**) Anyone can reproduce a significant part of the contents of a database for private purposes, if it does not directly or indirectly serve to the purpose of generating income. This provision does not apply to the electronic databases. (...)<br>**(2)** By indicating the source, a significant part of the content of the database may be reproduced for the purpose of school education or scientific research - in a manner and to the extent appropriate for the purpose, if it does not indirectly serve the purpose of generating income. (...)<br>**(3)** A significant part of the contents of the database can be extracted or reused for the purpose of evidence in judicial, state administrative or other official proceedings, in a manner and to the extent appropriate for the purpose. (…) |
| **Access to and reuse of works and other subject-matters** | |
| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | "Section 34(2) SZJT<br>Section 68(2) SZJT " |
| Legal text | "**Sect. 34. (...) (2)** A published literary or musical work, part of a film, or a smaller independent work of this kind, as well as an image of a work of fine art, architecture, applied art and industrial design art, as well as a photographic work can be used for the purpose of illustration for the purpose of school education and for the purpose of scientific research, as long as the source and the name of the |

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| | author are indicated, and to the extent justified by the purpose, unless the work is used commercially. The use of the work in another work to an extent that exceeds the citation is regarded as appropriation. (...)<br>**Sect. 68. (...) (2)** For the purpose of illustration of scientific research, an image of a work of fine art, architecture, applied art or industrial design art, as well as a photographic work may be used without the consent of the author and without remuneration." |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 35/A(2)-(3) SZJT |
| Legal text | "**Sect. 35/A. (...) (2)** Free use shall cover reproductions made in order to carry out text and data mining of works by research organisations and cultural heritage institutions [Point 2 of SubSection (1) of Section 33/A] for scientific research, provided that:<br>a) the person using the works had lawful access to the works used,<br>b) the copies of works made within the framework of free use are stored with an appropriate level of security, and<br>c) the copies made may be retained for the purposes of scientific research.<br>**(3)** Authorised users may provide access to the reproduced copies made under SubSections (1) and (2):<br>a) within the framework of the relevant research cooperation, or<br>b) for the professional assessment of the scientific work, for a closed group of users, upon request and on the condition that it does not serve the purposes of commercial activities or to directly or indirectly generate more income. Communication to the public may be maintained solely to the extent required for the purpose and for the duration prescribed in this Section. " |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 35/A(1) SZJT |
| Legal text | Sect. 35/A. 1) Free use works shall encompass the use of works for text and data mining purposes under the following conditions:<br>a) the reproductions and extractions of lawfully accessible works, and<br>b) if the rightsholder has not expressly has not been expressly reserved by their rightsholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online,<br>c) the copies required for text and data mining are retained for as long as is necessary for the purposes of text and data mining. (...)" |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 34(1) SZJT<br>Section 34/A(1)(a) SZJT |
| Legal text | "**Sect. 34. (1)** Anyone can quote from a work, to the extent justified by the nature and purpose of the use and by remaining faithful to the original work, and by mentioning the source, including the author's name. (...)<br>**Sect. 34/A. (1)** A work may be used by anyone:<br>a) for purposes such as criticism or review, provided that the source, including the author's name, is indicated; and/or |

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| | b) for purposes such as quotation, and caricature, parody or pastiche for an expression of humor or mockery.<br>**(2)** As regards the uses under SubSection (1), quotations from the original work shall be subject to exceptions or limitations to the extent justified by the purpose to be achieved. " |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 38(5) SZJT |
| Legal text | **Sect. 38. (...) (5)** Unless otherwise agreed by contract, cultural heritage institutions [Section 33/A.(1) Point 2], as well as educational institutions [Section 33/A.(1) point 3] can communicate the works in their permanent collection to the public, for the purpose of scientific research or individual study, by displaying on the screens of the computer terminals set up for this purpose in the premises of such institutions, and to this end - in the manner and under the conditions defined by law - they can be freely transmitted to the members of the public, including making it available to the public, provided that such use does not indirectly serve the purpose of generating income. |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | "Section 33/A(1)(2) SZJT<br>Section 35(4)(b) SZJT " |
| Legal text | **"Sect. 33/A. (…) (2)** Cultural heritage institution: a publicly accessible library or museum, or an archive, or an image or sound archive that is considered a public collection; (…).<br>**Sect. 35. (…) (4)** Cultural heritage institutions [Section 33/A.(1) point 2] and educational institutions [Section 33/A.(1) point 3] may make a copy of the work if it does not directly or indirectly serve to the purpose of earning or increasing income even, and if<br>a) it is necessary for scientific research or archiving,<br>**b)** it is prepared for the purpose of public library provision or the use specified in Section 38, subSection (5),<br>c) a minor part of a published work, and a newspaper or magazine article is prepared for internal institutional purposes, or<br>d) necessary for use for the purpose of school education.<br>**(4a)** The cultural heritage institutions are permitted to:<br>a) make a copy for the purpose of use according to point a) of paragraph (4) for a research site and other cultural heritage institution,<br>b) make a copy for the purpose of use according to point d) of paragraph (4) by an educational institution [Section 33/A.(1) point 3];<br>such copies may be distributed freely in a way that does not directly serve the purpose of earning or increasing income." |
| Relevant EU provision | Article 6 CDSMD |

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| Legal provision | Section 33/A(1)(2) SZJT<br>Section 35(4)(b) SZJT |
| Legal text | "**Sect. 33/A. (…) (2)** Cultural heritage institution: a publicly accessible library or museum, or an archive, or an image or sound archive that is considered a public collection; (…).<br>**Sect. 35. (…) (4)** Cultural heritage institutions [Section 33/A.(1) point 2] and educational institutions [Section 33/A.(1) point 3] may make a copy of the work if it does not directly or indirectly serve to the purpose of earning or increasing income even, and if<br>a) it is necessary for scientific research or archiving,<br>b) it is prepared for the purpose of public library provision or the use specified in Section 38, subSection (5),<br>c) a minor part of a published work, and a newspaper or magazine article is prepared for internal institutional purposes, or<br>d) necessary for use for the purpose of school education.<br>**(4a)** The cultural heritage institutions are permitted to:<br>a) make a copy for the purpose of use according to point a) of paragraph (4) for a research site and other cultural heritage institution,<br>b) make a copy for the purpose of use according to point d) of paragraph (4) by an educational institution [Section 33/A.(1) point 3];<br>such copies may be distributed freely in a way that does not directly serve the purpose of earning or increasing income." |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Section 58(1) SZJT |
| Legal text | Sect. 58. (1) The provision contained in Section 1(6) shall apply to the idea, principle, concept, procedure, operating method or mathematical operation that forms the basis of the interface of a software. (…) |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 1(4)-(7) SZJT |
| Legal text | "**Sect. 1. (…) (4**) Legislations, institutional regulatory instruments of public law, court decisions or other official decisions, official or other public announcements and cases, and other similar documents are not covered by this Law. |

**(5)** Copyright protection does not extend to the facts or daily news that form the basis of press publications.
**(6)** An idea, principle, concept, procedure, operating method or mathematical operation cannot be the subject of copyright protection.
**(7)** Expressions of folklore are not protected by copyright. This provision does not affect the copyright protection granted to the author of an individual and original work inspired by folklore."

### 1.4.14. IRELAND

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Sections 80 and 82 of Copyright and Related Rights Act |
| Legal text | Section 80. (1) It is not an infringement of the copyright in a computer programme for a lawful user of a copy of the computer programme to make a back-up copy of it which it is necessary for him or her to have for the purposes of his or her lawful use.<br>(2) For the purposes of this Section and Sections 81 and 82, a person is a “lawful user” of a computer programme where, whether under a licence to undertake any act restricted by the copyright in the programme or otherwise, he or she has a right to use the programme, and “lawful use” shall be construed accordingly.<br>Section 82. (1) It is not an infringement of the copyright in a computer programme for a lawful user of a copy of the computer programme to make a permanent or temporary copy of the whole or a part of the programme by any means and in any form or to translate, adapt or arrange or in any other way alter the computer programme where such actions are necessary for the use of the programme by the lawful user in accordance with its intended purpose, including error correction.<br>(2) It is not an infringement of the copyright in a computer programme for a lawful user of a copy of the computer programme to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme, where he or she does so while performing any of the acts of loading, displaying, running, transmitting or storing the programme which he or she is authorised to do. (...). |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 81 of Copyright and Related Rights Act |
| Legal text | Section 81. (1) It is not an infringement of the copyright in a computer programme for a lawful user:<br>(a) to make a permanent or temporary copy of the whole or a part of the computer programme by any means or in any form, or<br>(b) to make a translation, adaptation, arrangement or any other alteration of the computer programme and to copy the results thereof,<br>to achieve the interoperability of an independently created computer programme with other programmes where the following conditions are complied with:<br>(i) those acts are performed by the lawful user or on his or her behalf by a person authorised to do so;<br>(ii) the information necessary to achieve interoperability has not previously been available to the person referred to in subparagraph (i); and<br>(iii) those acts are confined to the parts of the original programme which are necessary to achieve interoperability.<br>(2) SubSection (1) shall not permit the information obtained through its application:<br>(a) to be used other than to achieve the interoperability of the independently created computer programme, |

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| | (b) to be given to persons other than those referred to in that subSection, except where necessary for the interoperability of the independently created computer programme, or<br>(c) to be used for the development, production or marketing of a computer programme substantially similar in its expression, or for any other act which infringes copyright. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 83 of Copyright and Related Rights Act |
| Legal text | Section 83. It is not an infringement of the copyright in an original database for a person who has the right to use the database or any part thereof, whether under a licence to undertake any of the acts restricted by the copyright in the original database or otherwise, to undertake, in the exercise of that right, anything which is necessary for the purposes of access to or use of the contents of the database or part thereof. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 327 of Copyright and Related Rights |
| Legal text | Section 327. (1) Without prejudice to Section 324(3), a lawful user of a database shall be entitled to extract or re-utilise insubstantial parts of the contents of the database for any purpose.<br>(2) Where, under an agreement, a person has a right to use a database, any term or condition in the agreement shall be void in so far as it purports to prevent that person from extracting or re-utilising insubstantial parts of the contents of the database for any purpose.<br>(3) While exercising the entitlement conferred by subSection (1), a lawful user of a database shall not prejudice the owner of any right conferred by this Act in respect of works or other subject matter contained in the database. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Sections 329, 330, 331, 332, and 333 of Copyright and Related Rights Act |
| Legal text | Section 329. (1) The database right in a non-electronic database which has been re-utilised is not infringed by fair dealing with a substantial part of its contents by a lawful user of the database where that part is extracted for the purposes of research education, research or private study.<br>(2) For the purposes of this Part “fair dealing” means the extraction of the contents of a database by a lawful user to an extent which will not unreasonably prejudice the interests of the rightsowner.<br>Section 57C. (1) An exemption in respect of education provided in Section 329 [fair dealing for educational establishments], shall not apply where:<br>(a) there is a licensing scheme certified under Section 173 that is applicable to the exemption concerned, and<br>(b) the person making use of the work knew or ought to have been aware of the existence of the licensing scheme.<br>Section 330. (1) The database right in a database is not infringed by fair dealing with a substantial part of its contents by a lawful user of the database where that part is extracted for the purposes of illustration in the course of education or of preparation for education and where:<br>(a) the extraction is done by or on behalf of a person giving or receiving education, and<br>(b) the source is indicated.<br>(2) For the purposes of this Section “lawful user” includes an educational establishment. |

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| | Section 331. The database right in a database is not infringed by anything done for the purposes of parliamentary or judicial proceedings or for the purpose of reporting those proceedings.<br>Section 332. (1) The database right in a database is not infringed by anything done for the purposes of a statutory inquiry or for the purpose of reporting any such inquiry.<br>(2) The database right in a database is not infringed by the making available of copies of a report of a statutory inquiry containing the contents of the database.<br>Section 333. All or a substantial part of the contents of a database which are comprised in records which are open to public inspection may be extracted or re-utilised without infringing the database right in the database. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Sections 2, 57 and 57C of Copyright and Related Rights Act |
| Legal text | Section 2. (...) “educational establishment” means:<br>(a) any school,<br>(b) any university to which the Universities Act, 1997, applies, and<br>(ba) any relevant provider within the meaning of Section 2 of the Qualifications and Quality Assurance (Education and Training) Act 2012, and<br>(c) any other educational establishment prescribed by the Minister.<br>Section 57. (1) Subject to subSections (2) to (4), it is not an infringement of the rights conferred by this Part:<br>(a) to make or cause to be made a copy or communication of a work for the sole purpose of illustration for education, teaching or scientific research or of preparation for education, teaching or scientific research, or<br>(b) for an educational establishment, for the educational purposes of that establishment, to reproduce or cause to be reproduced a work, or to do or cause to be done, any other necessary act, in order to display it.<br>(2) SubSection (1) shall apply only if the reproduction or communication is:<br>(a) made for purposes that are non-commercial,<br>(b) made only to the extent justified by the non- commercial purposes to be achieved, and<br>(c) accompanied by a sufficient acknowledgement.<br>(3) Not more than 5 per cent of any work can be copied under this Section in any calendar year.<br>(4) Where a copy which would otherwise be an infringing copy is made under this Section but is subsequently sold, rented or lent, or offered or exposed for sale, rental or loan, or otherwise made available to the public, it shall be treated as an infringing copy for those purposes and for all subsequent purposes.<br>(5) Any contractual provisions contrary to this Section shall be unenforceable.<br>Section 57C. (1) An exemption in respect of education provided in Section 57, 225B [illustration for education, teaching or scientific research], shall not apply where:<br>(a) there is a licensing scheme certified under Section 173 that is applicable to the exemption concerned, and<br>(b) the person making use of the work knew or ought to have been aware of the existence of the licensing scheme. |
| Text and data mining | |

| Relevant EU provision | Article 3 CDSMD |
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| Legal provision | Sections 53A and 225A of Copyright and Related Rights Act |
| Legal text | Section 53A. (1) Subject to subSection (3), the making of a copy of a work by a person who has lawful access to the work does not infringe copyright in the work where the copy is:<br>(a) made in order that the person may carry out a computational analysis of anything in the work for the sole purpose of research for a non-commercial purpose, and<br>(b) accompanied by a sufficient acknowledgement.<br>(...) (3) Where a copy of a work has been made under subSection (1) by a person, the copyright in the work is infringed where the copy:<br>(a) is transferred to any other person, except where the transfer is authorised by the copyright owner, or<br>(b) is used for any purpose other than the purpose referred to in subSection (1)(a).<br>(3A) A copy of a work made in compliance with subSection (1) shall be stored in a secure manner appropriate to the nature of the work concerned and may be retained for the purposes of research, including for the purposes of the verification of research results.<br>(3B) In order to ensure that a copy of a work is stored with an appropriate level of security in accordance with subSection (3A), the person responsible for the security and integrity of the networks and databases where the copy is hosted (in this Section referred to as “the responsible person”) shall ensure that only persons who have lawful access to the data contained in that copy shall be permitted to access those data, including through IP address validation or user authentication.<br>(3C) Where a copy of a work is made in compliance with subSection (1), the author of the work, in order to satisfy himself or herself of the security and integrity of the networks and databases where the copy is hosted, shall:<br>(a) be informed of the making of the copy,<br>(b) be entitled to request information on the steps taken by the responsible person to comply with subSection (3B), and<br>(c) be entitled, where he or she requests any additional security measures, to a response as soon as practicable as to whether or not those additional security measures will be applied.<br>(3D) The exceptions and limitations provided for under this Section shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject matter and do not unreasonably prejudice the legitimate interests of the rightsholder.<br>(…) (3F) Any contractual provision contrary to this Section shall be unenforceable. (…)<br>Section 225A. (1) Subject to subSection (3), the making of a copy of a performance or recording by a person who has lawful access to the performance or recording does not infringe any of the rights conferred by this Part where the copy is:<br>(a) made in order that the person may carry out a computational analysis of anything in the work for the sole purpose of research for a non-commercial purpose, and<br>(b) accompanied by a sufficient acknowledgement.<br>(2) A copy made under subSection (1) of a performance or recording which was, at the time when the copy was made, available without a restriction as to its access does not infringe copyright, and whether or not that work continues to be so available after that time.<br>(3) Where a copy of a performance or recording has been made under subSection (1) by a person, the copyright in the performance or recording is infringed where the copy—<br>(a) is transferred to any other person, except where the transfer is authorised by the copyright owner, or<br>(b) is used for any purpose other than the purpose referred to in subSection (1)(a). |

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| | (3A) A copy of a work made in compliance with subSection (1) shall be stored in a secure manner appropriate to the nature of the work concerned and may be retained for the purposes of research, including for the purposes of the verification of research results.<br>(3B) In order to ensure that a copy of a work is stored with an appropriate level of security in accordance with subSection (3A), the person responsible for the security and integrity of the networks and databases where the copy is hosted (in this Section referred to as "the responsible person") shall ensure that only persons who have lawful access to the data contained in that copy shall be permitted to access those data, including through IP address validation or user authentication.<br>(3C) Where a copy of a work is made in compliance with subSection (1), the author of the work, in order to satisfy himself or herself of the security and integrity of the networks and databases where the copy is hosted, shall:<br>(a) be informed of the making of the copy,<br>(b) be entitled to request information on the steps taken by the responsible person to comply with subSection (3B), and<br>(c) be entitled, where he or she requests any additional security measures, to a response as soon as practicable as to whether or not those additional security measures will be applied.<br>(3D) The exceptions and limitations provided for under this Section shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject matter and do not unreasonably prejudice the legitimate interests of the rightsholder.<br>(…) (3F) Any contractual provisions contrary to this Section shall be unenforceable. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Sections 53B, 83(3)-(5) and 225AA of Copyright and Related Rights Act |
| Legal text | Section 53B. (1) Where an author has not expressly reserved in an appropriate manner, in accordance with subSection (3), the use of a work for reproduction or extraction for the purposes of text and data mining, a person who has lawful access to it but does not fall within the scope of Section 53A(1), may reproduce it for the purposes of text and data mining.<br>(2) Reproductions and extractions made pursuant to subSection (1) may be retained for as long as is necessary for the purposes of text and data mining.<br>(3) For the purposes of subSection (1), an author reserves the use of a work for reproduction or extraction for the purposes of text and data mining in an appropriate manner where the reservation concerned:<br>(a) is machine-readable in the case of content made publicly available online, including metadata and terms and conditions of a website or a service, and<br>(b) should there be content not made publicly available online, is clearly communicated to all persons who have lawful access to it.<br>(4) The exceptions and limitations provided for under this Section shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. (…)<br>(6) Any contractual provisions contrary to this Section shall be unenforceable.<br>Section 83. (…) (3) It is not an infringement of the copyright in a computer programme for a lawful user of a copy of the computer programme to reproduce, or extract from, the computer programme for the purposes of text and data mining where the author has not expressly reserved in an appropriate manner, in accordance with subSection (5), the use of the computer programme for reproduction or extraction for the purposes of text and data mining.<br>(4) Reproductions and extractions made pursuant to subSection (3) may be retained for as long as is necessary for the purposes of text and data mining. |

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| | (5) For the purposes of subSection (3), an author reserves the use of a computer programme for reproduction or extraction for the purposes of text and data mining in an appropriate manner where the reservation concerned:<br>(a) is machine-readable in the case of content made publicly available online, including metadata and terms and conditions of a website or a service, and<br>(b) should there be content not made publicly available online, is clearly communicated to all persons who have lawful access to it.<br>Section 225AA. (1) Where an author has not expressly reserved in an appropriate manner, in accordance with subSection (3), the use of a work for reproduction or extraction for the purposes of text and data mining, a person who has lawful access to it but does not fall within the scope of Section 225A(1), may reproduce it for the purposes of text and data mining.<br>(2) Reproductions and extractions made pursuant to subSection (1) may be retained for as long as is necessary for the purposes of text and data mining.<br>(3) For the purposes of subSection (1), an author reserves the use of a work for reproduction or extraction for the purposes of text and data mining in an appropriate manner where the reservation concerned:<br>(a) is machine-readable in the case of content made publicly available online, including metadata and terms and conditions of a website or a service, and<br>(b) should there be content not made publicly available online, is clearly communicated to all persons who have lawful access to it.<br>(4) The exceptions and limitations provided for under this Section shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject matter and do not unreasonably prejudice the legitimate interests of the rightsholder. (…)<br>(6) Any contractual provisions contrary to this Section shall be unenforceable. |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Sections 87 and 244 of the Copyright and Related Rights Act |
| Legal text | Section 87. (1) It is not an infringement of the rights conferred by this Part to undertake or conduct temporary acts of reproduction which acts are transient or incidental and which are an integral and essential part of a technological process and whose sole purpose is to enable:<br>(a) a transmission in a network between third parties by an intermediary, or<br>(b) a lawful use, of a work or other subject-matter to be made, and which acts have no independent economic significance.<br>(2) Where a copy, which would otherwise be an infringing copy, is made under this Section and is subsequently sold, rented or lent, or offered or exposed for sale, rental or loan, or otherwise made available to the public, it shall be deemed to be an infringing copy for those purposes and for all subsequent purposes.<br>Section 244. (1) It is not an infringement of the rights conferred by this Part to undertake or conduct temporary acts of reproduction which acts are transient or incidental and which are an integral and essential part of a technological process and whose sole purpose is to enable -<br>(a) a transmission in a network between third parties by an intermediary, or<br>(b) a lawful use, |

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| | of the subject-matter to be made, and which acts have no independent economic significance.<br>(2) Where a copy, which would otherwise be an illicit recording, is made under this Section and is subsequently sold, rented or lent, or offered or exposed for sale, rental or loan, or otherwise made available to the public, it shall be treated as an illicit recording for those purposes and for all subsequent purposes. |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 52(4) of Copyright and Related Rights Act |
| Legal text | Section 52. (...) (4) The copyright in a work which has been lawfully made available to the public is not infringed by the use of quotations or extracts from the work, where such use does not prejudice the interests of the owner of the copyright in that work and such use is accompanied by a sufficient acknowledgement. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section 21 of S.I. No. 567/2021 - European Union (Copyright and Related Rights in the Digital Single Market) Regulations 2021 |
| Legal text | Removal of certain content and protection of freedom of expression<br>Section 21. (1) The cooperation between an online content-sharing service provider and a rightsholder shall not result in the prevention of the availability of a work or other subject matter uploaded by users, which do not infringe copyright and related rights, including where such a work or other subject matter is covered by an exception or limitation, including those specified in paragraph (2).<br>(2) A user in the State may rely on the existing exceptions or limitations provided for by or under Parts II and III of the Act of 2000 when uploading and making available content on online content-sharing services.<br>(3) The application of this Part shall not be construed as imposing any general monitoring obligation. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 51(1) of Copyright and Related Rights Act |
| Legal text | Section 51. (1) Fair dealing with a work for the purposes of criticism or review of that or another work or of a performance of a work shall not infringe any copyright in the work where the criticism or review is accompanied by a sufficient acknowledgement. (…) |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Sections 69A(1) and 235A(1) of Copyright and Related Rights Act |
| Legal text | Section 69A. (1) Without prejudice to the generality of Section 50(1) [fair dealing], the communication, by the librarian or archivist of a prescribed library or prescribed archive, to members of the public of copies of works in the permanent collection of the library or archive, by dedicated terminals on the premises of the library or archive, shall constitute fair dealing with the works for the purposes of that Section where the communication is:<br>(a) undertaken for the sole purpose of education, teaching, research or private study, and<br>(b) accompanied by a sufficient acknowledgement. (...)<br>Section 235A. (1) Without prejudice to the generality of Section 50(1) [fair dealing], the communication, by a librarian or archivist of a prescribed library or prescribed archive, to members of the public of recordings of performances in the permanent collection of the library or archive, by dedicated terminals on the premises of the library or archive, shall constitute fair dealing with the recording for the purposes of that Section where the communication is: |

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| | (a) undertaken for the sole purpose of education, teaching, research or private study, and<br>(b) accompanied by a sufficient acknowledgement. (...) |
| Relevant EU provision | No EU correspondent |
| Legal provision | Sections 69A(2) and 235A(2) of Copyright and Related Rights Act |
| Legal text | Section 69A. (...) (2) Without prejudice to the generality of Section 50(1) [fair dealing], the brief and limited display of a copy of a work:<br>(a) either:<br>(i) in a prescribed library or prescribed archive or by the librarian or archivist of a prescribed library or prescribed archive, or<br>(ii) during the course of a public lecture given in a prescribed library or prescribed archive or given by the librarian or archivist of a prescribed library or prescribed archive,<br>(b) undertaken for the sole purpose of education, teaching, research or private study where such purpose is neither directly nor indirectly commercial, and<br>(c) accompanied by a sufficient acknowledgement,<br>shall constitute fair dealing with the work for the purposes of Section 50(1).<br>Section 235A(2). (...) (2) Without prejudice to the generality of Section 50(1) [Fair dealing], the brief and limited display of a copy of a work:<br>(a) either:<br>(i) in a prescribed library or prescribed archive or by the librarian or archivist of a prescribed library or prescribed archive, or<br>(ii) during the course of a public lecture given in a prescribed library or prescribed archive or given by the librarian or archivist of a prescribed library or prescribed archive,<br>(b) undertaken for the sole purpose of education, teaching, research or private study where such purpose is neither directly nor indirectly commercial, and<br>(c) accompanied by a sufficient acknowledgement,<br>shall constitute fair dealing with the work for the purposes of Section 50(1). |
| Relevant EU provision | No EU correspondent |
| Legal provision | Sections 50(1), 50(2), 221(1)(c) and 57C of Copyright and Related Rights |
| Legal text | Section 50. (1) Fair dealing with a literary, dramatic, musical or artistic work, sound recording, film, broadcast, cable programme, or non-electronic original database, for the purposes of research or private study, shall not infringe any copyright in the work.<br>(2) Fair dealing with a typographical arrangement of a published edition for the purposes of research or private study shall not infringe any copyright in the arrangement. (…)<br>(4) In this Part, “fair dealing” means the making use of a literary, dramatic, musical or artistic work, film, sound recording, broadcast, cable programme, non-electronic original database or typographical arrangement of a published edition which has already been lawfully made available to the public, for a purpose and to an extent which will not unreasonably prejudice the interests of the owner of the copyright. (…)<br>(6) The exemption provided for in this Section shall not apply to reproductions of sheet music, on paper or any similar medium, effected by the use of any kind of photographic technique or by some other process having similar effects.<br>Section 221. (1) Fair dealing with a performance or recording for the purposes of: |

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| | (...) (c) education, research or private study<br>shall not infringe any of the rights conferred by this part. (...)<br>Section 57C. (1) An exemption in respect of education provided in Section 221 [fair dealing with performances] shall not apply where:<br>(a) there is a licensing scheme certified under Section 173 that is applicable to the exemption concerned, and<br>(b) the person making use of the work knew or ought to have been aware of the existence of the licensing scheme. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Sections 65 and 227 of Copyright and Related Rights Act |
| Legal text | Section 65. (1) The librarian or archivist of a prescribed library or prescribed archive may, where the prescribed conditions are complied with, make a copy of a work in the permanent collection of the library or archive in order:<br>(a) to preserve or replace that work by placing the copy in the permanent collection of that library or archive in addition to or in place of that work, or<br>(b) to replace in the permanent collection of another prescribed library or prescribed archive a work which has been lost, destroyed or damaged, without infringing the copyright in the work, in any illustrations accompanying the work or in the typographical arrangement.<br>(2) This Section shall only apply where it is not reasonably practicable to purchase a copy of the work concerned for the purposes of subSection (1).<br>Section 227. (1) The Minister may make regulations for the purposes of this Section and those regulations may make different provisions for different classes of libraries or archives and for different purposes.<br>(2) Without prejudice to the generality of subSection (1), the Minister may prescribe the libraries and archives to which Sections 228 to 234 apply and may prescribe all or any of the following—<br>(a) the conditions that are to be complied with when a librarian or archivist of a prescribed library or prescribed archive makes and supplies a copy of any part of a recording of a performance which has been lawfully made available to the public to a person requiring a copy;<br>(b) the conditions that are to be complied with when a librarian or archivist of a prescribed library or prescribed archive makes and supplies to another prescribed library or prescribed archive a copy of a recording of a performance or part of a recording of a performance which has been lawfully made available to the public and is required by that other prescribed library or archive;<br>(c) the conditions that are to be complied with before a librarian or archivist of a prescribed library or prescribed archive makes a copy of a recording of a performance in the permanent collection of the library or archive in order to preserve or replace that recording in the permanent collection of that prescribed library or prescribed archive, or in the permanent collection of another prescribed library or prescribed archive;<br>(d) the conditions that are to be complied with by a librarian or archivist of a prescribed library or prescribed archive when making or supplying a copy of the whole or part of certain recordings of a performance which have not been lawfully made available to the public from a recording in the prescribed library or prescribed archive to a person requiring the copy. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Sections 2 and 68A of Copyright and Related Rights Act |

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| Legal text | Section 2. (...) 'cultural heritage institution' has the meaning assigned to it in the European Union (Copyright and Related Rights in the Digital Single Market) Regulations 2021 (S.I. No. 567 of 2021).<br>Section 68A. (1) Subject to subSection (2), it is not an infringement of the rights conferred by this Part where the librarian or archivist of a prescribed library or prescribed archive makes, or causes to be made, a copy of a work, in the permanent collection of the library or archive, in a different form to that which the copy takes if:<br>(a) that librarian or archivist lawfully uses the means used to make the copy, and<br>(b) the copy is made solely for preservation or archival purposes where those purposes are neither directly nor indirectly commercial.<br>(2) SubSection (1) shall not apply where:<br>(a) the work being copied is an infringing copy, and<br>(b) the librarian or archivist making the copy, or causing it to be made, did not have reasonable grounds for believing that the work was not an infringing copy.<br>(3) Any contractual provisions contrary to this Section shall be unenforceable. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 8 of of S.I. No. 567/2021 - European Union (Copyright and Related Rights in the Digital Single Market) Regulations 2021 |
| Legal text | Use of out-of-commerce works and other subject matter by cultural heritage institutions under licenses with collective management organisations<br>Section 8<br>(1) A collective management organisation may, in accordance with its mandates from rightsholders, conclude a non-exclusive licence for non-commercial purposes with a cultural heritage institution for the reproduction, distribution, communication to the public or making available to the public of out-of-commerce works or other subject matter that are permanently in the collection of the said cultural heritage institution, irrespective of whether all rightsholders covered by the licence have so mandated the collective management organisation, if and only if –<br>(a) the collective management organisation is, on the basis of its mandates, sufficiently representative of rightsholders in the relevant type of works or other subject matter and of the rights that are the subject of the licence, and<br>(b) all rightsholders are guaranteed equal treatment in relation to the terms of the licence.<br>(2) A member of a collective management organisation may exclude his or her work or other subject matter from the licensing mechanism set out in paragraph (1) at any time by notifying the collective management organisation by electronic or other means and by including the following in the notice:<br>(a) notification that the owner is asserting his or her right pursuant to this Regulation;<br>(b) sufficient details of the work or other subject matter to enable it to be identified and removed from public display.<br>(3) Within 2 weeks of receiving a written request in relation to a particular work or other subject matter in accordance with paragraph (2), a collective management organisation shall, by electronic or other means, notify the cultural heritage institution with whom it has concluded a license under paragraph (1) of the request and shall forward that request to the institution concerned.<br>(4) A cultural heritage institution that receives a notification and a forwarded written request in accordance with paragraph (3) shall terminate its use of the work or other subject matter referred to in that written request within 4 weeks of receiving it. |

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| | (5) Upon receipt of a written request in relation to a particular work or other subject-matter in accordance with paragraph (2), the collective management organisation shall cease to issue new licenses under paragraph (1) in relation to that work or other subject matter.<br>(6) A member of a collective management organisation who chooses to exclude the use of his or her work or other subject matter in accordance with paragraph (2) shall still be entitled to claim remuneration for the actual use of the work or other subject matter under the relevant license.<br>(7) A collective management organisation shall ensure that its members receive relevant and comprehensive information on a regular basis, at least once a year, on their rights under these Regulations.<br>(8) (a) Subject to subparagraph (b), this Regulation shall not apply to sets of out-of-commerce works or other subject matter if, on the basis of the reasonable effort referred to in paragraph (9), there is evidence that such sets predominantly consist of –<br>(i) works or other subject matter, other than cinematographic or audiovisual works, first published or, in the absence of publication, first broadcast in a third country,<br>(ii) cinematographic or audiovisual works, of which the producers have their headquarters or habitual residence in a third country, or<br>(iii) works or other subject matter of third country nationals, where after a reasonable effort no Member State or third country could be determined pursuant to clauses (i) and (ii).<br>(b) Notwithstanding subparagraph (a), this Regulation shall apply where the collective management organisation is sufficiently representative in accordance with paragraph (1)(a) of rightsholders in the relevant third country.<br>(9) At least 6 months before the work or other subject matter licensed under paragraph (1) is distributed, communicated to the public or made available to the public, cultural heritage institutions, collective management organisations and library authorities within the meaning of Section 32 of the Local Government Act 1994 (Act No.8 of 1994) shall provide the following information on the Out-of-Commerce Works Portal established by the European Union Intellectual Property Office under the Directive:<br>(a) the title, where possible, the author, and a brief summary of the contents of an out-of-commerce work that is proposed to be the subject of a license under paragraph (1);<br>(b) the information about the options available to rightsholders under this Regulation;<br>(c) as soon as it is available and where relevant, information on the parties to the licence, the territories covered and the uses authorised under the license.<br>(10) In this Regulation –<br>“mandate” means the manner of authorisation by law or by way of assignment, license or any other contractual arrangement to manage copyright or related rights;<br>“member” has the same meaning as it has in the Regulations of 2016;<br>“rightsholder” has the same meaning as it has in the Regulations of 2016. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Section 17(2) of Copyright and Related Rights Act |
| Legal text | Section 17. (...) (3) Copyright protection shall not extend to the ideas and principles which underlie any element of a work, procedures, methods of operation or mathematical concepts and, in respect of original databases, shall not extend to their contents and is without prejudice to any rights subsisting in those contents. |
| Relevant EU provision | Article 14 CDSMD |

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| Legal provision | Not implemented. |
| Legal text | n/a |

### 1.4.15. ITALY

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 64-ter l.aut |
| Legal text | **Article 64-ter**<br>1. In the absence of any agreement to the contrary, the acts referred to in Article 64-bis(a) [permanent or temporary reproduction] and (b) [translation, adaptation, arrangement and any other alteration of a computer programme and the reproduction of the results thereof] shall not require authorisation by the rightsholder where they are necessary for the use of the computer programme by the lawful acquirer in accordance with its intended purpose, including error correction.<br>2. The making of a back-up copy by a person having a right to use the computer programme may not be prevented by contract in so far as it is necessary for that use.<br>3. The person having a right to use a copy of a computer programme shall be entitled, without the authorisation of the rightsholder, to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme if they do so while performing any of the acts of loading, displaying, running, transmitting or storing the programme which they are entitled to. Any contractual clause that is contrary to the provisions of this paragraph and of paragraph (2) shall be null and void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 64-*quarter* l.aut |
| Legal text | Article 64-quater<br>1. The authorisation of the rightsholder shall not be required when the reproduction of the code and translation of its form within the meaning of Article 64-bis(a) [permanent or temporary reproduction] and (b) [translation, adaptation, arrangement and any other alteration of a computer programme and the reproduction of the results thereof], are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that the following conditions are met:<br>a) these acts are performed by the licensee or by another person having a right to use a copy of a programme, or on their behalf by a person authorised todo so;<br>b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in subparagraph (a);<br>c) the acts are confined to the parts of the original programme which are necessary to achieve interoperability.<br>2. The provisions of paragraph (1) shall not permit the information thus obtained:<br>a) be used for goals than to achieve the interoperability of the independently created computer programme;<br>b) to be given to others, except where necessary for the interoperability of the independently created computer programme; |

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| | c) be used for the development, production or marketing of a computer programme substantially similar, in its expression, or for any other act which infringes copyright.<br>3. Any contractual clause contrary to paragraphs (1) and (2) shall be null and void.<br>4. In accordance with the provisions of Berne Convention for the protection of Literary and Artistic Works, ratified and enforceable by Law no. 399 of June 20, 1978, the provisions of this Article may not be interpreted in such a way as to allow its application to be used in a manner which unreasonably prejudices the rightsholder's legitimate interests, or conflicts with a normal exploitation of the computer programme. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | 64-sexies(2) l.aut |
| Legal text | Article 64-sexies<br>1. The authorisation by the rightsholder provided for in Article 64-quinquies [temporary or permanent reproduction, translation, adaptation, a different arrangement and any other alteration, any form of distribution to the public, any communication, display or performance to the public, any reproduction, distribution, communication, display or performance to the public of the results of these acts] shall not be required in the following cases:<br>a) where the database is accessed and visualised for the sole purpose of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purposes to be achieved. In the context of these access and consultation activities, any permanent reproduction of all or a substantial part of the content on another medium is in any case subject to the authorisation of the rightsholder.<br>b) the use of a database for public safety purposes or as a result of an administrative or judicial procedure.<br>2. The acts listed in Article 64-quinquies [temporary or permanent reproduction, translation, adaptation, a different arrangement and any other alteration, any form of distribution to the public, any communication, display or performance to the public, any reproduction, distribution, communication, display or performance to the public of the results of these acts] which are performed by the lawful user do not need the authorisation of the database author when they are necessary to have access to the contents and the database itself and to normally exploit it; if the lawful user is authorised to the use of only a part of the database, this Section shall only apply to that part.<br>3. Any contractual clause infringing paragraphs 1 and 2 shall be null and void pursuant to the article 1418 of the Civil Code.<br>4. In accordance with the Berne Convention for the protection of Literary and Artistic Works, ratified and enforceable pursuant to Law 20 June 1978, no. 399, the provisions under paragraphs 1 and 2 may not be interpreted in such a way as to allow their application to be used in a manner which unreasonably prejudices the rightsholder's legitimate interests or conflicts with normal exploitation of the database. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 102-ter l.aut |
| Legal text | **Article 102-ter**<br>1. A lawful user of a database which is made available to the public may not cause prejudice to the holder of a copyright or related right in respect of the works or subject matter contained in the database. |

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| | 2. A lawful user of a database which is made available to the public in whatever manner may not perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database.<br>3. The maker of a database which is made available to the public for whatever reason may not prevent a lawful user of the database from extracting and/or re-utilising parts of its content, evaluated qualitatively and/or quantitatively, for any purposes whatsoever. Where the lawful user is authorised toextract and/or to re-utilise only part of the database, this paragraph shall apply only to that part.<br>4. Any contractual provision contrary to paragraph 1, 2 and 3 shall be null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | n/a |
| Legal text | n/a |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 5 CDSMD |
| Legal provision | 70 bis l.aut |
| Legal text | Article 70-bis<br>1. The summary, quotation, reproduction, translation and adaptation of passages or parts of works and other subject-matter and their communication to the public by digital means, solely for illustrative purposes for teaching purposes, to the extent justified by the non-commercial purpose pursued, and under the responsibility of an educational establishment, on its premises or in another place or secure electronic environment, accessible only to the teaching staff of that establishment and to the pupils or students enrolled in the course of study in which the works or other subject-matter are used, is free.<br>2. The summary, quotation and reproduction of passages or parts of works and other subject-matter and their communication to the public shall always be accompanied by the reference to the title of the work, the names of the author, of the publisher and of the translator, if such references appear on the work.<br>3. The exception provided for in paragraph 1 shall not apply to works intended principally for the educational market and to sheet music and musical scores where suitable voluntary licences authorising the uses referred to are available on the market and where such licences answer to the needs and special characteristics of educational establishments and are readily available and accessible to them.<br>4. The uses of works and other subject matter referred to in paragraph 1 which take place in Italy by an educational establishment located in another Member State shall be deemed to take place exclusively in that Member State. |

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| | 5. Terms contrary to the provisions of this Article shall be null. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 70(1)-bis l.aut |
| Legal text | 70. 1 bis. The free publication through the Internet network, free of charge, of low-resolution or degraded images and music for educational or scientific use is permitted, and only if such use is not for profit. By de- cree of the Minister of Culture, after consultation with the Minister of Education and the Minister of Univer- sities and Research, after the opinion of the competent parliamentary Committees, the limits to the educational or scientific use referred to in this paragraph shall be defined. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 70(2)-bis l.aut |
| Legal text | 70.2. In anthologies for school use, reproduction shall not exceed the extent specified in the Regulation, that shall also lay down the manner of determining fair compen- sation in respect of such reproduction. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 70-ter l.aut |
| Legal text | **Article 70-ter**<br>1. Reproductions made by research organisations and cultural heritage institutions for purposes of scientific research for the extraction of text and data from works or other subject matter available in networks or databases to which they have lawful access, as well as the communication to the public of the results of research when expressed in new original works, shall be permitted.<br>2. For the purposes of this law, text and data mining means any automated technique that seeks to analyse large amounts of text, sound, images, data or metadata in digital format with the aim of generating information, including patterns, trends and correlations.<br>3. For the purposes of this law, cultural heritage institutions means libraries, museums, archives, provided they are open to the public or accessible to the public, including those belonging to educational establishments, research organisations and public broadcasting organisations, as well as film and sound heritage institutions and public broadcasting organisations.<br>4. For the purposes of this law, research organisations shall mean universities, including their libraries, research institutes or any other entity whose primary objective is to conduct scientific research or to carry out teaching activities that include scientific research, which alternatively:<br>(a) operate on a non-profit basis or whose bylaws provide for the reinvestment of profits in scientific research activities, including in the form of public-private partnerships;<br>(b) pursue an aim of public interest recognised by a Member State of the European Union.<br>5. Research organisations shall not be considered to be those over which commercial undertakings exert a decisive influence such as to provide them preferential access to the results generated by scientific research activities.<br>6. Copies of works or other materials made in accordance with paragraph 1 shall be stored with an appropriate level of security and may only be retained and used for scientific research purposes, including the verification of research results.<br>7. Rightsholders shall be entitled to apply, to the extent these does not exceed what is necessary for that purpose, appropriate measures to ensure the security and integrity of networks and databases where works or other subject matter are hosted. |

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| | 8. The measures referred to in paragraphs 6 and 7 can also be defined according to agreements between rightsholders' associations, cultural heritage institutions and research organisations.<br>9. Terms in conflict with paragraphs 1, 6 and 7 of this article are null. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 70-quater l. aut. |
| Legal text | **Article 70-quater**<br>1. Without prejudice to the provisions of Article 70-ter [text and data mining for scientific research], reproductions and extractions from works or other subject matter contained in networks or databases to which access is legitimately granted for the purpose of text and data extraction are permitted. The extraction of text and data is permitted when the use of the works and other subject matter has not been expressly reserved by the rightsholders of the copyright and related rights as well as by the owners of the databases.<br>2. Reproductions and extractions made pursuant to paragraph 1 may only be kept for as long as necessary for the purpose of text and data extraction.<br>3. For the performance of the activities referred to in this Article, security levels not lower than those defined for the performance of the activities referred to in Article 70-ter shall in any case be guaranteed |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary Reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Article 68 *bis* l.aut |
| Legal text | **Article 68-bis**<br>Without prejudice to the provisions concerning the liability of the intermediary service providers set out in the law regulating the electronic commerce, temporary acts of reproduction which have no independent economic significance, which are transient or incidental and integral and essential part of technological process and whose sole purpose is to enable the transmission in a network between third parties by intervention of an intermediary or the lawful use of a work or other subject matters shall be exempted from the reproduction right.<br>**Article 71-decies**<br>The exceptions and limitations to authors' right in this Chapter shall apply also to the neighbouring rights under Chapters I [Rights of the Phonogram Producer], I-bis [Rights of Producers of Cinematographic or Audiovisual Works or of Sequences of Moving Images], II [Rights in Radio and Television Broadcasting] and III [Rights of Performers] and, where applicable, to other Chapters of Part II [Neighbouring rights], as well to Chapter I of Part II-bis [Rights of the maker of a database]. |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 70 l.aut |
| Legal text | **Article 70** |

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| | 1. The abridgment, quotation or reproduction of fragments or parts of a work and their communication to the public for the purpose of criticism or discussion, shall be permitted within the limits justified for such purposes, provided such acts do not conflict with the commercial exploitation of the work; if they are made for teaching or research, the use must have the sole purpose of illustration, and non-commercial purposes.<br>(...) 3. The abridgment, quotation or reproduction must always be accompanied by a mention of the title of the work, and of the names of the author, the publisher and, in the case of a translation, of the translator, whenever such mentions appear on the work that has been reproduced.<br>**Article 71-decies**<br>The exceptions and limitations to authors' right in this Chapter shall apply also to the neighbouring rights under Chapters I [Rights of the Phonogram Producer], I-bis [Rights of Producers of Cinematographic or Audiovisual Works or of Sequences of Moving Images], II [Rights in Radio and Television Broadcasting] and III [Rights of Performers] and, where applicable, to other Chapters of Part II [Neighbouring rights], as well to Chapter I of Part II-bis [Rights of the maker of a database]. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 102-nonies(2) l.aut |
| Legal text | **Article 102-nonies**<br>(...) 2. When uploading and making available content which they have generated through an online content sharing service provider, users can benefit of the following exceptions or limitations to copyright and related rights:<br>(a) quotation, criticism, review; (...).<br>3. Providers of online content-sharing services inform their users, through the communication of their terms and conditions of service, of the possibility of using works and other subject matter benefiting from the exceptions or limitations to copyright and related rights. (...) |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 71-ter l.aut. |
| Legal text | **Article 71 ter**<br>The communication or making available to individual members of the public is free if made for the purpose of research or private study by dedicated terminals on the premises of publicly accessible libraries, educational establishment, museums or archives, limited to the works and other subject matter contained in their collections that are not subject to purchase or licensing terms.<br>**Article 71 decies**<br>The exceptions and limitations to authors' right in this Chapter shall apply also to the neighbouring rights under chapters I [Rights of the Phonogram Producer], I-bis [Rights of Producers of Cinematographic or Audiovisual Works or of Sequences of Moving Images], II [Rights in Radio and Television Broadcasting] and III [Rights of Performers] and, where applicable, to other chapters of Part II [Neighbouring rights], as well to chapter I of Part II-bis [Rights of the maker of a database]. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 6 CDSMD<br>Article 5(2)(c) ISD |

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| Legal provision | Article 68 paragraph 2bis l.aut |
| Legal text | **Article 68, 2 bis**<br>Cultural heritage institutions referred to in Article 70-ter(3) [Text and data mining for scientific research] shall always have the right, for conservation purposes and to the extent necessary for that purpose, to reproduce and make copies of works or other protected subject matter permanently present in their collections, in any format and on any medium. Any terms that limits or excludes this right shall be null.<br>**Article 70 ter (3)**<br>(...)<br>3. For the purposes of this law, cultural heritage institutions means libraries, museums, archives, provided they are open to the public or accessible to the public, including those belonging to educational establishments, research organisations and public broadcasting organisations, as well as film and sound heritage institutions and public broadcasting organisations.<br>(...) |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Article 2 (8) L.aut. |
| Legal text | **Article 2**<br>The following are specifically included in the protection:<br>8) computer programmes, in whatever form expressed as long as they are original as the result of the author's intellectual creation. The ideas and principles underlying any element of a programme, including those un- derlying its interfaces, shall remain excluded from the protection granted by this law. The term programme also includes preparatory material for the design of the programme itself. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 5 L.aut. |
| Legal text | **Article 5**<br>The provisions of this Law shall not apply to the texts of official acts of the State or of public administrations, whether Italian or foreign. |
| Relevant EU provision | Article 14 CDSM |
| Legal provision | Article 32-quarter l.aut |

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| Legal text | **Article 32 quater**<br>Upon the expiration of the term of protection of a work of the visual arts, including as identified in Article 2, the material resulting from an act of reproduction of such work is not subject to copyright or related ri- ghts, unless it constitutes an original work. The provi- sions on the reproduction of cultural assets set forth in Legislative Decree No. 42 of 22 January 2004 remain unaffected. |

### 1.4.16. LATVIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 29 of the Copyright Act of 6 April 2000 |
| Legal text | Section 29<br>(1) If not specified otherwise by contract, and the right to use a computer programme has been lawfully obtained, its reproduction, translation, adaptation or any other transformation and the reproduction of the results of such activities shall not require any special permission from the rightsholder, as long as such activities (including correction of errors) are necessary for the purpose of the intended use of the computer programme.<br>(2) A contract entered into with a person who has lawfully acquired the right to use a computer programme may not prohibit the making of a back-up copy, if such copy is necessary for the use of the computer programme.<br>(3) A person who has the right to use a computer programme may, without the permission of the holder of the copyright, observe, study or test the functioning of the programme in order to discover the ideas and principles which underlie any element of the computer programme, if such person does so while demonstrating, using, broadcasting or storing. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 30 of the Copyright Act of 6 April 2000 |
| Legal text | Section 30<br>(1) The permission of the holder of a copyright shall not be required, if, without reproducing the code of the computer programme or modifying its form, it is not possible to obtain the necessary information in order to achieve the interoperability of an independently created computer programme with other computer programmes. Such use shall be permitted, if the following provisions are observed in their entirety:<br>1) a person who has lawfully acquired the right to use a copy of the computer programme performs the relevant activities;<br>2) the information necessary to achieve interoperability has not been easily accessible beforehand;<br>3) only those parts of the computer programme, which are necessary to achieve interoperability, are subject to such activities.<br>(2) In accordance with the provisions of Paragraph one of this Section, the information obtained may not be:<br>1) used for purposes other than to achieve interoperability with an independently created computer programme;<br>2) disclosed to other persons, except in cases when it is necessary to achieve interoperability with an independently created computer programme;<br>3) used with the intention of developing, producing or selling a substantially similar computer programme, or for any other activity whereby copyright is infringed. |

| Access to and reuse of databases | |
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| Relevant EU provision | Article 6 Database |
| Legal provision | Section 31 of the Copyright Act of 6 April 2000 |
| Legal text | Section 31<br>(1) A lawful user of a database or of a copy thereof may perform any action, which is necessary in order to access the contents of the databases and its use. If the lawful user is authorised to use only part of the database, the abovementioned provision shall apply only to that part.<br>(2) Agreements, which are contrary to the provisions of this Section, shall not be in effect. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 58 of the Copyright Act of 6 April 2000 |
| Legal text | Section 58<br>(1) A lawful user of a database which is available to the public has the right to extract or reuse, for any purposes, parts of its content that may be regarded as qualitatively or quantitatively non-essential parts of its contents. This condition shall apply only to such part of a database which a lawful user is permitted to extract or reuse.<br>(2) A lawful user of a database which is available to the public shall comply with the rights of the holders of copyright or related rights related to the works or materials contained in the database.<br>(3) A lawful user of a database which is available to the public may not perform acts that conflict with the normal exploitation of the database or unreasonably prejudice the lawful interests of the maker of the database. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 59 of the Copyright Act of 6 April 2000 |
| Legal text | **Section 59. Restrictions to Rights of Protection of Databases**<br>(1) Without the consent of the maker of a database which is available to the public the lawful users of a database may:<br>1) extract the contents of a non-electronic database for personal use;<br>2) obtain or reuse a significant part of the content of the database for the purpose of illustration in the learning process, in compliance with the provisions of Section 21, Paragraph one, Clause 1, Paragraphs two, three and four of this Law;<br>2 [1] ) to obtain a significant part of the contents of the database for the purpose of research, in accordance with the provisions of paragraph 2 of the first part of Article 21 [Use of a work for digital education purposes] of this law;<br>3) extract or reuse a substantial part of the contents of a database for the purposes of State security, as well as for the purposes of administrative or judicial proceedings.<br>4) to obtain a significant part of the content of the database for text mining and data mining, observing the provisions of Articles 21.[1] and 21.[2] of this Law<br>5) obtain or reuse a significant part of the content of the database for the needs of persons who are blind or have other reading difficulties, in accordance with the provisions of Article 22.1 of this Law,<br>6) to obtain a significant part of the content of the database for preservation for the needs of cultural heritage institutions, in compliance with the provisions of the first part of Article 23 of this Law. |

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| | (2) The right of the maker of a database to control the resale of the database in the European Union shall be exhausted at the moment when the database is sold or otherwise alienated in the European Union for the first time, if it has been done by the maker of the database himself or herself, or if it has been done with his or her consent. This condition shall apply only to those objects included in concrete material media or the copies thereof which are sold or otherwise alienated. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 21 of the Copyright Act of 6 April 2000<br>Section 54(3)(2) of the Copyright Act of 6 April 2000 |
| Legal text | Article **21. Use of work for educational and research purposes**<br>(1) By indicating the name of the used work, the source and the name of the author, as well as in accordance with the provisions of the second part of Article 18 of this Law, it is permitted to use published works or their fragments for non-commercial purposes, in an amount appropriate to the purpose of use:<br>1) for the purpose of illustration in the learning process, if such use takes place in an educational institution or other place where an educational programme is implemented, or in a secure electronic environment that is accessible only to learners and persons implementing the educational programme;<br>2) for research purposes.<br>(2) Use for the purpose of illustration in the sense of this law is the use of such works or their fragments that support, enrich or supplement the learning process.<br>(3) A secure electronic environment within the meaning of this law is a digital environment for educational purposes, in which the authentication of learners and persons implementing the educational programme is ensured.<br>(4) The place of use of the works or their fragments specified in Clause 1 of the first part of this Article, if it is implemented in a secure electronic environment, is considered to be the European Union member state or the European Economic Area country where the relevant educational institution is established. Latvia is considered to be the place of use of the works or their fragments specified in Clause 1 of the first part of this article, if an educational institution established outside a member state of the European Union or a country of the European Economic Area operates in Latvia and implements the programme of the subject "Latvian learning"<br>**Section 54. Restrictions on Rights of the Holders of Related Rights**<br>(…)<br>(2) The restrictions provided for in this Law shall be applied in such a way that they are not in contradiction with the provisions for normal use of a related rights object and do not unjustifiably restrict the lawful interests of the holders of related rights.<br>(3) Related rights shall not be deemed infringed if, without permission of the holders of related rights and without the payment of compensation, the related rights object is used and fixed:<br>1) in short segments that are included in news broadcasts and in reports of current events, in amounts appropriate for informative purpose;<br>- with the numbers 21.1 , 21.2 [Text and data mining] |

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| | 2) for other purposes specified in Sections 21, 22, 22.[1],23 [**Use of work for the needs of cultural heritage institutions]**, 24, 25, 26, 27, and 33 of this Law in respect of the restriction of the economic rights of authors. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 21[2] of the Copyright Act of 6 April 2000 |
| Legal text | **21[2] . Using the work for text mining and data mining for research purposes**<br>(1) In compliance with the provisions of the second part of Article 18 of this Law, the research organisation and the cultural heritage institution are allowed to reproduce legally available works in order to perform text mining and data mining for research purposes.<br>(2) A research organisation within the meaning of this law is an institution of higher education, including its library, scientific institution or any other institution, whose main task is to conduct research or implement educational activities, which also include research, and which does not make a profit or invests all the profit made in research , or acts in the public interest recognised by the state. A company that has a decisive influence in a research organisation does not have the advantage of access to the research results it produces.<br>(3) Copies of works made for research purposes are stored, ensuring an appropriate level of security, for as long as it is necessary for research purposes, including the verification of research results.<br>(4) Subjects of copyright have the right to take measures to ensure security and integrity in relation to data networks and databases used to store works, to the extent appropriate for this purpose.<br>(5) The provisions of this Article do not apply to computer programmes.<br>Article 12 [2] ) **cultural heritage institution** - a publicly accessible library or museum, archive, including the library and archive of educational institutions, research organisations or public broadcasting organisations, as well as an institution for preserving the heritage of films or sound recordings.<br>Article 19 [1] ) **text and data mining** - any automated analytical technique that analyses text and data digitally to obtain certain information, such as patterns, trends and correlations. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 21[1] of the Copyright Act of 6 April 2000 |
| Legal text | **Article 21[1]. Use of work for text mining and data mining**<br>(1) In compliance with the provisions of the second part of Article 18 of this Law, it is permitted to reproduce legally available works for text mining and data mining.<br>(2) Copies of works made in accordance with the first part of this Section may be kept for as long as it is necessary for the purposes of text mining and data mining.<br>(3) Subjects of copyright may prohibit the use of works in the manner specified in the first part of this Section, by clearly informing about it in an appropriate manner. The prohibition of using publicly available works online shall be communicated in a machine-readable form, including through metadata. |
| General E&Ls complementary to research-specific E&Ls | |

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| Temporary reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Section 33 of the Copyright Act of 6 April 2000<br>Section 54(3)(2) of the Copyright Act of 6 April 2000 |
| Legal text | **Section 33**<br>It is permitted to temporarily reproduce a work without the consent of the author and without remuneration if the reproduction of the work is an integral part and an essential component of a technological process and the purpose of the reproduction is to permit the transmission of the work performed by the intermediary to a data network between third persons or the lawful use thereof, and if such reproduction has no independent economic significance.<br>**Section 54**<br>(1) It is allowed to restrict the right of a holder of related rights to permit or to prohibit the use of an object of related rights and to compensate the rightsholder for the use thereof in the cases specified in this Law.<br>(2) The restrictions provided for in this Law shall be applied in such a way that they are not in contradiction with the provisions for normal use of a related rights object and do not unjustifiably restrict the lawful interests of the holders of related rights.<br>(3) Related rights shall not be deemed infringed if, without permission of the holders of related rights and without the payment of compensation, the related rights object is used and fixed:<br>(…) 2) for other purposes specified in Sections (…) 33 [acts of transient reproduction] of this Law in respect of the restriction of the economic rights of authors. (…) |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 20 of the Copyright Act of 6 April 2000 |
| Legal text | **Section 20**<br>(1) It being mandatory that the title of the work and the name of the author to be used are indicated and that the provisions of Sections 14 [moral rights] and 18 [three-step-test] of this Law are observed, it is permitted:<br>1) to reproduce works communicated to the public and published in the form of quotations and fragments for scientific, research, polemical, critical purposes, as well as use in news broadcasts and reports of current events to the extent justified by the purpose; (...).<br>(2) The provisions of this Section shall not apply to computer programmes. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section $56^2$ (5) of the Copyright Act of 6 April 2000 |
| Legal text | (5) The provider of online content sharing services, while fulfilling the obligations set out in Paragraphs 2 and 3 of Part Three of this Article in cooperation with the subjects of copyright and related rights, shall not deny access to works uploaded by users or objects of related rights, the use of which does not violate copyright and related rights, including works or related rights objects, the use of which is subject to the restrictions of the property rights of the author or the subject of related rights. |
| Private study | |

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| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 23 (2) of the Copyright Act of 6 April 2000 |
| Legal text | Article 23. **Use of work for the needs of cultural heritage institutions**<br>(…)<br>(2) In compliance with the provisions of the second part of Article 18 of this Law, the cultural heritage institution of the state, municipality or other derived public entity is permitted for non-commercial purposes to use works in its collection, as well as their copies made in accordance with the first part of this Article, for scientific use upon request to make individually available for research or self-education to natural persons who have authorisedaccess to computers specially installed in the premises of the relevant cultural heritage institution. This service is provided by the cultural heritage authority through specially protected internal networks only for works that are not available for commercial circulation, unless otherwise agreed with the author.<br>(…)<br>(4) The provisions of the second and third parts of this Article do not apply to computer programmes.<br>Article 12 [2] ) **cultural heritage institution** - a publicly accessible library or museum, archive, including the library and archive of educational institutions, research organisations or public broadcasting organisations, as well as an institution for preserving the heritage of films or sound recordings.<br>**Section 54. Restrictions on Rights of the Holders of Related Rights**<br>(…)<br>(2) The restrictions provided for in this Law shall be applied in such a way that they are not in contradiction with the provisions for normal use of a related rights object and do not unjustifiably restrict the lawful interests of the holders of related rights.<br>(3) Related rights shall not be deemed infringed if, without permission of the holders of related rights and without the payment of compensation, the related rights object is used and fixed:<br>1) in short segments that are included in news broadcasts and in reports of current events, in amounts appropriate for informative purpose;<br>- with the numbers 21.1 , 21.2 [Text and data mining]<br>2) for other purposes specified in Sections 21, 22, 22.[1],23 [**Use of work for the needs of cultural heritage institutions]**, 24, 25, 26, 27, and 33 of this Law in respect of the restriction of the economic rights of authors. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Section 23 (1)(3) of the Copyright Act of 6 April 2000 |
| Legal text | **Use of work for the needs of cultural heritage institutions**<br>(1) In compliance with the provisions of the second part of Article 18 of this Law, a cultural heritage institution is allowed to reproduce, for non-commercial purposes, in any format and data carrier, a work permanently in its collection for the purpose of preservation, including to preserve a damaged or worn-out work, or a work whose data carrier is technologically obsolete, to the extent appropriate for this purpose.<br>(…) |

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| | (3) In compliance with the provisions of the second part of Article 18 of this Law, the cultural heritage institution is allowed to reproduce, without direct or indirect commercial intent, works in its collection or their fragments in posters, flyers, brochures and similar informational materials in an amount appropriate for the purpose of information.<br>(4) The provisions of the second and third parts of this Article do not apply to computer programmes.<br>Article 12 [2] ) **cultural heritage institution** - a publicly accessible library or museum, archive, including the library and archive of educational institutions, research organisations or public broadcasting organisations, as well as an institution for preserving the heritage of films or sound recordings.<br>**Section 54. Restrictions on Rights of the Holders of Related Rights**<br>(…)<br>(2) The restrictions provided for in this Law shall be applied in such a way that they are not in contradiction with the provisions for normal use of a related rights object and do not unjustifiably restrict the lawful interests of the holders of related rights.<br>(3) Related rights shall not be deemed infringed if, without permission of the holders of related rights and without the payment of compensation, the related rights object is used and fixed:<br>1) in short segments that are included in news broadcasts and in reports of current events, in amounts appropriate for informative purpose;<br>- with the numbers 21.1 , 21.2 [Text and data mining]<br>2) for other purposes specified in Sections 21, 22, 22.[1],23 [**Use of work for the needs of cultural heritage institutions]**, 24, 25, 26, 27, and 33 of this Law in respect of the restriction of the economic rights of authors. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | n/a |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSM |
| Legal provision | Section 6 of the Copyright Act of 6 April 2000 |
| Legal text | Section 6. Non-Protected Works<br>The following shall not be protected by copyright:<br>1) Laws and regulations and administrative rulings, other documents issued by State and local government institutions and court adjudications (laws, court judgements, decisions and other official documents), as well as official translations of such texts and official consolidated versions; |

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| | 2) State approved, as well as internationally recognised official symbols and signs (flags, coats of arms, anthems, and awards), the use of which is subject to specific laws and regulations;<br>3) Maps, the preparation and use of which are determined by laws and regulations;<br>4) Information provided in the press, radio or television broadcasts or other information media concerning news of the day and various facts and events;<br>5) Ideas, methods, processes and mathematical concepts.<br>6) copies of works of visual art whose copyright has expired, if they are not the result of creative activity. |

## 1.4.17. LITHUANIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 30 of the Law of 18 May 1999 n. VIIII-1185 (last amended in 2022) |
| Legal text | Article 30<br>**(a)**A person who has a right to use a computer programme, shall, without the authorisation of the author or other owner of copyright, have the right to make back-up copies of the computer programme or to adapt the computer programme, provided that such copies or adaptation of the programme are necessary:<br>1) for the use of the computer programme in accordance with its intended purpose, including for error correction;<br>2) for the use of a back-up copy of the lawfully acquired computer programme, in the event the computer programme is lost, destroyed, or becomes unfit for use.<br>**(b)**The person having a right to use a copy of a computer programme shall be entitled, without the authorisation of the author or any other owner of copyright in the programme, to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme if they do so while performing the acts they are entitled to do (loading, displaying, transmitting or storing the data of the programme).<br>**(3)** No copy or adaptation of a computer programme shall, without the authorisation of the author or other owner of copyright, be used for goals other than those set out in paragraph 1 of this Article.<br>**(4)** Any agreement preventing the performance of the acts provided in paragraphs 1 and 2 of this Article shall be null and void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 31 of the Law of 18 May 1999 n. VIIII-1185 (last amended in 2022) |
| Legal text | Article 31 (...)<br>(1) The authorisation of the author or other owner of copyright shall not be required where reproduction of the code of a computer programme or translation of its form are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that the following conditions are met:<br>1) these acts are performed by the licensee or another person having a right to use a copy of a programme, or on their behalf by a person authorised to do so;<br>2) the information necessary to achieve the interoperability of the programmes has not been previously readily available to the persons referred to in point 1 of paragraph 1 of this Article;<br>3) these acts are confined to the parts of the original programme which are necessary to achieve interoperability. |

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| | (2) The provisions of paragraph 1 of this Article shall not permit the information obtained through its application:<br>1) to be used for goals other than to achieve the interoperability of the independently created computer programme;<br>2) to be given to other persons, except when necessary for the interoperability of the independently created programme;<br>3) to be used for the development, production or marketing of a computer programme substantially similar in its expression, or for any other act which infringes copyright.<br>(3) Any agreements impeding any of the acts set out in paragraph 1 of this Article shall be null and void. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 32 of the Law of 18 May 1999 n. VIIII-1185 (last amended in 2022) |
| Legal text | Article 32. (1) A lawful user of a database or a copy thereof shall have the right, without the authorisation of the author or other owner of copyright, to perform the acts set out in Article 15(1) [reproduction, publication, translation, adaptation, arrangement, transformation, distribution, public display, public performance, broadcasting, retransmission, communication to the public and making available to the public] of this Law, provided that such acts are necessary for the purposes of access to, and an appropriate use of the contents of the database by the legitimate user of the database.<br>(2) Where a lawful user of a database is authorised to use only a certain part of the database, the provisions of paragraph 1 of this Article shall apply only to that part.<br>(3) Terms of contracts that prevent the performance of actions specified in paragraphs 1, 5, 6 and 7 of this Article are null and void.<br>(…) |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 62 of the Law of 18 May 1999 n. VIIII-1185 (last amended in 2022) |
| Legal text | Article 62.<br>**(1)** The maker of a database which is lawfully made available to the public in whatever manner may not prevent lawful users of the database from extracting and re-utilising insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever.<br>**(2)** Where a lawful user is authorised to use only certain parts of the database, the provisions of paragraph 1 of this Article shall apply only to those parts of the database.<br>**(c)**A lawful user of a database which is lawfully made available to the public in whatever manner may not perform acts which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database.<br>**(d)**A lawful user of a database which is lawfully made available to the public in any manner must not cause prejudice to the rights of the owners of copyright and related rights in respect of works or subject matter contained in the database.<br>**(e)**Any agreements contrary to paragraphs 1 - 4 of this Article shall be null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 63 of the Law of 18 May 1999 n. VIIII-1185 (last amended in 2022) |
| Legal text | Article 63<br>1. A lawful user of a database which is made available to the public in whatever manner may, without the authorisation of its maker, extract or re-utilise a substantial part of its contents:<br>1) in the case of extraction for private purposes of the contents of a non-electronic database; (...). |

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| | 2. Repeated and systematic extractions and reutilisationof small parts of the contents of a database shall be prohibited where such acts conflict with a normal exploitation of that database or unreasonably prejudice the legitimate interests of the maker thereof. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 22(1)(2) of the Law of 18 May 1999 n. VIII-1185, as amended by Law n. XIV-970 of 24 March 2022, implementing Article 5 CDSM, Article 58 of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 22<br>The following shall be permitted without the authorisation of the author of a work or any other owner of copyright in this work and without the payment of a remuneration, but indicating, where possible, the source, including the author's name:<br>(1) As an example for non-commercial teaching and research purposes to reproduce, publicly publish, make publicly available via computer networks (Internet) and publicly display small legally published or publicly announced works and their digital copies and short excerpts of legally published or publicly announced works or their digital copies both in the original language, as well as translated into another language, insofar as it is related to educational programmes and does not exceed the extent necessary for teaching or research; when works are used for educational purposes by educational institutions, such use takes place under the responsibility of the educational institution, on its premises or in other places, or using a secure electronic network to which only the teachers, lecturers and students of the educational institution have access.<br>(2) As an example, for non-commercial purposes to reproduce, publicly announce and publicly display works created to assess the learning achievements of learners in educational institutions, as far as it is related to training and teacher qualification improvement programmes and does not exceed the extent necessary for training or teacher qualification improvement. (...)<br>Article 58<br>1. The use of a performance, phonogram, electronic press release, recording of an audio-visual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist:<br>(...) 5) reproduction, communication to the public, for the non-commercial purpose of illustration for teaching or scientific research, of a short object of related rights lawfully published or communicated to the public or an extract of such object, provided that this is related to study programmes and does not exceed the extent justified by the purpose to be achieved.<br>(...)<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audio-visual work or broadcasting organisations. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 22[(1)] of the Law of 18 May 1999 n. VIII-1185<br>Article 32(7) of the Law of 18 May 1999 n. VIII-1185<br>Article 63(6) of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 2 |

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| | (...) 31. Cultural heritage institution means a library, museum, archive (including the publicly accessible archive of a public broadcaster), film or sound heritage institution, which are publicly accessible; (...)<br>35. Research organisation means a university (including its libraries), a research institute, as well as another non-profit legal entity or a legal entity that reinvests all its profits in its research, or a legal entity that implements tasks related to the public interest, the main purpose of which is to carry out educational activities that include and research. A scientific research organisation is not considered an organisation for which a for-profit legal entity has a substantial, opportunity to control the manifest influence arising from its role as shareholders or members or other structural features that may give preference to access to scientific research results; (...)<br>49. Text and data mining is an automated method of analysing text and data in digital form to obtain information; (...).<br>Article 22(1)<br>1. Without the authorisation of the author of the work or of any other rightsholder of the work and without payment of royalties, research organisations and cultural heritage institutions shall be authorised to reproduce works for non-commercial purposes for the purpose of carrying out, for the purposes of scientific research, the extraction of texts and data from works to which they have lawful access. Copies of the works shall be kept under restrictions on the use and/or distribution of the texts and data and may be retained for research purposes, including the verification of research results.<br>2. Copyright holders shall be permitted to take measures to ensure the security and integrity of computer networks and databases on which works are stored.<br>3. Contractual provisions which do not allow the limitation of copyright provided for in this Article shall be null and void.<br>Article 32<br>(...) 7. Research organisations and cultural heritage institutions may reproduce databases without the authorisation of the author of the work or of any other rightsholder of the work and without payment of royalties, for the purpose of carrying out, for the purposes of scientific research, the extraction of the texts and data of the databases to which they have lawful access. Copies of the databases shall be protected at a certain level of security and may be retained for research purposes, including the verification of research results. Copyright holders shall be allowed to take measures to ensure the security and integrity of the computer networks hosting the databases. Such measures shall not go beyond what is necessary to achieve the stated objectives.<br>Article 63<br>1. A lawful user of a database which is made available to the public in whatever manner may, without the authorisation of its maker, extract or re-utilise a substantial part of its contents:<br>(...) 6) the database of scientific research organisations and cultural heritage institutions is transferred so that they can perform text and data mining of databases with which they can have legal access for the purposes of scientific research. Copies of the databases are kept at a certain level of security and may be retained for research purposes, including to verify research results. Subjects of sui generis rights are allowed to apply measures to ensure the security and integrity of the computer networks where the databases are stored. Terms of contracts that do not allow the application of the limitation of rights provided for in this clause are null and void; (...).<br>2. Repeated and systematic extractions and reutilisationof small parts of the contents of a database shall be prohibited where such acts conflict with a normal exploitation of that database or unreasonably prejudice the legitimate interests of the maker thereof. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 22(2), 32(8), 58(15), 63(7), of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 22(2) |

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| | 1. Reproduction of lawfully available works for the purposes of text and data mining shall be permitted without the authorisation of the author of the work or of any other rightsholder of the work and without payment of royalties. Reproduced material may be retained for as long as is necessary for text and data mining purposes.<br>2. The limitation of economic rights provided for in paragraph 1 of this Article shall apply only where the rightsholders have not expressly indicated, by appropriate means (computer-readable means in the case of content available to the public on the Internet), that they reserve the right to use those works.<br>Article 58<br>1. The use of a performance, phonogram, electronic press release, recording of an audiovisual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist:<br>(…) 15) the provisions of Articles 22(1), 22(2) [text and data mining for research purposes] and 23 of this Law shall apply mutatis mutandis to the restrictions of related property rights.<br>(...)<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audiovisual work or broadcasting organisations.<br>Article 32<br>(...) (8) Reproduction of lawfully accessible works for the purposes of text and data mining shall be permitted without the authorisation of the author of the work or of any other rightsholder of that work and without payment of royalties. Reproduced material may be retained for as long as necessary for the purposes of text and data mining. The limitation of economic rights provided for in this paragraph shall apply only where the rightsholders do not expressly indicate by appropriate means (computer-readable means in the case of content available to the public on the Internet) that they reserve the right to use those databases.<br>Article 63<br>1. A lawful user of a database which is made available to the public in whatever manner may, without the authorisation of its maker, extract or re-utilise a substantial part of its contents:<br>(...) 7) the database of scientific research organisations and cultural heritage institutions is transferred so that they can part of the database is transferred for text and data extraction purposes. Transferred material may be stored for as long as necessary for text and data mining purposes. This limitation of property rights applies only when the subjects of sui generis rights have not clearly indicated by appropriate means (in the case of content publicly available on the Internet by computer-readable means) that they reserve the right to use those databases. (...)<br>2. Repeated and systematic extractions and reutilisationof small parts of the contents of a database shall be prohibited where such acts conflict with a normal exploitation of that database or unreasonably prejudice the legitimate interests of the maker thereof. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 21 of the Law of 18 May 1999 n. VIII-1185, Article 58(1)(14) of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 21<br>It is permitted to reproduce, publish and publicly announce (among other things, to make publicly available via computer networks (Internet)) without the permission of the author of the work or another subject of the copyright of this work and without royalties, but |

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| | with indication, if possible, of the source used and the name of the author, a small part of a legally published or publicly published work, whether in the original language or translated into another language, as a quotation (for the purposes of criticism or review) in another work, provided that such use is fair and does not exceed the extent necessary for the purpose of the quotation.<br>Article 58(1)(14)<br>The use of a performance, phonogram, electronic press release, recording of an audio-visual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist: (…)<br>14) for the purposes of citation (criticism or review) to reproduce and publicly announce (among other things, make publicly available via computer networks (on the Internet)) a small part of the legally published or publicly announced object of related rights in another object of copyright or related rights, if such use is fair and does not exceed the extent necessary for the purpose of the citation; (...)<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audio-visual work or broadcasting organisations. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 21 of the Law of 18 May 1999 n. VIII-1185, Article 58(1)(14) of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 21<br>It is permitted to reproduce, publish and publicly announce (among other things, to make publicly available via computer networks (Internet)) without the permission of the author of the work or another subject of the copyright of this work and without royalties, but with indication, if possible, of the source used and the name of the author, a small part of a legally published or publicly published work, whether in the original language or translated into another language, as a quotation (for the purposes of criticism or review) in another work, provided that such use is fair and does not exceed the extent necessary for the purpose of the quotation.<br>Article 58(1)(14)<br>1. The use of a performance, phonogram, electronic press release, recording of an audiovisual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist: (…)<br>14) for the purposes of citation (criticism or review) to reproduce and publicly announce (among other things, make publicly available via computer networks (on the Internet)) a small part of the legally published or publicly announced object of related rights in another object of copyright or related rights, if such use is fair and does not exceed the extent necessary for the purpose of the citation; (...).<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audiovisual work or broadcasting organisations. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 22(3) of the Law of 18 May 1999 n. VIII-1185, Article 58(1)(3) of the Law of 18 May 1999 n. VIII-1185 (as last amended in 2022) |
| Legal text | Article 22<br>The following shall be permitted without the authorisation of the author of a work or any other owner of copyright in this work and without the payment of a remuneration, but indicating, where possible, the source, including the author's name: (...) |

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| | 3) use of works held by libraries, by libraries of educational and research institutions, museums or archives, communicating them to the public, for the non-commercial purpose of research or private study, via computer networks at the terminals designated for that purpose in those establishments, if the work is not publicly traded and the copyright owners do not prohibit the use of such works. For the purpose of such limitation, the establishment referred to in this point may reproduce the acquired copies of the works, but only in order to make communication of a work to the public technically possible via computer networks. At the same time, it shall not be permitted to make accessible via computer networks more copies of a work than held by these institutions. The establishments specified in this point must ensure the use of effective technical protection measures so copies of works would not be reproduced and the content information of works would not be transferred or transmitted outside the terminals of the establishments to external networks; (...).<br>Article 58<br>1. The use of a performance, phonogram, electronic press release, recording of an audiovisual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist: (...)<br>3) use of the objects of related rights held by libraries, by libraries of educational and research institutions, museums or archives as well as [beneficiaries] specified in point 3 of Article 22 of this Law; (...).<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audiovisual work or broadcasting organisations. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 2(31), 23, 58(4) of the Law n. XIV-970 of 24 March 2022 |
| Legal text | Article 2<br>(...) 31. Cultural heritage institution means a library, museum, archive (including the publicly accessible archive of a public broadcaster), film or sound heritage institution, which are publicly accessible.<br>Article 23<br>1. Without the permission of the author of the work or another subject of the copyright of this work and without royalties, but with indication, if possible, of the source used and the name of the author, cultural heritage institutions or third parties or other persons acting on their behalf and under their responsibility are allowed to reproduce the works permanently in their funds and collections works in any format or medium for the purpose of preserving such works and to the extent necessary to preserve them.<br>2. Terms of contracts that do not allow the application of the limitation of the property rights of authors provided for in this Article are null and void.<br>Article 58<br>(1) The use of a performance, phonogram, electronic press release, recording of an audiovisual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist:<br>(…) 4) reproduce an object of related rights permanently held in the collection or fonds of a cultural heritage institution, other than an object of related rights published on computer networks (on the Internet), where a copy of the object of related rights is made in any format or medium for the purposes of preserving such works, and to the extent necessary for the preservation of such works. Contractual terms which exclude the limitation of economic rights provided for in this Article shall be null and void. |

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| | (..) 15) the provisions of Articles (...) 23 of this Law shall apply mutatis mutandis to the restrictions of related property rights.<br>(...)<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audiovisual work or broadcasting organisations. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Articles 2(31), 23(1), 58(1)(4) of the Law n. XIV-970 of 24 March 2022 |
| Legal text | Article 2<br>(...) 31. Cultural heritage institution means a library, museum, archive (including the publicly accessible archive of a public broadcaster), film or sound heritage institution, which are publicly accessible.<br>Article 23<br>1. Without the permission of the author of the work or another subject of the copyright of this work and without royalties, but with indication, if possible, of the source used and the name of the author, cultural heritage institutions or third parties or other persons acting on their behalf and under their responsibility are allowed to reproduce the works permanently in their funds and collections works in any format or medium for the purpose of preserving such works and to the extent necessary to preserve them.<br>2. Terms of contracts that do not allow the application of the limitation of the property rights of authors provided for in this Article are null and void.<br>Article 58<br>(1) The use of a performance, phonogram, electronic press release, recording of an audiovisual work (film) and the broadcast of a broadcasting organisation or their recordings is permitted without the permission of the subjects of related rights and without remuneration, but with the indication, if possible, of the source used and the name of the artist:<br>(…) 4) reproduce an object of related rights permanently held in the collection or fonds of a cultural heritage institution, other than an object of related rights published on computer networks (on the Internet), where a copy of the object of related rights is made in any format or medium for the purposes of preserving such works, and to the extent necessary for the preservation of such works. Contractual terms which exclude the limitation of economic rights provided for in this Article shall be null and void.<br>(..) 15) the provisions of Articles (...) 23 of this Law shall apply mutatis mutandis to the restrictions of related property rights.<br>(...)<br>3. Limitations of related rights specified in paragraph 1 of this Article must not conflict with a normal exploitation of the objects of the said rights and must not unreasonably prejudice the legitimate interests of performers, producers of phonograms, producers of the first fixation of an audiovisual work or broadcasting organisations. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | n/a |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |

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| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Article 5(7) of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 5<br>Copyright shall not apply to:<br>(…) 7) any material obtained by reproducing a work of visual art after the term of copyright in that work has expired, except for cases where the material obtained after reproduction is original (intellectual work of the author reproducing the work). |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 5 of the Law of 18 May 1999 n. VIII-1185 |
| Legal text | Article 5. Works not Attributed to the Subject Matter of Copyright<br>Copyright shall not apply to:<br>1) ideas, procedures, processes, systems, methods of operation, concepts, principles, discoveries, or mere data;<br>2) legal acts, official documents, or texts of administrative, legal or regulative nature (decisions, rulings, regulations, norms, territorial planning and other official documents), as well as their official translations;<br>3) official State symbols and insignia (flags, coat-of-arms, anthems, banknote designs, and other State symbols and insignia) the protection of which is regulated by other legal acts;<br>4) officially registered drafts of legal Acts;<br>5) regular information reports on events;<br>6) works of folklore. |

### 1.4.18. LUXEMBOURG

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Articles 34, 35, 39 of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 34<br>Except where specifically provided for in the contract, the acts provided for in Article 33 [temporary or permanent reproduction, translation, adaptation, arrangement and any other transformation, and the distribution to the public] shall not be subject to authorisation by the rightsholder where such acts are necessary to enable the lawful acquirer to use the computer programme in a manner consistent with its intended purpose, including the correction of errors and the incorporation of the programme in a database which he is required to operate.<br>Article 35<br>A person having the right to use the computer programme may not be prevented by contract:<br>(a) from making a back-up copy of the computer programme insofar as this is necessary for that use;<br>(b) from observing, studying or testing the operation of that programme in order to determine the ideas and principles underlying any element of the programme, when performing any loading, displaying, running, transmitting or storing operation of the computer programme which they are entitled to perform.<br>(...) The exceptions listed above may not interfere with the normal operation of the computer programme, nor cause undue prejudice to the legitimate interests of the rightsholder.<br>Article 39 |

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| | (...) 2. Any contractual provision contrary to Article 36 or the exceptions provided for in Article 35 shall be null and void. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Articles 36, 39 of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 36<br>(1) The authorisation of the holder of the exclusive rights shall not be required where the reproduction of the code or the translation of the form of the code within the meaning of Article 33(a) and (b) [temporary or permanent reproduction, translation, adaptation, arrangement and any other transformation] is indispensable to obtain the information necessary for the interoperability of an independently created computer programme with other programmes and provided that the following conditions are met:<br>(a) such acts are performed by the licensee or by another person enjoying the right to use a copy of a programme or on their behalf by a person entitled to do so<br>(b) the information necessary for interoperability has not already been made easily and rapidly accessible to the persons referred to in point (a); and<br>(c) such acts are limited to the parts of the original programme necessary for that interoperability.<br>(2) The provisions of paragraph 1 shall not justify the use of information obtained by virtue of its application:<br>(a) be used for purposes other than achieving interoperability of the independently created computer programme;<br>(b) be communicated to third parties, except where this is necessary for the interoperability of the independently created computer programme; or<br>(c) used for the development, production or marketing of a computer programme having a substantially similar expression or for any other act of copyright infringement.<br>(3) With reference to Article 9(2) of the Berne Convention for the Protection of Literary and Artistic Works, this Article shall not be applied in such a way as to unreasonably prejudice the legitimate interests of the owner of the exclusive rights or to conflict with a normal exploitation of the computer programme.<br>Article 39<br>(...) 2. Any contractual provision contrary to Article 36 or the exceptions provided for in Article 35 shall be null and void. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 10bis of the Law of 18 April 2001 on Copyright, Related rights and Databases (as amended in 2004 and 2022) |
| Legal text | Article 10bis<br>The author of a database may not prohibit:<br>1° acts performed by the legitimate user of the whole or part of a database or of copies thereof which are necessary for access to the contents and for the normal use by the latter of the whole or part thereof.<br>(...)<br>Any contractual provision contrary to this provision is void.<br>(...)<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the rightsholder. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 67bis of the Law of 18 April 2001 on Copyright, Related rights and Databases (as amended in 2004 and 2022) |

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| Legal text | Article 67bis<br>1. The producer of a database which is made available to the public in any way whatsoever cannot prevent the legitimate user of this database from extracting or reusing insubstantial parts of its contents, evaluated in qualitatively or quantitatively, for any purpose whatsoever. To the extent that the lawful user is permitted to extract or reuse only part of the database, this paragraph applies to that part.<br>2. The legitimate user of a database which is made available to the public in any way may not perform acts which conflict with the normal operation of this database, or which in any way injure unjustified the legitimate interests of the database producer.<br>3. The legitimate user of a database which is made available to the public in any way whatsoever may not prejudice the holder of a copyright or a related right relating to works or services contained in this database.<br>4. Any contractual provision contrary to this Article is null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 68(a) of the Law of 18 April 2001 on Copyright, Related rights and Databases (as amended in 2004 and 2022) |
| Legal text | Article 68<br>Any legitimate user of a database made available to the public may, without the authorisation of the database producer, extract and reuse a substantial part of the contents of the database:<br>(a) in the case of extraction for private purposes of the contents of a non-electronic database. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 10(2), 46(9), 55 of the Law of 18 April 2001 on Copyright, Related rights and Databases (as amended in 2001, 2004 and 2022) |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 2° the reproduction and communication to the public of works for the sole purpose of illustration of teaching or scientific research to the extent justified by the non-commercial purpose pursued and provided that such use is in accordance fair practice and that, unless this proves to be impossible, the source, including the name of the author, is indicated.<br>(...) The exceptions listed above may not interfere with the normal exploitation of the work, nor cause undue prejudice to the legitimate interests of the author.<br>Article 46<br>The performer and the producer of phonograms and first film fixations may not prohibit:<br>(...) 9° The reproduction and communication to the public of services for the exclusive purpose of illustrating teaching or scientific research to the extent justified by the non-commercial purpose pursued and provided that such use complies with the good practices and that, unless this proves impossible, the source, including the name of the author, is indicated.<br>(...) The exceptions listed above may not interfere with the normal operation of the service, nor cause unjustified prejudice to the legitimate interests of the rightsholder.<br>Article 55 |

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| | The provisions of Article 46 apply to the broadcasts of broadcasting organisations. The following shall be permitted without the authorisation of the author of a work or any other owner of copyright in this work and without the payment of a remuneration, but indicating, where possible, the source, including the author's name: |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 10(15), 10bis, 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 15° reproductions and extractions made by research bodies and libraries accessible to the public, museums, archives or institutions that are custodians of a film or sound heritage, with a view to carrying out, for scientific research purposes, a search of texts and data on works to which they have lawful access.<br>Copies of works made in accordance with the foregoing paragraph shall be stored with an appropriate level of security and may be kept for scientific research purposes, including for the verification of research results.<br>Rightsholders shall be entitled to apply measures to ensure the security and integrity of networks and databases where works are hosted. Such measures shall not go beyond what is necessary to achieve this objective.<br>For the purposes of this exception, "research organisation" means a university, including its libraries, a research institute or any other entity, the primary purpose of which is to carry out scientific research, or to carry out educational activities which also include scientific research:<br>(a) on a non-profit basis or by reinvesting all profits in its scientific research; or<br>(b) as part of a public interest mission;<br>in such a way that it is not possible for an undertaking having a decisive influence on that organisation to gain privileged access to the results of that scientific research.<br>(...) For the purposes of points 15 and 16, "text and data mining" means any automated analysis technique aimed at analysing texts and data in digital form in order to extract information, including, but not limited to, patterns, trends, and correlations.<br>(..) The exception referred to this paragraph is mandatory.<br>Article 10bis<br>Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Article 10 (...) 15°(...) shall apply to the rights of authors of a database.<br>The exceptions listed above may not conflict with a normal exploitation of the database nor unreasonably prejudice the legitimate interests of the rightsholder.<br>The exceptions referred to in paragraphs 1 and 2 are mandatory.<br>Article 68<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, 15° (....) apply to the rights of producers of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the rightsholder. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Articles 10(16), 10bis, 35(2), 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases |

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| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 16° reproductions and extractions of works lawfully accessible for the purposes of text and data mining.<br>Reproductions and extractions made under this exception may be kept for as long as necessary for the purposes of text and data mining.<br>This exception shall apply on condition that the use of the works has not been expressly reserved by their rightsholders in an appropriate manner, in particular by machine-readable processes for content made available to the public online.<br>By way of derogation from paragraph 4, this exception shall not be mandatory. The exception referred to in this point shall not affect the application of point 15;<br>(…) For the purposes of points 15 and 16, "text and data mining" means any automated analysis technique aimed at analysing texts and data in digital form in order to extract information, including, but not limited to, patterns, trends and correlations.<br>Article 10bis<br>Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Article 10 (...) 16°(...) shall apply to the rights of authors of a database.<br>The exceptions listed above may not conflict with a normal exploitation of the database nor unreasonably prejudice the legitimate interests of the rightsholder.<br>Article 35<br>Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Article 10 (...) 16°(...) shall apply to rights in computer programmes.<br>The exceptions listed above may not conflict with a normal operation of the programme nor cause undue prejudice to the legitimate interests of the right holder.<br>Article 68<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, 16° (....) apply to the rights of producers of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the rightsholder. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Articles 10, 46, 55 of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>1° short quotations in the original or in translation, justified by the critical, controversial, educational, scientific or informational nature of the work in which they are incorporated. The uses referred to in the above paragraph may not be made without the author's authorisation provided that they comply with fair practice, that they do not pursue a profit-making purpose and that they do not harm neither to the work nor to its exploitation. The name of the author and the title of the work reproduced or cited must be mentioned if they appear in the source.<br>(...) The exceptions listed above may not interfere with the normal exploitation of the work, nor cause undue prejudice to the legitimate interests of the author. |

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| | Article 46<br>The performer and the producer of phonograms and first fixations of films may not prohibit:<br>1° Short quotations, in the original or in translation, justified by the critical, polemical, educational, scientific or informative nature of the work or programme in which the service is incorporated.<br>These uses can only be made insofar as they comply with good practice, that they do not pursue a profit motive, that they are justified by the aim pursued and insofar as they do not affect the services nor to their exploitation.<br>(...) The exceptions listed above may not interfere with the normal operation of the service, nor cause unjustified prejudice to the legitimate interests of the rightsholder.<br>Article 55<br>The provisions of Article 46 apply to the broadcasts of broadcasting organisations. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 70bis of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 70bis<br>(...) (8) Cooperation between providers of online content sharing services and rightsholders should not result in preventing the making available of works or other subject-matter uploaded by users which do not infringe copyright and related rights, including where such works or other subject-matter are covered by an exception or limitation.<br>Users may avail themselves of any of the following existing exceptions or limitations when uploading and making available user-generated content on online content sharing services:<br>1° quotation, criticism, review; (...). |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 10(14) of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 14° use by communication to the public, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph point 10 below [library accessible to the public, an establishment of teaching, a museum or archive who do not seek commercial advantage or an institution depositary of cinematographic or sound heritage] of works not subject to purchase or licensing terms which are contained in their collections.<br>(…) The exceptions listed above may not interfere with the normal exploitation of the work, nor cause undue prejudice to the legitimate interests of the author. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Articles 10(10), 46(10), 10bis, 35 and 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 10° the reproduction of a work lawfully accessible to the public, produced by a library accessible to the public, an educational institution, a museum, an archive or an institution depository of cinematographic or sound heritage which does not seek any direct or indirect commercial or economic advantage for the sole purpose of preserving the cultural heritage and to carry out any work |

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| | reasonably useful for the preservation of this work, provided that it does not prejudice the normal exploitation of said works and does not cause prejudice to the legitimate interests of the authors, as well as the communication to the public of audio-visual works by these institutions with the aim of making the cultural heritage known, provided that this communication is analogue and takes place within the institution.<br>Article 46<br>The performer and the producer of phonograms and first film fixations may not prohibit:<br>(…) 8° Analog reproduction and communication of performances in a work, under the conditions referred to in Article 10, 10°.<br>(...) The exceptions listed above may not interfere with the normal operation of the service, nor cause unjustified prejudice to the legitimate interests of the right holder.<br>Article 55<br>The provisions of Article 46 apply to the broadcasts of broadcasting organisations.<br>Article 10bis<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , point 10 (....) apply to the rights of authors of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the right holder.<br>Article 35<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , point 10 (....) apply to the rights in computer programmes.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the right holder.<br>Article 68<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , points 2bis (....) apply to the rights of aproducers of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the rightsholder. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Articles 10(10), 46(8), 10bis, 35, 55 and 68 of the Law of 18 April 2001 on Copyright, Related rights and Databases (amended in 2022) |
| Legal text | Article 10<br>When the work, other than a database, has been lawfully made available to the public, the author may not prohibit:<br>(…) 10° the reproduction of a work lawfully accessible to the public, produced by a library accessible to the public, an educational institution, a museum, an archive or an institution depository of cinematographic or sound heritage which does not seek any direct or indirect commercial or economic advantage for the sole purpose of preserving the cultural heritage and to carry out any work reasonably useful for the preservation of this work, provided that it does not prejudice the normal exploitation of said works and does not cause prejudice to the legitimate interests of the authors, as well as the communication to the public of audiovisual works by these institutions with the aim of making the cultural heritage known, provided that this communication is analogue and takes place within the institution.<br>Article 46 |

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| | The performer and the producer of phonograms and first film fixations may not prohibit:<br>(…) 8° Analog reproduction and communication of performances in a work, under the conditions referred to in Article 10, 10°.<br>(...) The exceptions listed above may not interfere with the normal operation of the service, nor cause unjustified prejudice to the legitimate interests of the right holder.<br>Article 55<br>The provisions of Article 46 apply to the broadcasts of broadcasting organisations.<br>Article 10bis<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , point 10 (....) apply to the rights of authors of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the right holder.<br>Article 35<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , point 10 (....) apply to the rights in computer programmes.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the right holder.<br>Article 68<br>(...) Without prejudice to the exceptions listed above, the exceptions to authors' rights provided for in Articles 10, paragraph 1 , points 2bis (....) apply to the rights of a producers of a database.<br>The exceptions listed above may not interfere with the normal operation of the database, nor cause undue prejudice to the legitimate interests of the rightsholder. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 1(1) of the Law of 18 April 2001 on Copyright, Related rights and Databases |
| Legal text | Art. 1. (1) Copyright protects original literary and artistic works of any kind and in any form or expression, including photographs, databases and computer programmes.<br>It does not protect ideas, methods of operation, concepts or information, as such. (…) |

## 1.4.19. MALTA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 9(2)(a) and Article 9(2)(c) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (...) (2) Copyright in a computer programme shall not include the right to authorise or prohibit -<br>**(f)**the observation, the study or testing of the functioning of the programme by the licensed user in order to determine the ideas and principles which underlie any element of the programme if this is done whilst performing any of the acts of loading, displaying, running, transmitting or storing the programme which they is entitled to do.<br>**(g)**(...)<br>**(h)**the making of a copy or a back-up copy, the translation, adaptation, arrangement and any other alteration of a computer programme and the reproduction of the results thereof, in so far as this is necessary for the licensed user to make proper use of the programme in accordance with its intended purpose, including the correction of errors; and the right of the licensed user to make a back-up copy of a computer programme may not be restricted or excluded by contract in so far as it is necessary for the use of that computer programme.<br>(3) The exceptions and limitations provided for in this article shall only be applied in such particular cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 9(2)(b) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (...) (2) Copyright in a computer programme shall not include the right to authorise or prohibit:<br>**1.** (...)<br>**2.** the reproduction by the licensed user of the code and translation of its form where this is indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that these acts are confined to the parts of the original programme which are necessary to achieve interoperability and the information necessary to achieve interoperability has not previously been readily available to the licensed user:<br>Provided that any information obtained from the reproduction of the code and the translation of the form of a computer programme made under this paragraph shall not:<br>**(i)** be used for purposes other than to achieve the interoperability of the independently created computer programme;<br>**(ii)** be given to other persons, except when necessary for the interoperability of the independently created computer programme;<br>**(iii)** be used for the development, production or marketing of a computer programme substantially similar in its expression to the original programme or for any other act which infringes copyright.<br>**3.** (...).<br>(3) The exceptions and limitations provided for in this article shall only be applied in such particular cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. |
| Access to and reuse of databases | |

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| Relevant EU provision | Article 6 Database |
| Legal provision | Article 9(1) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit -<br>(...) (w) in the case of a database, the performance of those acts which are normally necessary in order that the licensed user obtains access to the contents of the database and normal use thereof, in respect of the whole or part of the database which the user is licensed to use; and any contractual provisions running counter to what is prescribed in this paragraph shall be null and void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 26(1) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 26. (1) The maker of a database which is made available to the public in whatever manner may not prevent a licensed user of the database from extracting or re-utilising insubstantial parts of its contents, evaluated qualitatively or quantitatively, for any purpose whatsoever, as long as the licensed user does not perform acts which conflict with the normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database or in any way cause prejudice to the holder of a copyright or neighbouring right in respect of the works or subject matter contained in the database and any contractual provisions running counter to this proviso shall be null and void:<br>Provided that the repeated and systematic extraction or reutilisation of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database shall not be permitted. (…) |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 26(2) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 26. (...) (2) Notwithstanding Article 25, a licensed user may, without the authorisation of the maker of a database made available to the public in whatever manner, extract or re-utilise a substantial part of its contents for the following purposes:<br>**(a)** extraction for private use in the case of a non-electronic database;<br>**(b)** extraction for the purposes of illustration for teaching or for scientific research to the extent justified by the non-commercial purpose to be achieved provided the source is indicated;<br>**(c)** extraction or reutilisation for the purposes of public security or an administrative or judicial procedure (...). |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 9(1)(h) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit -<br>(...) (h) the reproduction, translation, distribution or communication to the public of a work for the sole purpose of illustration for teaching or scientific research only to the extent justified by the non-commercial purpose to be achieved, and as long as the source, including the author's name, is, unless this is impossible, indicated; (...). |
| Text and data mining | |

| Relevant EU provision | Article 3 CDSMD |
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| Legal provision | Article 3 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021<br>Article 4 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021<br>Article 8 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 3. In these Regulations, unless the context otherwise requires:<br>(...) "text and data mining" means any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations.<br>Article 4. Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work and the sui generis right accorded to the maker of a database as well as the press publishers' right as provided in Regulation 15(1), shall not include the right to authorise or prohibit reproductions and extractions made by research organisations or cultural heritage institutions to carry out, for the purposes of scientific research, text and data mining of works or other subject matter to which they have lawful access:<br>Provided that:<br>(a) copies of work or other subject-matter made in compliance with the preceding paragraph shall be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results;<br>(b) rightsholders shall be allowed to apply measures to ensure the security and integrity of the networks and databases where the works or other subject-matter are hosted. Such measures shall not go beyond what is necessary to achieve that objective.<br>Article 8. (1) Any contractual provision contrary to the exceptions provided for in Regulations 4, 6 and 7 shall be unenforceable.<br>(2) The exceptions and limitations provided for in Regulations 4, 5, 6 and 7 shall only be applied in those particular cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. (...). |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 3 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021<br>Article 5 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021<br>Article 8 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 3. In these Regulations, unless the context otherwise requires:<br>(...) "text and data mining" means any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations.<br>Article 5. (1) Copyright in an audio-visual work, a database, a literary work, a musical or artistic work and the sui generis right accorded to the maker of a database as well as the press publishers right as provided in Regulation 15(1), shall not include the right to authorise or prohibit reproductions and extractions of lawfully accessible works or other subject-matter for the purposes of text and data mining:<br>Provided that reproductions and extractions made pursuant to the preceding paragraph may be retained for as long as is necessary for the purposes of text and data mining;<br>(2) The exception provided for in sub-regulation (1), shall apply on condition that the use of works and other subject-matter referred to above may be expressly reserved by their rightsholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online.<br>(3) This regulation shall not affect the application of Regulation 4.<br>Article 8. (1) Any contractual provision contrary to the exceptions provided for in Regulations 4, 6 and 7 shall be unenforceable. |

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| | (2) The exceptions and limitations provided for in Regulations 4, 5, 6 and 7 shall only be applied in those particular cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. (...). |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Article 9(1)(a) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audiovisual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit –<br>(a) temporary acts of reproduction, which are transient or incidental and an integral and essential part of a technological process and whose sole purpose is to enable:<br>(i) a transmission in a network between third parties by an intermediary, or<br>(ii) another lawful use of a work or other subject- matter to be made, and which have no independent economic significance; (...). |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 9(1)(k) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit -<br>(...) (k) the reproduction, translation, distribution or communication to the public of quotations for purposes such as criticism or review, provided that they relate to a work or other subject-matter which has already been lawfully made available to the public, as long as, unless this is impossible, the source, including the author's name, is indicated, and that their use is in accordance with fair practice, and to the extent required by the specific purposes; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 16(7) of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 16. (...) (7) The cooperation between online content-sharing service providers and rightsholders shall not result in the prevention of the availability of works or other subject matter uploaded by users, which do not infringe copyright and related rights, including where such works or other subject matter are covered by an exception or limitation in terms of the Act.<br>The rights provided by the Act and these regulations shall not preclude online content-sharing service providers from uploading and making available content generated by users on online content-sharing services in the context of:<br>(a) quotation, criticism, review; and<br>(b) use for the purpose of caricature, parody or pastiche. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 9(1)(v) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit - |

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| | (...) (v) the communication to the public, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph (d) of works and other subject-matter, not subject to purchase or licensing terms, which are contained in their collections; (...). |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 9(1)(d) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 9. (1) Copyright in an audio-visual work, a database, a literary work other than in the case of a computer programme, a musical or artistic work shall not include the right to authorise or prohibit -<br>(…) (d) specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage; (…). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 7 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021<br>Article 8 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 7. Copyright in an audio-visual work, a database, a literary work a musical or artistic work and the sui generis right accorded to the maker of a database as well as the press publishers' right provided in Regulation 15(1), shall not include the right to authorise or prohibit cultural heritage institutions to reproduce such works that are permanently in their collections, in any format or medium, for the purposes of preservation and to the extent necessary for such preservation.<br>Article 8. (1) Any contractual provision contrary to the exceptions provided for in Regulations 4, 6 and 7 shall be unenforceable.<br>(2) The exceptions and limitations provided for in Regulations 4, 5, 6 and 7 shall only be applied in those particular cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightsholder. (...). |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Article 12 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 12. (1) The Minister may by notice in the Gazette provide that where a collective management organisation established in Malta enters into a licensing agreement for the exploitation of works or other subject matter, in accordance with its mandates from rightsholders, such an agreement can be extended to apply to the rights of rightsholders who have not authorised that collective management organisation to represent them by way of assignment, licence or any other contractual arrangement, by first obtaining the approval of the Board with regards to such extension. In such cases, collective management organisations may submit an application to the Board, for the approval of the extension, which application must indicate the:<br>(a) type of licence;<br>(b) purpose of the licence;<br>(c) type of work or subject-matter or rights covered by the licence;<br>(d) identity of the licensees; and<br>(e) electronic mail address where rightsholders may submit requests relative to the licence. In reaching a decision as to whether or not to approve the collective licence with extended effect, the Board must ensure that: |

(a) the collective management organisation is, on the basis of its mandates, sufficiently representative of rightsholders in the relevant type of works or other subject-matter and of the rights which are the subject of the licence;
(b) all rightsholders are guaranteed equal treatment, including in relation to the terms of the licence;
(c) the licence relates to an area of use, where obtaining authorisations from rightsholders on an individual basis is typically onerous and impractical to a degree that makes therequired licensing transaction unlikely, due to the nature of the use or of the types of works or other subject-matter concerned;
(d) appropriate publicity measures have been taken by the collective management organisation as provided in sub-regulation (2); and
(e) the territorial scope of the licensing agreement inquestion is limited to the territory of Malta;
(2) At least 6 months before to the commencement of the use of works or other subject-matter under a licence with extended effect pursuant to sub-regulation (1), the collective management organisation intending to grant such a licence must take appropriate publicity measures related to that licence, which must at least include a notice in the Gazette and in two daily newspapers, in order to inform rightsholders about:
(a) its ability to licence works or other subject-matter with extended effect;
(b) the licensing with extended effect which is intended to take place;
(c) the option to exclude their work or other subject-matter from the licence with extended effect; and
(d) the electronic mail address where rightsholders may submit requests relative to the licence.
(3) Rightsholders who have not authorised the collective management organisation granting a licence with extended effect pursuant to sub-regulation (1), may at any time, whether before or after the commencement of the use of their work or other subject-matter under that licence, exclude their works from that licence by communicating a request to this effect by electronic means to the collective management organisation's electronic mail address provided pursuant to sub-regulation (1)(v). Upon receiving such a request and ascertaining the identity of the rightsholder in question, the relevant collective management organisation shall act expeditiously to exclude the work or other subject-matter indicated in the request, from the licence in question within a period not exceeding 3 months from the date of the request.
(4) Collective management organisations which have granted alicence with extended effect pursuant to sub-regulation (1) shall ensure that all rightsholders are guaranteed equal treatment, includingin relation to:
(a) the terms of that licence;
(b) the distribution of amounts due under that licence;and
(c) transparency and reporting obligations applicableunder regulations 26 to 30 of the Control of the Establishmentand Operation of Societies for the Collective Administration of Copyright Regulations.
(5) In reaching its conclusion as to whether a collective management organisation is sufficiently representative for a particular type of work or right, for the purposes of paragraph (a) of sub-regulation (1), the Board shall take into consideration:
(a) the categories of rights it manages;
(b) its ability to manage rights effectively;
(c) the specificities of the relevant creative sector; and
(d) coverage of a significant number of rightsholders in the relevant type of work or right.
(6) The provisions of regulation 7 of the Control of the Establishment and Operation of Societies for the Collective Administration of Copyright Regulations, shall apply to collective management organisations that provide a licence with extended effect pursuant to sub-regulation (1).

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| | (7) Should any dispute arise in relation to a licence with extended effect pursuant to sub-regulation (1), a rightsholder may refer the dispute to the Board for its determination:<br>Provided that this shall be without prejudice to a rightsholder's right of recourse before the Civil Court, First Hall.<br>(8) This regulation shall not affect the application of collective licensing mechanisms with an extended effect in accordance with other provisions of the law, including provisions that allow exceptions or limitations, such as under regulation 9. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Article 14 of the Copyright and Related Rights in the Digital Single Market Regulations of 2021 |
| Legal text | Article 14. When the term of protection of a work of visual art has expired, any material resulting from an act of reproduction of that work is not subject to copyright or related rights unless the material resulting from that act of reproduction is original in the sense that it is the author's own intellectual creation. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 3(2) of Act XIII of 2000 (as amended by Acts VI of 2001, IX of 2003, IX of 2009, VIII of 2011) |
| Legal text | Article 3. (...) (2) A literary, musical, or artistic work shall not be eligible for copyright unless the work has an original character and it has been written down, recorded, fixed or otherwise reduced to material form.<br>Furthermore, copyright protection shall not extend to ideas, procedures, methods of operations or mathematical concepts as such. (…) |

### 1.4.20. THE NETHERLANDS

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Articles 45j, 45k, 45l of the Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 45j<br>Not regarded as an infringement of the copyright in a work meant in Article 10, first paragraph, sub 12° is the reproduction of a work by the lawful acquirer of a copy of said work, where this is necessary for the intended use of the work, unless otherwise agreed.<br>The reproduction as meant in the first sentence when made in connection with loading, displaying or error correction cannot be prohibited by contract.<br>Article 45k<br>Not regarded as an infringement of the copyright in a work meant in Article 10, first paragraph, sub 12° is the reproduction of a work by the lawful user of said work which serves as a back-up copy, where this is necessary for the intended use of the work.<br>Article 45l<br>The person who is entitled to perform the acts meant in Article 45i is also entitled, while performing them, to observe, study or test the functioning of the work concerned in order to determine the ideas and principles which underlie it. |
| Relevant EU provision | Article 6 Software |

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| Legal provision | Article 45m(1)(2) Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 45m<br>1. Not regarded as an infringement of the copyright in a work as meant in Article 10, first paragraph, sub 12°, is the making of a copy and the translation of the form of its code if these acts are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that:<br>a. those acts are carried out by a person who has lawfully obtained a copy of the computer programme or by a third party authorised by him;<br>b. the information necessary to achieve interoperability has not previously been readily available to the persons meant sub a; and<br>c. those acts are confined to the parts of the original programme which are necessary in order to achieve interoperability.<br>2. The information obtained pursuant to first paragraph may not:<br>a. be used for any other purpose than to achieve the interoperability of the independently created computer programme;<br>b. be given to others except where necessary for the interoperability of the independently created computer programme;<br>c. be used for the development, production or marketing of a computer programme that cannot be regarded as a new, original work or for any other act which infringes copyright. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 24a Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 24a<br>1. Not regarded as an infringement of the copyright in a collection as meant in Article 10, third paragraph, is the reproduction made by the lawful user of the collection, which is necessary to gain access to and make normal use of the collection.<br>2. Where the lawful user is only entitled to use part of the collection, the first paragraph only applies for the access to and normal use of that part.<br>3. No agreement shall deviate from the provisions of the first and second paragraphs to the detriment of the lawful user. |
| Relevant EU provision | Article 8 Database |
| Legal provision | n/a |
| Legal text | n/a |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 4a Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | The following shall not be regarded as an infringement of rights, as referred to in Article 2:<br>c. retrieval and reuse of a database, as referred to in Article 2, solely for the purpose of explanation for education, insofar as this is justified by the intended, non-commercial purpose; Articles 16, first, under 1°. up to and including 4°., fifth and sixth paragraph, and 47c, first paragraph, of the Copyright Act apply mutatis mutandis; |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 16 Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 16 |

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| | 1. Not regarded as an infringement of copyright is the reproduction or making available to the public of parts of a literary, scientific, or artistic work for the sole purpose of illustration for teaching, to the extent justified by the intended and for non-commercial purpose, provided that:<br>1- the work from which the part is taken has been lawfully made to the public;<br>2- it is in accordance with what social custom regards as reasonably acceptable use,<br>3- the provisions of Article 25 have been observed;<br>4- so far as reasonably possible the source, including the maker's name, has been clearly indicated; and<br>5- fair compensation is paid to the author or their successors in title.<br>2. For the same purpose and subject to the same conditions, use of the whole work is allowed if it concerns a short work or a work as meant in Article 10, first paragraph sub 6°, 9° or sub 11°.<br>3. Where the use is for a compilation, the use of works by the same maker must be limited to only short works or short passages of works. Where it concerns works meant in Article 10, first paragraph sub 6°, 9° or 11°, only a few of said works may be used and only if the reproductions differ considerably from the original work, in size or as a result of the manner in which they are made, in the understanding that, where two or more such works were communicated to the public together, the reproduction of only one of them shall be permitted.<br>4. The provisions of this Article also apply where the use is in a language other than the original.<br>5. The provisions of this Article also apply to digital use that takes place under the responsibility of an educational institution by means of a secure electronic environment that is only accessible to the pupils or students and the teaching staff of the educational institution.<br>6. It is not possible to deviate from the provisions of this Article by agreement. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 15n Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 15n<br>1. The reproduction by research organisations and cultural heritage institutions in order to carry out text and data mining, for the purpose of scientific research, on a work to which they have lawful access shall not be regarded as an infringement of copyright in a work of literature, science or art.<br>2. The reproduction referred to in the first paragraph shall be stored with an appropriate level of protection and may be kept for purposes related to scientific research.<br>3. The authors of literary, scientific or artistic works and their heirs can take measures to ensure the security and integrity of the networks and databases where those works are stored. These measures shall not go beyond what is necessary to achieve that objective.<br>4. It is not possible to deviate from the provisions of this Article by agreement. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Articles 15o Law of 23 September 2012 (last amended in 2023) |
| Legal text | Article 15o<br>1. Without prejudice to the provisions of Article 15n, a reproduction in the context of text and data mining shall not be regarded as an infringement of copyright in a literary, scientific or artistic work provided that the person carrying out the text and data mining has |

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| | lawful access to the work and the copyright is not expressly reserved by the author or their heirs, such as by machine-readable means with a work made available online.<br>2. The reproductions made in accordance with the provisions of the first paragraph may be kept for as long as this is necessary for text and data mining. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 15a(1) of Law of 23 September 2012 (Auteurswet) (last amended in 2023) |
| Legal text | Article 15a<br>1. It is not regarded as an infringement of the copyright in a literary, scientific or artistic work to quote from the work in an announcement, review, polemic or scientific treatise or a piece with a comparable purpose, provided that:<br>1- the work quoted from has been lawfully made public;<br>2- the quoting is in accordance with what social custom regards as reasonably acceptable and the number and size of the quoted parts are justified by the purpose to be achieved;<br>3- the provisions of Article 25 are observed; and<br>4- the source, including the maker's name, is clearly indicated, in so far as this is reasonably possible.<br>2. In this Article the term quotation also includes those in the form of press reviews from articles appearing in a daily or weekly newspaper or other periodical.<br>3. This Article also applies to quotations in a language other than the original. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 19(5) of Law of 23 September 2012 (last amended in 2023) |
| Legal text | Article 19<br>(...)<br>5. The provider of an online content-sharing service informs the users of its service in the general terms and conditions of the restrictions on copyright. The cooperation between the provider of an online content-sharing service and the creators, or their assignees, shall not prevent the availability of works uploaded by users that do not infringe copyright, especially when the use of those works is subject to an exception and/or limitation to copyright. (...) |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 15h of Law of 23 September 2012 (Auteurswet) (amended in 2004 and 2014) |
| Legal text | Article 15h<br>Unless otherwise agreed, not regarded as an infringement of copyright is the provision of access to a literary, scientific or artistic work that forms part of the collections of libraries accessible to the public and of museums or archives which are not seeking a direct or indirect economic or commercial benefit, by means of a closed network through dedicated terminals on the premises of said establishments, to individual members of the public, for purposes of research or private study. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 16n of Law of 23 September 2012 (amended in 2004 and 2014) |

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| Legal text | Article 16n<br>1. The reproduction of a work of literature, science or art by a cultural heritage institution shall not be regarded as an infringement of copyright if:<br>1- the reproduction takes place for the purpose of preserving the work and the reproduction is necessary for that purpose; and<br>2- the work is permanently part of the collection of the cultural heritage institution.<br>2. It is not possible to deviate from the provisions of the first paragraph by agreement. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Articles 16(5), 16(6), 16n of Law of 23 September 2012 (last amended in 2020) |
| Legal text | Article 16:<br>5. The provisions of this article also apply to digital use that takes place under the responsibility of an educational institution by means of a secure electronic environment that is only accessible to the pupils or students and the teaching staff of the educational institution.<br>6. It is not possible to deviate from the provisions in this article by agreement.<br>Article 16n<br>1. It shall not be regarded as an infringement of copyright in a literary, scientific or artistic work if it is reproduced by a cultural heritage institution if:<br>1° the reproduction is made with the aim of preserving the work and the reproduction is necessary for this purpose; and<br>2° the work forms a permanent part of the collection of the cultural heritage institution.<br>2. The provisions of the first paragraph cannot be deviated from by agreement. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Article 45 of Law of 23 September 2012 (last amended in 2020) |
| Legal text | Article 45:<br>1. A collective management organisation, as referred to in Section 1(d) of the Collective Management Organisations Copyright and Related Rights Supervision and Dispute Settlement Act, which grants a non-exclusive license for the use of works of literature, science or art, is authorisedwithin the State also to represent the interests of authors or their successors in title who are not members of the collective management organisation in the area of application determined in accordance with paragraph 2 and if they have not authorisedby way of assignment, license or other agreement to manage the rights on their behalf when it involves the exercise of the same rights as set out in its statutes, provided that:<br>1- the collective management organisation, on the basis of its mandates, is sufficiently representative of the creators in the type of works in question, and of the rights that are subject of the license, within the Kingdom;<br>2- all authors or their assignees are treated equally, including with respect to the terms of the license;<br>3- the authors or their successors in title who have not granted permissions may at any time generally or for specific cases prohibit the use of their works, even after the conclusion of the license or after the use of the work has begun; and<br>4- the collective management organisation ensures that information regarding the possibility to grant licenses pursuant to this Article, the licenses granted pursuant to this Article and the possibilities of authors or their successors in title as referred to in paragraph 1, under sub 3, is provided at least 6 months before the works are used, and can be consulted in an appropriate and effective manner. |

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| | 2. The scope of the licenses with an extended effect is determined by the order of the Council. The scope is determined on the basis of a request from the collective management organisation. The request contains the grounds for determining the scope. Before determining the scope, advice is requested from the Supervisory Board as referred to in Article 1, part b, of the Supervision and Dispute Settlement of Collective Management Organisations for Copyright and Related Rights Act. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 11 of Law of 23 September 2012 |
| Legal text | Art. 11<br>No copyright subsists in laws, decrees or ordinances issued by public authorities, or in judicial or administrative decisions. |

### 1.4.21. POLAND

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 75(1)-(2) UPA |
| Legal text | Article 75. 1. Unless there is an agreement otherwise, the activities listed in Article 74 paragraph 4 points 1 and 2 do not require the consent of the authorisedperson if they are necessary for the use the computer programme in accordance with its intended purpose, including for correction of errors by the person who legally came into its possession.<br>2. Authorisation is not required:<br>1) for making a backup, if it is necessary for use of a computer programme. Unless otherwise provided in the contract, this copy can be used simultaneously with a computer programme;<br>2) to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme by the lawful user if they do so while performing any of the acts of loading, displaying, running, transmitting or storing the programme which they are entitled to do; (...). |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 75(2)-(3) UPA |
| Legal text | Article 75. (...) 2. Authorisation is not required: |

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| | (...) 3) for the reproduction of the code or translation of its form within the meaning of Article 74 paragraph 4 points 1 and 2, if it is necessary to obtain the information necessary to achieve interoperability of an independently created computer programme with other computer programmes, if the following conditions are met:<br>(a) those acts are carried out by the licensee or by another person entitled to use a copy of the computer programme or by another person acting on their behalf,<br>(b) the information necessary to achieve interoperability was not previously available and easily accessible to persons referred to in point (a), and,<br>(c) these activities relate to those parts of the original programme that are necessary to achieve interoperability.<br>3. The information referred to in paragraphs 2 point 3 may not be:<br>1) used for purposes other than achieving interoperability independently created computer programme;<br>2) transferred to other people, unless it is necessary to achieve interoperability of an independently created computer programme;<br>3) used for development, production or marketing a computer programme with a substantially similar form of expression or to other activities that infringe copyright. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 171 UPA |
| Legal text | Article 171. The development or reproduction of the database constituting a work, made by a lawful user of the database, or a copy thereof, shall not require the permission of the author of the database, if it is required in order to access the contents of the database and for their normal exploitation. If the user is authorised to use only a portion of the database, this provision shall refer only to that portion. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 7 of the Act on the Protection of Databases of 2001 |
| Legal text | Article 7. 1. The maker of a database which is made available to the public in whatever manner may not prevent a lawful user of the database from extracting and/or re-utilising insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever.<br>2. Where the lawful user is authorised toextract and/or re-utilise only part of the database, paragraph 1 shall apply only to that part.<br>3. The use of databases referred to in paragraph 1 shall not conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database.<br>4. Contractual provisions contrary to paragraphs 1 and 2 are invalid. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 8 of the Act on the Protection of Databases of 2001 |
| Legal text | **Article 8.**<br>1. It shall be permitted to utilise the substantial part, evaluated qualitatively and/or quantitatively, of the contents of the database that has already been distributed:<br>1) for personal use, but only with respect to the non-electronic contents of the database; |

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| | 2) as an illustration, for didactic or research purposes, with the indication of its source, if such use is justified by the non-commercial purpose to be achieved; and<br>3) for the purposes of public safety, or legal or administrative proceedings.<br>2. It shall not be permitted to repeatedly or systematically extract or re-utilise the database in a manner that would conflict with the normal exploitation and cause unjustified infringement of the legitimate interests of the database maker. |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 27 UPA |
| Legal text | Article 27.<br>1. Educational institutions and the entities referred to in Article 7/1 paragraph 1, 2, and 4 to 8 of the Act of 20 July 2018 (The Law on Higher Education and Science) may, for the purpose of illustrating the content conveyed for educational purposes or for the purpose of conducting scientific activity, use the originals and translations of works that have already been disclosed and reproduce, for the same purposes, short works that have already been disclosed or excerpts of longer works.<br>2. In the case of making works available to the public in such a way that anyone can access to them at a place and time chosen by them, the uses referred to in paragraph 1 are allowed only for a limited group of people involved in the learning and teaching activities or conducting research at the entities listed in paragraph 1.<br>**Common provisions on neighboring rights**<br>Article 100. The exercise of rights to artistic performances, phonograms, videograms, broadcasts, as well as first fixations of films, is subject to appropriate restrictions resulting from the regulations within Article 23–35. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article $27^1$ UPA |
| Legal text | 1. It is allowed, for the purposes of illustration for teaching and scientific research, to disseminate short works or excerpts of longer works in textbooks, excerpts and anthologies.<br>2. In the cases referred to in paragraph 1, the author is entitled to remuneration. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Not implemented. |

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| Legal text | n/a |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary Reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Article 23[1] UPA |
| Legal text | Article 23[1].<br>The author's consent is not required for the temporary reproduction of a work, which is transient or incidental in nature, and which has no independent economic significance and is an integral and essential part of a technological process whose sole purpose is to enable:<br>(1) the transmission of a work in an information and communications technology system between third parties by an intermediary, or<br>(2) a lawful use of the work.<br>**Common provisions on neighboring rights**<br>Article 100. The exercise of rights to artistic performances, phonograms, videograms, broadcasts, as well as first fixations of films, is subject to appropriate restrictions resulting from the regulations within Article 23–35. |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 29 UPA |
| Legal text | Article 29.<br>It shall be permitted to quote, in works constituting an independent whole, the fragments of works that have been already disclosed or the entirety of short works, including works of art and photographs, within the scope justified by explanation, critical analysis, teaching or other types of creative activity.<br>**Common provisions on neighboring rights**<br>Article 100. The exercise of rights to artistic performances, phonograms, videograms, broadcasts, as well as first fixations of films, is subject to appropriate restrictions resulting from the regulations within Article 23–35. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 28(1)(3) UPA |

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| Legal text | Article 28. 1. Educational institutions, universities, research institutes pursuing the activities referred to in Article 2(3) of the Act of 30 April 2010 on Research Institutes (Dziennik Ustaw 2018, item 736), research institutes of the Polish Academy of Sciences pursuing the activities referred to in Article 50(4) of the Act of 30 April 2010 on the Polish Academy of Sciences (Dziennik Ustaw 2017, items 1869 and 2201), libraries, museums, and archives may:<br>(...)<br>3) make their collections available to the public for research or learning purposes via the terminals of information technology systems located on their premises, only if these activities are not performed for direct or indirect financial gain. (...)<br>The provision of paragraph 1 (3) shall not be applied if works are made available using the method described therein pursuant to a before agreement with a rightsholder.<br>**Common provisions on neighboring rights**<br>Article 100. The exercise of rights to artistic performances, phonograms, videograms, broadcasts, as well as first fixations of films, is subject to appropriate restrictions resulting from the regulations within Article 23–35. |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 28 (1)(2)(2) UPA |
| Legal text | Article 28. 1. Educational institutions, universities, research institutes pursuing the activities referred to in Article 2(3) of the Act of 30 April 2010 on Research Institutes (Dziennik Ustaw 2018, item 736), research institutes of the Polish Academy of Sciences pursuing the activities referred to in Article 50(4) of the Act of 30 April 2010 on the Polish Academy of Sciences (Dziennik Ustaw 2017, items 1869 and 2201), libraries, museums, and archives may:<br>(...)<br>2) reproduce the works in their own collections for the purposes of restoration, preservation or protection of these collections, (...).<br>2. The reproduction referred to in paragraph 1 sub-paragraph 2 shall not lead to increasing the number of copies of works and expanding collections, respectively lent and made available on the basis of paragraph 1 sub-paragraphs 1 and 3. (...) |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 21 UPA |

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| Legal text | Article 21. 1. Radio and television broadcasting organisations may broadcast minor musical works, minor lyrical works as well as musical and lyrical works exclusively on the basis of a contract signed with the competent collective copyright management organisation, unless the radio or television broadcasting organisation is entitled under a separate contract to broadcast works commissioned by a radio or television broadcasting organisation under a separate contract.<br>2. In a contract concluded with a radio or television broadcasting organisation, the author may waive the representation of the collective copyright management organisation, referred to in paragraph 1. The waiver must be made in writing, otherwise being null and void.<br>2/1. The provisions of paragraphs 1 and 2 shall apply accordingly to making works available to the public in a manner that allows anyone to access them in a place and at a time of their choosing. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 21(1) UPA |
| Legal text | Article 21/1. 1. Cable network operators may retransmit in cable networks the works broadcast in programmes of radio and television organisations exclusively on the basis of a contract concluded with the competent collective copyright management organisation.<br>1-1. The obligation of intermediation of a competent collecting society referred to in paragraph 1 shall not apply to rights used by a radio or television broadcaster in relation to its own transmissions, regardless of whether the rights in question belong to that broadcaster or whether they were transferred to it by another rightsholder.<br>2. In the case of disputes related to the conclusion and the terms and conditions of the contract referred to in paragraph 1, the provision of Article 85 of the Act on the Collective Management of Copyright and Related Rights shall apply. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 21$^{(2)}$ UPA |
| Legal text | Article 21/2.<br>1. A radio or television organisation is allowed to broadcasts its own archival recordings and make these works available to the public in such a way that everyone could have access to them at a place and time chosen by them, and also reproduce them for such use, only on the basis of a contract to be concluded with the relevant collective management organisation, unless the right to use of such materials belongs to the radio organisation concerned or on the basis of an act or a separate agreement. The provision of Article 21 paragraph 2 apply accordingly.<br>2. The archived broadcasts, mentioned in paragraph 1, refer to the broadcasts produced or having produced by the broadcasting organisation before 1 January 2003. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 21/3 UPA |
| Legal text | Article 21/3. Owners of devices used for receiving a radio or television programme can communicate to the public the works broadcasted therein on the basis of an agreement concluded with the relevant collecting management organisation, unless these works are subject to a separate contract. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |

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| Legal provision | Article 74(2) UPA |
| Legal text | Article 74/2.<br>Protection accorded to a computer programme shall cover all forms of its expression. Ideas and principles which underlie any element of a computer programme, including those which underlie its interfaces, shall not be protected. |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 4 UPA |
| Legal text | Article 4. Copyright shall not apply to:<br>1) legislative acts and their official drafts;<br>2) official documents, materials, logos and symbols;<br>3) published patent specifications and industrial design specifications,<br>4) simple press information. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 1(2)(1) UPA |
| Legal text | Article 1. (…)<br>(2/1). Only the form of expression may be subject to protection. Protection shall not be afforded to inventions, ideas, procedures, methods, principles of operation, or mathematical concepts. |
| **Secondary Publishing Right** | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 25fa UPA |
| Legal text | Article 25fa. The creator of a short scientific work for which the research has been fully or partially funded with Dutch public funds has the right to make that work available to the public free of charge after a reasonable period after its first publication, provided that the source of the first disclosure is clearly stated. |

### 1.4.22. PORTUGAL

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 6 of Decree Law n. 252/94 |

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| Legal text | Art. 6. (1) Notwithstanding that stated in the previous Article, any legitimate user may, without the authorisation of the computer programme owner:<br>(a) provide a back-up copy within the scope of such use;<br>(b) observe, study or test the functioning of the programme, in order to determine the ideas and principles that are the basis of any of its elements, when performing any operation of loading, visualisation, execution, transmission or storage.<br>(2) Any stipulation contrary to the provisions of the previous point is null and void.<br>(3) The lawful user of a programme may always, in order to use the programme or to correct errors, load, view, execute, transmit and store it, even if those acts imply operations provided for in the previous Article, except if there is a contractual stipulation referring to a specific point. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 7 of Decree Law n. 252/94 |
| Legal text | Art. 7. (1) Decompilation of the parts of a programme necessary for the interoperability of that computer programme with other programmes is always legitimate, even when it involves the operations foreseen in the previous Articles, when it is the indispensable means for obtaining the information necessary for that interoperability.<br>(2) The decompilation is legitimately carried out by the licensee or any other person who may lawfully use the programme, or by persons authorised by them, if such information is not already readily and rapidly available.<br>(3) Any stipulation contrary to the provisions of the previous paragraphs is null and void.<br>(4) The information obtained may not:<br>(a) Be used for an act that infringes copyrights on the original programme;<br>(b) prejudice the normal exploitation of the original programme or cause unjustified prejudice to the legitimate interests of the rightsholder;<br>(c) be communicated to others when it is not necessary for the interoperability of the independently created programme.<br>(5) The programme created under the terms of sub-paragraph c) of the previous number cannot be substantially similar, in its expression, to the original programme. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 9 of DL 122/2000 |
| Legal text | Art. 9. (1) The lawful user may, without the authorisation of the owner of the database and the owner of the programme, perform the acts provided for in Article 5, with a view to accessing the database and its use, to the extent of their rights.<br>(2) An agreement contrary to the provisions of the preceding paragraph is null and void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 14 of DL 122/2000 |

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| Legal text | Art. 14. (1) A lawful user of a database made available to the public may perform all acts inherent to the use obtained, namely those of extracting and re-utilising the non-substantial parts of the respective contents, to the extent of their right.<br>(2) A legitimate user of a database made available to the public may not commit any anomalous acts that conflict with the normal exploitation of the database and unjustifiably prejudice the legitimate interests of the manufacturer or harm the owners of copyright or related rights over works and performances incorporated therein.<br>(3) Any agreement contrary to the provisions of the preceding paragraphs is null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 15(a) of DL 122/2000 |
| Legal text | Art. 15. The legitimate user of a database made available to the public may also, without the authorisation of the manufacturer, extract and/or re-utilise a substantial part of its contents in the following cases:<br>(a) Where this is an extraction for private use of the contents of a non-electronic database; (...). |
| **Access to and reuse of works and other subject-matters** | |
| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 75(2)(f) CDA<br>Article 189(1)(c) CDA |
| Legal text | Art. 75. (..) (2) The following uses of a work are lawful, without the copyright's owner consent: (...) (f) The reproduction, distribution and making available to the public, for teaching and educational purposes, of parts of a published work, provided that they are intended solely for the purposes of teaching in such establishments and are not for direct or indirect economic or commercial advantage; (...).<br>Art. 189. (1) The protection granted in this title does not cover: (...) (c) Use for exclusively scientific or pedagogical purposes. |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 75.2.v |
| Legal text | v) The act of reproduction of works or other protected material, provided that they are legally accessible, when carried out by research organisations or institutions responsible for cultural heritage, for the purpose of prospecting texts and data relating to such works or protected material, for scientific research purposes; |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 75.2.w |

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| Legal text | w) The act of reproduction of a work or other protected material, provided that it is legally accessible, for the purpose of prospecting for texts and data, provided that such use has not been expressly reserved by the respective rightsholders in an appropriate manner, in particular through optical reading in the case of content made available to the public online, without prejudice to the provisions of the previous paragraph; |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 75(2)(g) CDA |
| Legal text | Art. 75. (...) (2) (...) (g) The following uses of a work are lawful, without the copyright's owner consent: The insertion of quotations or summaries of other people's works, whatever their kind and nature, in support of one's own doctrines or for the purposes of criticism, discussion or teaching, and to the extent justified by the objective to be achieved; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 75.2.x. |
| Legal text | x) The reproduction, communication to the public and making available to the public of works in order to make them accessible to any person from the place and time chosen by him, for the purpose of caricature, parody or pastiche; |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 75(2)(o) CDA |
| Legal text | Art. 75. (...) (2) The following uses of a work are lawful without the author's consent: (...) (o) The communication or making available, for research or personal study purposes, to individual members of the public by dedicated terminals on the premises of libraries, museums, public archives and schools, of protected works not subject to purchase or licensing conditions and forming part of their collections or holdings; (...). |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 75(2)(e) CDA |
| Legal text | Art. 75. (...) (2) The following uses of a work are lawful, without the copyright's owner consent: (..) (e) the reproduction of all or part of a work which has previously been made available to the public, provided that such reproduction is made by a public library, a public archive, a public museum, a non-commercial documentation centre or a scientific or educational institution, and that such reproduction and the number of |

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| | copies thereof are not intended for the public, are limited to the needs of the activities of those institutions and are not for direct or indirect economic or commercial advantage, including acts of reproduction necessary for the preservation and archiving of any works; (...). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 75.2.y |
| Legal text | y) Reproduction, by institutions responsible for cultural heritage, to obtain copies of works and other protected material that are a permanent part of their collections, regardless of format or medium, exclusively to guarantee their conservation and to the extent where this is necessary to ensure such conservation. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Article 36 A Law 26/2015<br>Article 36 B Law 26/2015 |
| Legal text | Article 36-A<br>Collective licenses with extended effects<br>1 - When the law expressly allows, in relation to identified and delimited uses, the obtaining of authorisations from holders of rights on an individual basis is excessively onerous and impractical, to the point of making it unlikely to obtain individual licenses, a collective management entity may enter into agreements granting licenses for the use of works or other protected material, with effects extended to other holders of rights who have not mandated it, presuming, in relation to these, the representation by the collective management entity in question .<br>2 - Unless there is a special provision to the contrary, the regime provided for in this article shall apply to the licenses provided for in the preceding paragraph.<br>3 - Only a collective management entity that is sufficiently representative by virtue of the mandates conferred on it for the uses object of the license, by the holders of rights, of the same category in relation to works may make use of the option provided for in paragraph 1. or benefits concerned.<br>4 - The collective management entities guarantee, at all times, the equal treatment of all holders of rights, including in relation to the conditions of the licences.<br>5 - Holders of rights over works or other protected materials who have not mandated the collective management entity that grants such licenses may, at any time, exclude them from the license provided for in this article, even after the granting of such license or the beginning of its use.<br>6 - For the purposes of the preceding paragraph, rightsholders must address a communication to the collective management entity in question, attaching proof of ownership of the right in question.<br>7 - The communication takes effect within a period of 90 days, counting from its reception by the collective management entity, which may defer this period until the end of the financial year in which such exclusion is communicated and without prejudice to the right to remuneration for the actual use of the work or other material protected under the licence.<br>8 - The collective management entities that grant licenses under the terms of this article publish on their website the full list of holders of rights or works and services that have been excluded from the scope of the license under the terms of the previous number. |

9 - The provisions of this decree-law apply to the setting of tariffs for licenses granted by collective management entities under the terms of this article, regarding the criteria and procedures for setting general tariffs.
10 - Unless there is a special provision to the contrary, the effects of the licenses granted under the terms of this article are limited to uses that occur within the national territory.
Added by the following diploma: Decree-Law No. 47/2023, of 19 June
Article 36-B
Procedure and publicity
Collective management entities, 6 months before making licenses available under the terms of the previous article, must:
a) Communicate to the IGAC, electronically, the intention to make the said licenses available, demonstrating their sufficient representation, under the terms of paragraph 3 of the previous article and the intended uses of the licenses they intend to grant, as well as the users or category of users concerned;
b) Publicise such intention on the respective website, specifying the object of the licenses that they intend to grant, the fact that this may also be granted on behalf of holders of rights that have not given a mandate to the respective management entity and the way in which these holders may exercise the right provided for in paragraph 5 of the previous article."
Added by the following diploma: Decree-Law No. 47/2023, of 19 June

| **Public domain** | |
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| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
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| Relevant EU provision | Article 39 CDA |
| Legal provision | Article 4 Term |
| Legal text | Art. 39. (1) Whoever lawfully publishes or disseminates, after the expiry of the copyright, an unpublished work benefits for 25 years from the publication or dissemination of protection equivalent to that resulting from the author's economic rights.<br>(2) Critical and scientific publications of works falling into the public domain benefit from protection for 25 years from the first lawful publication. |

## 1.4.23. ROMANIA

Access to and reuse of computer programmes

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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 77 RDA and Article 78 RDA |
| Legal text | **Art. 77.** In the absence of a clause to the contrary, the documents provided for in Article 74 paragraph (1) letter a) and b) are not subject to authorisation by the copyright holder, if they are necessary to allow the legitimate acquirer to use the computer programme in a way corresponding to its intended purpose, including for the correction of errors.<br>**Art. 78. (1)** The authoriseduser of a computer programme may, without the authorisation of the copyright holder, make an archive or safety copy, to the extent that this is necessary to ensure the use of the programme.<br>**(2)** The authoriseduser of the copy of a computer programme may, without the authorisation of the copyright holder, analyse, study or test the operation of this programme, in order to determine the ideas and principles underlying any element of it, with the occasion of carrying out any installation, display, running or execution, transmission or storage of the programme, operations which he is entitled to carry out.<br>**(3)** The provisions of Article 10 letter e) does not apply to computer programmes. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 79 RDA; Article 80 RDA; Article 81 RDA |
| Legal text | **Art.79.** The authorisation of the copyright holder is not required when the reproduction of the code or the translation of the form of this code is indispensable for obtaining the information necessary for the interoperability of a computer programme with other computer programmes, if the following conditions are met:<br>**a)** the acts of reproduction and translation are performed by a person who holds the right to use a copy of the programme or by a person who performs these actions on behalf of the former, being authorized for this purpose;<br>**b)** the information necessary for interoperability is not easily and quickly accessible to the persons referred to in letter a);<br>**c)** the acts provided for in letter a) are limited to the parts of the programme necessary for interoperability.<br>**Art. 80.** The information obtained by applying Article 79:<br>**a)** they cannot be used for purposes other than to achieve the interoperability of the computer programme, created independently;<br>**b)** cannot be communicated to other people, unless the communication proves necessary for the interoperability of the computer programme, created independently; |

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| | **c)** they cannot be used for the finalisation, production or marketing of a computer programme, the expression of which is fundamentally similar, or for any other act that affects the rights of the copyright holder.<br>**Art. 81.** The provisions of Article 79 and 80 do not apply, if it causes damage to the copyright holder or the normal use of the computer programme. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 8 of Database |
| Legal provision | Article 142(1) RDA; Article 142(2) RDA; Article 142(3) RDA ; Article 142(5) RDA |
| Legal text | **Art. 142. (1)** The manufacturer of a database, which is made available to the public by any means, cannot prevent its legitimate use by extracting or reusing non-substantial parts of its content, whatever the purpose of use. If the legitimate user is authorised toextract or reuse only part of the database, the provisions of this paragraph shall apply to that part.<br>**(2)** The legitimate user of a database, which is made available to the public in any way, may not perform acts that conflict with the normal use of this database or that unreasonably harm the legitimate interests of the manufacturer of the database.<br>**(3)** The legitimate user of a database, which is made available to the public in any way, cannot harm the owners of a copyright or related right that refers to works or services contained in this database.<br>(...) **(5)** The legitimate user of a database or part of a database may perform, without the consent of its author, any act of reproduction, distribution, public communication or transformation necessary for the normal use and access to the database or to a part of it. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 142(4)(a), (b), (c) RDA |
| Legal text | "Art. 142 (...) (4) The legitimate user of a database, which is made available to the public in any way, may, without the authorisation of the manufacturer of the database, extract or reuse a substantial part of its content:<br>a) if the extraction is done for the purpose of private use of the content of a non-electronic database; (...).<br>b) if the extraction is done for the purpose of use for education or scientific research, provided the source is indicated and to the extent justified by the non-commercial purpose pursued; (...).<br>c) if an extraction or reuse is made with the aim of defending public order and national security or within administrative or jurisdictional procedures. (...)." |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 35(2)(d) RDA |

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| Legal text | **Art. 35. (1)** The following uses of a work previously brought to public knowledge are permitted, without the consent of the author and without payment of any remuneration, provided that they are in accordance with fair practices, do not contravene the normal exploitation of the work and do not prejudice the author or the holders of the rights of use: (...)<br>**(2)** Under the conditions provided for in paragraph (1), the reproduction, distribution, broadcasting or communication to the public of the following are permitted, without a direct or indirect, commercial or economic advantage:<br>(...) **d)** of works, used for the sole purpose of didactic illustration or scientific research. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 37(d) RDA |
| Legal text | "Art. 37. The transformation of a work, without the consent of the author and without payment of remuneration, is allowed in the following cases:<br>(...) d) if the result of the transformation is a summary presentation of the works for teaching purposes, with the mention of the author." |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 2^1(1)(f) RDA<br>Article 36^1 RDA |
| Legal text | **Article 2^1. (1)** For the purposes of this law, the terms and expressions below mean the following: (...) **f)** text and data mining - any automated analytical technique aimed at analysing text and data in digital form to generate information such as, but not limited to, patterns, trends and correlations; (...).<br>**Art. 36^1. (1)** The reproduction and extraction of text and data by research organisations and cultural heritage institutions for the purposes of scientific research from works or other protected objects to which they have legal access shall be permitted.<br>**(2)** The provisions of paragraph (1) also applies to the rights provided for in Article 141 paragraph (1).<br>**(3)** Copies of works or other protected objects made in accordance with paragraph (1) may be kept with appropriate security measures and may be kept for scientific research purposes, including to verify research results.<br>**(4)** Rightsholders are allowed to apply measures aimed at ensuring the security and integrity of the networks and databases where the works or other protected objects are hosted, without such measures exceeding what is necessary to achieve the respective objective.<br>**(5)** Rightsholders, research organisations and cultural heritage institutions can develop, by common agreement, practices related to the application of the provisions listed in paragraph (1)-(4). |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 2^1(1)(f) RDA<br>Article 36^2 RDA |
| Legal text | **Article 2^1. (1**) For the purposes of this law, the terms and expressions below mean the following: (...) **f)** text and data mining - any automated analytical technique aimed at analysing text and data in digital form to generate information such as, but not limited to, patterns, trends and correlations; (...).<br>**Art. 36^2. (1)** Reproductions and extractions from works and other legally accessible protected objects for the purpose of text and data extraction are permitted.<br>**(2)** The reproductions and extractions carried out in accordance with paragraph (1) may be kept for as long as necessary for text |

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| | and data mining.<br>**(3)** The exception provided for in paragraph (1) shall apply provided that the use of the works and other protected subject matter has not been expressly reserved by the right holders in an appropriate manner, such as machine-readable means in the case of content made public online.<br>**(4)** The application of this article does not affect the application of Article 36^1. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 35(1)(b) RDA |
| Legal text | **Art. 35. (1)** The following uses of a work previously brought to public knowledge are permitted, without the consent of the author and without payment of any remuneration, provided that they are in accordance with fair practices, do not contravene the normal exploitation of the work and do not prejudice the author or the holders of the rights of use:<br>(...) **b)** the use of short quotes from a work, for the purpose of analysis, commentary or criticism or as an example, to the extent that their use justifies the length of the quote; (...). |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 128^2(5)<br>Article 128^2(6) |
| Legal text | **Art. 128^2.** (...) **(5)** Cooperation between online content sharing service providers and rightsholders must not lead to preventing the availability of works or other protected objects uploaded by users, which do not infringe copyright and related rights, including if of works or other protected objects are subject to an exception or limitation.<br>**(6)** Users may rely on any of the following existing exceptions or limitations when uploading and making available user-generated content within online content sharing services:<br>**a)** quotes, criticisms, reviews;<br>**b)** use for purposes of caricature, parody or pastiche. (...) |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Not implemented |
| Legal text | n/a |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 35(1)(d) RDA |
| Legal text | **Art. 35. (1)** The following uses of a work previously brought to public knowledge are permitted, without the consent of the author and without payment of any remuneration, provided that they are in accordance with fair practices, do not contravene the normal exploitation of the work and do not prejudice the author or the holders of the rights of use:<br>(...) **d)** the reproduction for information and research purposes of short extracts from works in libraries, museums, film archives, phonotheques, archives of public cultural or scientific institutions operating on a non-profit-making basis; reproduction of the whole copy of a work is permitted, for replacement purposes, in the event of destruction, serious deterioration or loss of the single copy in the permanent collection of the library or archive concerned; (...). |

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| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 36^4 RDA |
| Legal text | **Art. 36^4.** It is exempted from the right of reproduction, as well as from the rights provided for in Article 74 paragraph (1) and Article 141 paragraph (1), making copies of works or protected objects in the permanent collections of cultural heritage institutions, in any format or on any type of support, for the purpose of conservation and to the extent necessary for such conservation. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Art. 145^1 RDA |
| Legal text | Art. 145^1. (...) (2) The non-exclusive license authorisations granted pursuant to this Article by the representative collective management body also apply to rightsholders who have not granted a mandate or authorisedthe respective collective management body, subject to compliance with the following guarantees:<br>a) the collective management body, based on its mandates, is representative for the rightsholders, the relevant category of works or other protected objects and for the rights that are the subject of the license for the territory of Romania, under the conditions of Article 159;<br>b) authors and rightsholders who are members of the representative collective management body, as well as those who are not its members, enjoy equal treatment, especially with regard to license conditions, access to information regarding the granting of licenses and the distribution of remuneration;<br>c) authors and rightsholders who have not authorisedthe representative collective management body can exclude from authorisation all or part of their protected works and objects, through a notification sent to the collective management body, both before the license is concluded, and during its development, according to the provisions of paragraph (3);<br>d) adequate publicity measures are taken before the works or other protected objects are used under the license, according to the provisions of paragraph (4).<br>(3) Within 30 days of receiving the notification provided for in paragraph (2) letter c), the collective management body informs the users about the exclusion of the respective protected works and objects from the managed repertoire, issues new licenses from which the respective protected works and objects are excluded and updates the ongoing licenses until the end of the 30-day period. The exclusion does not affect the remunerations due to the authors and rightsholders for the uses made on the basis of the licenses concluded by the collective management bodies before to receiving the notification.<br>(4) Publicity measures must be adequate and effective, without the collective management bodies being obliged to inform each individual rightsholder 30 days before the works or other protected objects are used under the license, the collective management bodies post on their website information regarding the granting of the license and the possibilities of the rightsholders referred to in paragraph (2) letter c).<br>(5) In cases where the rightsholders do not comply with the notification procedure or the collective management bodies do not comply with the publicity measures, the uses are validly carried out.<br>(6) The licensing mechanism provided for in paragraph (2) applies only to the rights subject to extended collective management, without prejudice to the provisions of Articles 145-147 and is used to protect the legitimate interests of rightsholders and users. (...) |
| Public domain | |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 9 RDA |

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| Legal text | **Art. 9.** The following cannot benefit from the legal protection of copyright:<br>**a)** the ideas, theories, concepts, scientific discoveries, procedures, operating methods or mathematical concepts as such and inventions, contained in a work, regardless of the way of retrieval, writing, explanation or expression;<br>**b)** official texts of a political, legislative, administrative, judicial nature and their official translations;<br>**c)** the official symbols of the State, public authorities and organisations, such as: coat of arms, seal, flag, emblem, coat of arms, badge, badge and medal;<br>**d)** means of payment;<br>**e)** news and press information;<br>**f)** simple facts and data;<br>**g)** photos of letters, documents, documents of any kind, technical drawings and the like; (...). |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Article 73(2) RDA |
| Legal text | **Art. 73.** (…) **(2)** The ideas, processes, methods of operation, mathematical concepts and principles underlying any element of a computer programme, including those underlying its interfaces, are not protected. |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Article 9(h) RDA |
| Legal text | Art. 9. The following cannot benefit from the legal protection of copyright:<br>(...) h) materials resulting from an act of reproduction of a work of visual art, whose term of protection has expired, unless the material resulting from the act of reproduction is original, in the sense that it represents the author's own intellectual creation. |

### 1.4.24. SLOVAKIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 89(2) ZKUASP |
| Legal text | Sect. 89. (...) (2) An authoriseduser shall not interfere with the rights of the author of the computer programme, if without the consent of the author of the computer programme<br>a) uses the computer programme for the purpose of proper use of the computer programme, including the correction of its errors, unless otherwise agreed,<br>b) makes a back-up copy of the computer programme for the purpose of ensuring proper use of the computer programme,<br>c) examines, studies or tests the functionality of a computer programme for the purpose of determining the idea or principles underlying any part of the computer programme, during the recording, display, transmission, verification of functionality and storage of the computer programme in the computer memory. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 89(3) ZKUASP |

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| Legal text | Sect. 89. (...) (3) The right of the author of a computer programme shall not be interfered with by an authoriseduser or acquirer of a license to a computer programme who, without the consent of the author of the computer programme, reproduces the source code or machine code of the computer programme or its part or translates the form of the source code or machine code of the computer programme or its part in to the extent necessary to obtain the information necessary to achieve interoperability of the computer programme with other independently created computer programmes, if this information was not normally available before.<br>The information obtained according to the first sentence cannot be used for<br>a) achieving another goal, such as achieving mutual cooperation of independently created computer programmes,<br>b) provision to other persons, with the exception if it is necessary to ensure the mutual cooperation of independently created computer programmes,<br>c) ensuring the development, production or trading of a computer programme that is similar in its expression, or for any other activity that would violate the right of the author of the computer programme. (...) |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 134(1) ZKUASP |
| Legal text | Sect. 134.<br>(1) A person authorised touse the database who uses the database without the consent of the author of the database for the purpose of accessing its content or for the purpose of its normal use does not interfere with the copyright of the database.<br>(2) A person authorised touse the database is allowed to use the database without the consent of the author of the database by making a copy, public transmission, public performance, public exhibition or processing, as well as the result of its processing in the case according to § 44 par. 2.<br>**(3)** The provisions on exceptions and limitations according to Sections 34 to 57 shall be applied appropriately, except for the provision of Section 42 [Exception for Private use], which shall be used only in relation to a database that is not created in electronic form, and Section 44 par. 2. Digital reproduction for teaching purposes] |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 134 (1)(2)(3) ZKUASP |
| Legal text | Exceptions and limitations of the special right to the database<br>(1) The user of a database to which public access has been allowed may not use it contrary to the normal use of the database and may not unreasonably interfere with the legally protected interests of the database developer.<br>(2) The user of a database to which the public has been allowed access must not cause harm to the holders of rights to individual parts of the database.<br>(3) The special right to the database is not interfered with by a database user who, without the consent of the database developer, extracts or reuses a qualitatively or quantitatively insignificant part of its content, for any purpose. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 138(4) ZKUASP |

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| Legal text | (4) A database user who extracts or reuses a substantial part of the database's content without the consent of the database developer does not interfere with the special right to a database to which the public has been allowed access, if<br>a) extraction of the content of the database, which is not made in electronic form, for private use,<br>b) extraction for the purpose of illustration during teaching or research, in which no direct or indirect commercial benefit is achieved, and the name of the database developer and the source are indicated,<br>c) extraction or reuse to the necessary extent for the purpose of security<br>1. public safety,<br>2. in the course of administrative, criminal or judicial proceedings or<br>3. meetings of the National Council of the Slovak Republic and its committees, the municipal council or the council of a higher territorial unit,<br>d) extraction or reuse for the purpose of illustration during teaching at school, under the responsibility of the school or via the school's secure electronic network for non-commercial purposes, and the name of the database developer and the source shall be indicated,<br>e) extraction or reutilisationusing § 49a [Use of the work for the purpose of preserving cultural heritage], 51b and 51c [Text and data mining] |
| **Access to and reuse of works and other subject-matters** | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 44(1) ZKUASP<br>Section 89(5) ZKUASP<br>Section 103(1) ZKUASP<br>Section 121 ZKUASP<br>Section 127(1) ZKUASP |
| Legal text | Sect. 44. (1) A person who, without the consent of the author, uses a published work by making a reproduction, public performance or public transmission for the purpose of illustration during teaching or research does not infringe copyright, if such use does not result in direct or indirect economic benefit.<br>(...)<br>(4) For the purposes of this Act, school means a school, school facility, college, educational institution of further education and childcare facility for children up to 3 years of age.<br>Sect. 89. (...) (5) The rights of the author of a computer programme are not affected by an authorized user or acquirer of a license to a computer programme who, without the author's consent, uses the computer programme by making a copy, processing or publicly distributing it and uses the result of its processing by making a copy or publicly distributing it for the purpose of an illustrative demonstration during teaching at school, on the responsibility of the school or via the school's secure electronic network for non-commercial purposes. (...)<br>Sect. 103. (1) The provisions of Sections 34 to 57 shall apply accordingly to the exceptions and limitations of the performing artist's property rights.(…) |

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| | Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights.<br>(…) |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 45 ZKUASP |
| Legal text | Use of a work in school performances<br>(1) The copyright shall not be interfered with by a school, and its teaching staff,professional staff, a natural person providing further education or a natural person participating in the educational or training process therein, if, without the author's consent, the published work is used by the author in the context of a school performance arranged exclusively by the school or its founder, the purpose of which is not directly or indirectly pecuniary.<br>(2) Copyright shall not be interfered with by a school which, without the author's consent, uses a school work in the performance, free of charge, of tasks falling within the scope of the school's activities. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 51b ZKUASP |
| Legal text | Sect. 51b. (1) Copyright is not affected by a library, archive, museum, school or legal depository according to a special regulation, which without the consent of the author uses the work by making a reproduction when mining data for the purpose of research.<br>(2) According to this law, data mining means any automated analytical technique aimed at analysing data in digital form with the aim of obtaining patterns, trends, correlations and similar results.<br>(3) Reproductions of works made in accordance with paragraph 1 shall be kept with an adequate level of security and may be kept for research purposes, including verification of research results. The author may request the application of appropriate measures to ensure the security and integrity of the networks and databases in which their works are located. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 51c ZKUASP |
| Legal text | Sect. 51c. (1) A person who, without the consent of the author, uses the work by making a copy while extracting data, does not interfere with the copyright, if such use is not expressly reserved.<br>(2) Copies obtained according to paragraph 1 may be kept for the period for which it is necessary for the purpose of drawing data. |
| General E&Ls complementary to research-specific E&Ls | |
| Temporary Reproduction | |
| Relevant EU provision | Article 5(1) ISD |
| Legal provision | Section 54 ZKUASP |

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| Legal text | Sect. 54. (1) A person who, without the consent of the author, makes a temporary copy of a published work as part of an inseparable and essential part of the technological process, which is accidental or transitory, for the purpose of:<br>a) enabling authoriseduse of the work or<br>b) transmission of the work in an electronic communication network between third parties and an intermediary.<br>(2) Making a reproduction according to paragraph 1 must not have independent economic significance.<br>Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights. (…) |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 37 ZKUASP |
| Legal text | Copyright is not infringed by a person who without authorisation of its author uses the released work or its part by means of quotation primarily for the purpose of review or critique of the work. Using of a work or its part pursuant to paragraph 1 must be in accordance with customs and its scope may not exceed the scope justified by the purpose of quotation.<br>Sect. 103. (1) The provisions of Sections 34 to 57 shall apply accordingly to the exceptions and limitations of the performing artist's property rights.(…)<br>Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights. (…) |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section 64d ZKUASP |
| Legal text | § 64d<br>(1) The procedure for compliance with the conditions pursuant to §§ 64a and 64b shall not restrict the use of exceptions and limitations to the property rights pursuant to Title IV, the fundamental rights and freedoms, the use within the scope of the licence granted, the use of the free work and the objects pursuant to § 5; the provider of the online content sharing service shall provide the user with information on the possibility to use the work pursuant to §§ 37 to 57 by means of the general terms and conditions of the service. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Section 48 ZKUASP |
| Legal text | Section 48 ZKUASP<br>Copyright is not infringed by a library, an archive, a museum or a school which without authorisation of its author uses the work deposited in the library, archive, museum or a school by making a copy or its communication to the public for private purpose of a |

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| | natural person through terminal equipment located in premises of library, archive, museum or a school, justified by using for education, scientific study or research, provided that such use does not violate rules of acquiring and using of such work by a library, archive, museum or school.<br>Sect. 103. (1) The provisions of Sections 34 to 57 shall apply accordingly to the exceptions and limitations of the performing artist's property rights.(…)<br>Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights. (…) |
| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Section 49 ZKUASP |
| Legal text | Copyright is not infringed by a library, an archive, a museum or a school which without authorisation of its author uses the work deposited in the library, archive, museum or school by making a copy for the purpose of substituting, archiving or securing of the original of the work or its copy against loss, destruction or damage.<br>Sect. 103. (1) The provisions of Sections 34 to 57 shall apply accordingly to the exceptions and limitations of the performing artist's property rights.(…)<br>Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights. (…) |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Section 49a ZKUASP |
| Legal text | Use of a work for the purpose of preserving cultural heritage<br>Copyright shall not be interfered with by a library, archive, museum or statutory depository pursuant to a special regulation which, without the author's consent, uses a work permanently deposited in a library, archive, museum or statutory depository pursuant to a special regulation by making a reproduction for the purpose of preserving the work to the extent necessary for that purpose.<br>Sect. 103. (1) The provisions of Sections 34 to 57 shall apply accordingly to the exceptions and limitations of the performing artist's property rights.(…)<br>Sect. 121. The provisions of Sections 34 to 57 apply accordingly to the exceptions and limitations of the property rights of the audiovisual recording producer.<br>Sect. 127. (1) The provisions of Sections 34 to 57 shall apply to the exceptions and limitations of the broadcaster's property rights. (…) |
| Licensing schemes | |

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| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 79 ZKUASP |
| Legal text | Sect. 79. (1) Organisation of collective administration, which represents the most holders of rights according to § 164 paragraph 1 on the territory of the Slovak Republic and is thus listed in the register of collective administration organisations pursuant to § 152 paragraph 4, may enter into an extended collective license agreement with the acquirer, granting consent for the use of all works of the right holders<br>a) represented according to § 164, for which they perform the administration of property rights and<br>b) who are not represented by this collective management organisation pursuant to § 164 and have not excluded the collective management of rights to these works pursuant to paragraph 2.<br>(2) The holder of rights according to paragraph 1 letter b) is entitled to exclude the collective management of his property rights to all or some of their works through an extended collective license agreement by written notification to the organisation of collective management according to paragraph 1, which shall inform the licensee thereof without undue delay.<br>(3) The holder of rights according to paragraph 1 letter b) the same rights and obligations arising from the extended collective license agreement belong to the rightsholders who are represented by the collective administration organisation according to § 164, including the appropriate application of rights and obligations in relation to the collective administration organisation, as regards the selection, redistribution and payment of rewards and other monetary benefits.<br>(4) The extended collective license agreement is concluded by the collective management organisation with the acquirer for a maximum of 1 year. The duration of the extended collective license agreement is always extended by another year if<br>a) one of the contracting parties has not expressed the will to terminate this contract in writing, no later than 1 month before the end of the term of the extended collective license agreement, or<br>b) the collective management organisation has not ceased to fulfill the condition according to paragraph 1 during the duration of the extended collective license agreement.<br>(5) The Ministry of Culture of the Slovak Republic (hereinafter referred to as the "Ministry") shall provide information on the collective management organisation's ability to conclude an extended collective license agreement pursuant to paragraph 1 in the register of collective management organisations pursuant to Section 152, paragraph 4. The collective management organisation, which concludes extended collective license agreements, informs the rightsholders on its website about the conditions for granting a license and concluding a license agreement according to paragraph 1, including the right to exclude the collective management of their property rights. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 93 ZKUASP |
| Legal text | Sect. 93. (1) A school work is a work created by a child, pupil or student to fulfill school or study obligations arising from their legal relationship with the school.<br>(2) At the proposal of the school, the author of the school work is obliged to conclude a non-exclusive and royalty-free license agreement with the school on the use of the school work in a way that is not directly or indirectly commercial, if this can be fairly required of the author of the school work. If the author of the school work refuses to conclude the license agreement according to the first sentence, the school can request that the content of the license agreement be determined by the court. |

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| | (3) The school may demand that the author of the school work compensates the costs incurred for the creation of the school work from the remuneration received for the use of the school work, up to their actual amount, depending on the circumstances. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Section 87 (1) ZKUASP |
| Legal text | *Special provisions on computer programme*<br>**Section 87 (1)** A computer programme, which is a set of commands and instructions expressed in any form used directly or indirectly in a computer or similar technical device, is protected under this law if it is the result of the author's creative mental activity. Commands and instructions can be written or expressed in source code or machine code. The computer programme also includes the background material used to create it. The ideas and principles underlying a computer programme element, including those underlying its interface, are not protected under this Act. |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 5 ZKUASP |
| Legal text | Sect. 5. The following concepts are not subject to copyright:<br>a) idea, manner, system, method, concept, principle, discovery or information that has been expressed, described, explained, depicted or incorporated into a work,<br>b) a text of legislation, a decision of public authority or a court decision, technical norm), including draft materials and translations thereof, irrespective of whether they meet requirements pursuant to Section 3 paragraph 1,<br>c) land-use planning documents, irrespective of whether they meet requirements pursuant to Section 3 paragraph 1,<br>d) State symbol, municipality symbol, symbol of self-governing region; this does not apply to a work which formed ground for creating of such symbol,<br>e) speech presented in discussions on public affairs, irrespective of whether it meets requirements pursuant to Section 3 paragraph 1,<br>f) daily news; daily news is information on event or circumstance; where a work informing about daily news or a work in which daily news is included, is not considered as daily news,<br>g) work of traditional folk culture,<br>h) result of activity of expert, interpreter or translator acting under a special law. |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 9 ZKUASP |
| Legal text | Sect. 9. (1) A work becomes free if: |

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| | a) the duration of property rights according to § 32 expires,<br>b) the author of the work has no heirs or if the heirs refuse to accept the inheritance, even before the expiration of the term of property rights according to § 32.<br>(2) A work that has become free can be freely used.<br>(3) The provisions of paragraphs 1 and 2 do not affect the provisions of § 13 paragraph 3 and § 60. |

### 1.4.25. SLOVENIA

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 114(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 114. (1) Unless otherwise specified in the contract, the legal acquirer of the computer programme may perform the actions referred to in points 1 and 2 of the previous Article [reproducing components or the entire computer programme, translation, adaptation, adaptation or any other processing of the computer programme; distributing the original computer programme or its copies in any form, including renting], including the correction of errors, without the permission of the author, if this is necessary for the use of the computer programme in accordance with its purpose.<br>(2) The authoriseduser of a computer programme may reproduce a maximum of two back-up copies of the programme without the permission of the author if this is necessary for its use.<br>(3) The authoriseduser of a copy of a computer programme may, without the permission of the author, observe, study, or test the operation of the programme in order to obtain the ideas and principles that are the basis of any element of the programme, if he does so when loading, displaying, executing, transferring or storing it, until of which they are entitled.<br>(...) (6) Contract provisions that are in conflict with the second and third paragraphs of this Article are null and void |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 115(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 115. (1) In order to reproduce the code or translate the code form of a computer programme in the sense of points 1 and 2 of Article 113 of this Act, the permission of the author is not required, if this is absolutely necessary to obtain the information necessary to achieve the interoperability of the independently created computer programme with other programmes or by hardware if the following conditions are met:<br>1. that these actions are performed by the licensee or other entitled user or a person authorised todo so on their behalf;<br>2. that the information necessary to achieve interoperability was not previously accessible without further ado to the persons referred to in the previous point; and<br>3. that these actions are limited to only those parts of the original programme that are necessary to achieve interoperability.<br>(2) It is forbidden to use the information obtained using the previous paragraph:<br>1. used for a purpose other than to achieve interoperability of an independently created computer programme;<br>2. transferred to third parties, except when this would be necessary to achieve interoperability of an independently created computer programme; or<br>3. used to develop, produce or market another computer programme that is substantially similar in its expression, or used for any other act that violates copyright. |

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| | (3) The provisions of this Article cannot be interpreted in the direction in which it would be permissible to use it in a way that would unreasonably harm the author's legitimate interests or would be contrary to the normal use of a computer programme.<br>(4) Contract provisions that are in conflict with this Article are null and void. |
| Access to and reuse of databases | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 53a of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Article 53a<br>(1) A lawful user of a disclosed database or of a copy thereof may freely reproduce or alter that database if this is necessary for the purposes of access to its contents and the normal use of those contents. Where the user is authorised to access only a part of the database, the provision of this Article shall apply only to that part.<br>(2) Any contractual provision contrary to this Article shall be null and void. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 141d(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 141d. (1) The authoriseduser of the published database or its instance may freely use qualitatively or quantitatively insignificant parts of its content for any purpose. When the user is only entitled to a part of the database, the provisions of this Article apply only to that part.<br>(2) The authoriseduser of the published database or its copy may not perform actions that conflict with the normal use of this database or that unreasonably harm the legitimate interests of its creator.<br>(3) The authoriseduser of the published database or its instance may not infringe copyright or related rights on the parts or objects contained in this database.<br>(4) Contract provisions that are in conflict with this Article are null and void. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 141g(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 141g. (1) The authoriseduser of the published database may use a significant part of its content in the case of:<br>(…) 3. private or other own use of a non-electronic database, if the conditions from Article 50 of this Act are met.<br>Art. 50. (1) Subject to Article 37 of this Act, the reproduction of an already published work is free if it is made in no more than three copies and if the conditions from the second or third paragraph of this Article are met.<br>(2) A natural person may reproduce the work freely<br>(...) 2. on any other medium, if it is done for private use, if the copies are not handed over or disclosed to the public and if there is no intention to achieve direct or indirect economic benefit. (...). |
| Access to and reuse of works and other subject-matters | |
| Research-specific E&Ls | |
| Illustration for teaching and scientific research | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 49 of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Article 49<br>(1) For the purposes of teaching it shall be free: 1. to publicly perform disclosed works and communicate them to the public in the form of |

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| | direct teaching; 2. to publicly perform disclosed works at school events with free admission on condition that<br>the performers receive no payment for their performance; 3. to conduct secondary broadcasting of school radio and television shows.<br>(2) In cases referred to in the preceding paragraph, the source and authorship of the work shall be indicated if they are indicated on the work used. |
| Text and data mining | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 57b(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 57b. (1) Research organisations, publicly accessible archives, libraries, museums, institutions of film or audio heritage and public RTV organisations, as well as persons belonging to research organisations and institutions for the protection of cultural heritage, may freely reproduce works that are legally accessed, under conditions from this Article and carry out text and data mining from the first paragraph of the previous Article on parts to which they have legal access for the purposes of scientific research under the conditions from this Article, which also includes digitisation of analogue content and remote access to such content, when required for text and data mining purposes.<br>(2) According to this Article, universities, including their libraries, research organisations, public research organisations and other legal entities are considered to be research organisations, which, according to the regulations governing scientific, research or educational activities, carry out scientific research or educational activities as their main goal; these activities also include conducting scientific research, on a non-profit basis or by reinvesting all profits in their scientific research. According to this Article, a research organisation over which a legal entity under private law has a decisive influence, which enables it to have priority access to these research results, is not considered a research organisation.<br>(3) Samples of works made under the conditions referred to in the first paragraph of this Article shall be kept in a secure environment and may be retained as long as necessary for the purposes of verifying the results of the research for which text and data mining was carried out. In order for the use based on the first paragraph of this Article not to be unduly restricted, stored in a secure environment should be ensured with an appropriate level of security, which must be proportionate and limited to what is necessary for the safe storage of copies and the prevention of unauthoriseduse.<br>(4) The author may use appropriate measures to ensure the security and integrity of his networks and databases, but such measures must not be disproportionate and must not prevent the effective implementation of text and data mining, as regulated by the first paragraph of this Article. If the use of any security safeguards prevents a person from performing actions permitted under this Article, the author must provide that person with access to the works and use in accordance with this Article within a period not exceeding 72 hours.<br>(5) Sharing and making available to the public the results of text and data mining from the first paragraph of this Article is permissible if the scope of text and data mining is limited according to the purpose to be achieved, if it is in accordance with good customs, if not opposes the normal use of the work and if it does not unreasonably conflict with the legitimate interests of the author.<br>(6) Contract provisions that are in conflict with this article are null and void. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 57a(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 57a. (1) For the purposes of text and data mining, the reproduction of legally accessed works is free. Text and data mining means any automated analytical technique that aims to analyse text and data in electronic form to generate information such as |

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| | patterns, trends and correlations, which also includes the digitisation of analogue content and remote access to such content when necessary for text and data mining purposes.<br>(2) Copies of works made under the conditions from the previous paragraph may be kept as long as necessary for the purposes of text and data mining.<br>(3) The actions referred to in the first paragraph of this Article are not permitted if the author has expressly and appropriately reserved the right to use the work, especially with internationally established standardised machine-readable means containing metadata and general conditions of use in the case of a work that is publicly available on the Web.<br>(4) The author may use appropriate measures to ensure the security and integrity of their networks and databases, but such measures must not be disproportionate and must not prevent the effective implementation of text and data mining, as regulated by the first paragraph of this Article. If the use of any security protection measures prevents a person from performing actions permitted under this article, the author must provide that person with access to the works or other objects of protection and use in accordance with this Article within a period not longer than 72 ed.<br>(5) Contract provisions that are in conflict with this Article are null and void. |
| General E&Ls complementary to research-specific E&Ls | |
| Quotation | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 51(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 51. (1) Citing excerpts of published work or individual published works from the fields of photography, fine art, architecture, applied art, industrial design and cartography is free, if this is necessary for the purpose of illustration, criticism, or review.<br>(2) In the cases from the previous paragraph, the source and authorship of the work must be indicated, if it is indicated on the used work. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 163e(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 163e. (1) Measures taken by the provider of online content sharing services in cooperation with the author must not prevent the availability of the author's work uploaded to the server by a user who legally uses this work. A provider of online content sharing services may not prevent users of its services from uploading to the server and making public the content they create for the purposes of quotation, criticism, evaluation, caricature, parody or pastiche.<br>(2) The provider of online content sharing services informs the users of its services that they can use the author's work in accordance with the content restrictions of the copyright from the previous paragraph, in the general terms and conditions published on its website.<br>(3) The obligations of the provider of online content sharing services from the third paragraph of Article 163c and the third and fourth paragraphs of Article 163d of this Act do not mean the obligation to generally monitor the content that users upload to the server. |
| Private study | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 49b of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 49b. For the purposes of research or individual knowledge acquisition, publicly accessible archives, libraries, museums, and educational institutions may freely communicate works from their collections to the public via dedicated screens located in their premises, unless otherwise stipulated by the contract on the transfer of material copyrights. |

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| Preservation of cultural heritage | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 50(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 50. (1) Subject to Article 37 of this Act, the reproduction of an already published work is free if it is made in no more than three copies and if the conditions from the second or third paragraph of this Article are met.<br>(...) (3) Public archives, public libraries, museums and educational and scientific institutions may freely reproduce the work on any medium for their own needs, if they do so from their own copy and if they do not intend to achieve direct or indirect economic benefits.<br>(4) Reproduction according to the previous paragraphs of this Article is not permitted with regard to written works in the scope of the entire book, graphic editions of musical works, electronic databases and computer programmes, and in the form of the implementation of an architectural object, unless otherwise stipulated by this law or by contract. (...). |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 57d(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 57d. (1) Publicly accessible archives, libraries, museums, institutions of film or audio heritage and public RTV organisations may, for the purpose of preserving cultural heritage and, to the extent necessary for such preservation, freely reproduce works that they have permanently in their collections.<br>(2) Contract provisions that conflict with the previous paragraph are null and void. |
| Licensing schemes | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Article 101(1) of the Copyright and Related Rights Act no. 59/19 of 4 October 2019 (as last amended in 2022) |
| Legal text | Art. 101. (1) When copyright work is created by an employee in the execution of their duties or following the instructions given by their employer (copyright work created in the course of employment), it shall be deemed that the economic rights and other rights of the author to such work are exclusively assigned to the employer for the period of 10 years from the completion of the work, unless otherwise provided by contract.<br>(2) On the expiration of the term mentioned in the foregoing paragraph, the rights mentioned in the foregoing paragraph revert to the employee, however, the employer can claim a new exclusive assignment of these rights, for adequate remuneration. |
| Public domain | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 9 of Copyright Act of 23 October 2014, No. 1144 (as last amended in 2021) |

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| Legal text | Article 9<br>1.1.1The following are not protected by copyright:<br>1. ideas, principles, discoveries;<br>2. official texts regarding the legislative, administrative, and judicial fields;<br>3. literary and artistic creations of folklore.<br>1.2.1Translations of the texts referred to in point 2 of the preceding paragraph shall be protected by copyright unless they are published as official texts. |

### 1.4.26. SPAIN

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Article 100(1)-(4) TRLPI |
| Legal text | Limits to exploitation rights<br>Article 100. (1) In the absence of specific contractual provisions, the reproduction or transformation of a computer programme shall not require authorisation by the rightsholder where they are necessary for the use of the computer programme by the lawful acquirer in accordance with its intended purpose, including for error correction.<br>(2) The making of a back-up copy by a person having a right to use the computer programme may not be prevented by contract in so far as it is necessary for that use.<br>(3) The person having a right to use a copy of a computer programme shall be entitled, without the authorisation of the rightsholder, to observe, study or test the functioning of the programme in order to determine the ideas and principles which underlie any element of the programme if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the programme which he is entitled to do.<br>(4) The author, unless otherwise agreed, cannot object to the lawful user to make or authorise the making of successive versions of the programme or of programmes derived therefrom. (...) |
| Relevant EU provision | Article 6 Software |
| Legal provision | Article 100(5)-(7) TRLPI |
| Legal text | Limits to exploitation rights<br>Article 100. (...) (5) The authorisation of the rightsholder shall not be required where reproduction of the code and translation of its form within the meaning of in the sense of paragraphs a) and b) of Article 99 of this Act are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer programme with other programmes, provided that the following conditions are met:<br>a) those acts are performed by the licensee or by another person having a right to use a copy of a programme, or on their behalf by a person authorised to do so;<br>b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in point (a); and |

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| | c) those acts are confined to the parts of the original programme which are necessary in order to achieve interoperability.<br>(6) The exception contemplated in Section 5 of this Article will be applicable provided that the information thus obtained:<br>a) to be used for goals other than to achieve the interoperability of the independently created computer programme;<br>b) to be given to others, except when necessary for the interoperability of the independently created computer programme; or<br>c) to be used for the development, production or marketing of a computer programme substantially similar in its expression, or for any other act which infringes copyright.<br>(7) The provisions contained in Sections 5 and 6 of this Article may not be interpreted in such a way that unreasonably prejudices the rightsholder's legitimate interests or conflicts with a normal exploitation of the computer programme. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Article 34(1) TRLPI |
| Legal text | Use of databases by the lawful user and limitations to the exploitation rights of the owner of a database<br>Article 34 (1) The lawful user of a database or copies thereof protected by virtue of Article 12 of this Act, may carry out, without the authorisation of the author of the database, all the acts that are necessary for access to the contents of the database and its normal use, even if they are affected by any exclusive right of that author. Where the lawful user is authorised touse only part of the database, this provision shall apply only to that part.<br>Any agreement contrary to this provision would be null and void. (...) |
| Relevant EU provision | Article 8 Database |
| Legal provision | Article 134 TRLPI |
| Legal text | Rights and obligations of the legitimate user<br>Article 134. (1) The maker of a database which is made available to the public in whatever manner may not prevent a lawful user of the database from extracting and/or re-utilising insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever.<br>Where the lawful user is authorised to extract and/or re-utilise only part of the database, this paragraph shall apply only to that part.<br>(2) A lawful user of a database which is made available to the public in whatever manner may not perform the following acts:<br>a) Those which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database.<br>b)Those that harm the owner of a copyright or any of the rights recognised in Titles I to VI of Book II of this Act, which cause prejudice to the holder of a copyright or related right in respect of the works or subject matter contained in the database.<br>(3) Any agreement contrary to what is established in this provision will be null and void.. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Article 135(1)(a) TRLPI |
| Legal text | Exceptions to the “sui generis” right |

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| | Article 135. (1) The lawful users of a database which is made available to the public in whatever manner may, without the authorisation of its maker, extract or re-utilise a substantial part of its contents:<br>a) in the case of extraction for private purposes of the contents of a non-electronic database; (...).<br>(2) The provisions of the previous Section may not be interpreted in a way that would cause unjustified damage to the legitimate interests of the owner of the right or that conflicts with the normal exploitation of the protected subject matter. |
| **Access to and reuse of works and other subject-matters** | |
| **Research-specific E&Ls** | |
| **Illustration for teaching and scientific research** | |
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Article 32(3)-(5) TRLPI |
| Legal text | Quotations and reviews, and illustration for educational or scientific research purposes<br>Article 32. (...) (3) The teaching staff of educational institutions integrated into the Spanish educational system and the staff of Universities and Public Research Organisations, as long as their educational and scientific activities are concerned, do not need authorisation from the author or publisher to carry out acts of reproduction, distribution and communication to the public of small fragments of works and individual works of plastic art, images, or photographs, only if they do not seek any commercial purpose and if the following conditions are cumulatively met:<br>a) If such acts are carried out solely for the illustration for educational activities, both in face-to-face teaching and in distance-learning, or for scientific research purposes, and to the extent justified by the non-commercial purpose pursued.<br>b) If these works have already been disclosed to the public.<br>c) If these works do not have the status of a textbook, university manual or similar publication, except in the case of:<br>1. Acts of reproduction for public communication, including the act of public communication itself, which do not imply making the work or fragment available or allowing the recipients access to the work or fragment. In these cases, a location from which students can legally access the protected work must be expressly included.<br>2. Acts of distribution of copies exclusively among the collaborating research staff of each specific research project and to the extent necessary for this project.<br>For these purposes, textbook, university manual or similar publication will be understood as any publication, printed or likely to be, published in order to be used as a resource or material for teachers or students of regulated education to facilitate the process of teaching or learning.<br>d) That the name of the author and the source be included, except in cases where it is impossible.<br>For these purposes, a small fragment of a work will be understood as an extract or quantitatively insignificant portion of the work as a whole.<br>The authors and publishers will not be entitled to any remuneration for carrying out these acts.<br>(4) Acts of partial reproduction, distribution and public communication of works or publications, printed or likely to be printed, will not require the authorisation of the author or publisher when the following conditions are met simultaneously:<br>a) That such acts are carried out solely for illustration for educational and scientific research purposes. |

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| | b) That the acts are limited to a chapter of a book, article of a magazine or equivalent extension with respect to an assimilated publication, or assimilable extension to 10 percent of the total of the work, being indifferent to these effects that the copy is carried carried out through one or several acts of reproduction.<br>c) That the acts are carried out in universities or public research centers, by their staff and with their own means and instruments.<br>d) That at least one of the following conditions is present:<br>1. That the distribution of partial copies be carried out exclusively among students and teaching or research staff of the same center in which the reproduction is made.<br>2. If only the students and the teaching or research staff of the institution in which the partial reproduction of the work is carried out may have access to it through the acts of public communication authorisedin this Section, carrying out the made available through internal and closed networks that can only be accessed by those beneficiaries or within the framework of a distance education programme offered by said educational institution.<br>In the absence of before specific agreement in this regard between the rightsholders and the educational institutions or research organisations, and unless the said institution or organisation is the owner of the corresponding intellectual property rights over the works reproduced, distributed and publicly communicated partially according to Section b), the authors and publishers of these will have an inalienable right to receive an equitable remuneration, which will be made effective through the management entities.<br>(5) Sections 3 and 4 does not apply to sheet music, single-use works, or compilations or groups of fragments of works, or individual works of plastic art, images, and photographs. |
| **Text and data mining** | |
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Article 67(4) of Royal Decree n. 24/2021 |
| Legal text | Text and data mining<br>Article 67. (...) (4) The reproduction of works and other subject matter carried out by research organisations and cultural heritage institutions to carry out text and data mining, for the purposes of scientific research, do not require the authorisation of the rightsholders. The results of text and data mining can be stored with an adequate level of security and may be kept for the verification of the results of the research.<br>In this case, the rightsholders will be authorised to apply measures whose sole objective is to guarantee the security and integrity of the networks and databases in which the works are stored. These measures will not go beyond what is necessary to achieve that goal.<br>Rightsholders, research organisations and cultural heritage institutions shall be able to approve voluntary codes of conduct that collect the best applicable practices. The Administration may promote the elaboration of the said codes.<br>(5) Notwithstanding the provisions on temporary reproductions and private copying, the authorisation of the author of a legally protected database that has been disclosed to the public will not be required in the case of reproductions and extractions of works for text and data mining purposes under this Article.<br>(6) In the case of reproductions and extractions of works and other subject matter for the purposes of text and data mining in accordance with this Article, the authorisation of the rightsholder is not necessary: |

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| | a) for the total or partial reproduction, even for personal use, of a computer programme, by any means and in any form, whether permanent or transitory. When the loading, presentation, execution, transmission or storage of a programme requires such reproduction, authorisation must be obtained, which will be granted by the owner of the right.<br>b) for the translation, adaptation, arrangement or any other transformation of a computer programme and the reproduction of the results of such acts, without prejudice to the rights of the person who transforms the computer programme.<br>(7) The legitimate user of a database, regardless of the way in which it has been made available to the public, may, without authorisation from the database manufacturer, extract and/or reuse a substantial part of its content, in the case of reproductions and extractions of legitimately accessible works for the purposes of text and data mining in accordance with this Article. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Article 67(1)-(3) of Royal Decree n. 24/2021 |
| Legal text | Text and data mining<br>Article 67. (1) The authorisation of the owner of the intellectual property rights is not required for the reproduction of works and other subject matter carried out for the purpose of text and data mining.<br>(2) The reproductions and extractions may be kept for as long as necessary to fulfill these purposes, with full respect for the principles of legality and the regulations for the protection of personal data and the guarantee of digital rights.<br>(3) The provisions of Section 1 shall not apply when the rightsholders have expressly reserved the use of the works for mechanical reading means or other appropriate means. (...)<br>(5) Notwithstanding the provisions on temporary reproductions and private copying, the authorisation of the author of a legally protected database that has been disclosed to the public will not be required in the case of reproductions and extractions of works for text and data mining purposes under this Article.<br>(6) In the case of reproductions and extractions of works and other subject matter for the purposes of text and data mining in accordance with this Article, the authorisation of the rightsholder is not necessary:<br>a) for the total or partial reproduction, even for personal use, of a computer programme, by any means and in any form, whether permanent or transitory. When the loading, presentation, execution, transmission or storage of a programme requires such reproduction, authorisation must be obtained, which will be granted by the owner of the right.<br>b) for the translation, adaptation, arrangement or any other transformation of a computer programme and the reproduction of the results of such acts, without prejudice to the rights of the person who transforms the computer programme.<br>(7) The legitimate user of a database, regardless of the way in which it has been made available to the public, may, without authorisation from the database manufacturer, extract and/or reuse a substantial part of its content, in the case of reproductions and extractions of legitimately accessible works for the purposes of text and data mining in accordance with this Article. |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Article 32(1) TRLPI |
| Legal text | Quotations and reviews, and illustration for educational or scientific research purposes |

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| | Article 32. (1) The inclusion in one's own work the fragments of other works of a written, audio or audiovisual nature, as well as individual works of a plastic or figurative or photographic nature, does not require the authorisation of the author, provided that works as such have already been disclosed and they are quoted for analysis, comment or critical judgment. Such use may only be made for teaching or research purposes, to the extent justified by the purpose of quotation, and by indicating the source and the name of the author of the work in use.<br>Periodic compilations made in the form of reviews or press reviews are considered quotations. However, when compilations of journalistic articles, which consist of their mere reproduction, are made and if the said activity is carried out for commercial purposes, the author who has not expressly objected these acts would have the right to receive equitable remuneration. Should there be express opposition by the author, said activity shall not be covered by this exception.<br>In any case, the reproduction, distribution or communication to the public, in whole or in part, of individual journalistic articles in a press kit that takes place within any organisation will require the authorisation of the rightsholders. (...) |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Article 73(8) of Royal Decree n. 24/2021 |
| Legal text | Use of protected content by service providers to share content online<br>Article 73. (...) (8) The cooperation between online content-sharing service providers and rightsholders shall not result in the prevention of the availability of works or other subject matter uploaded by users, which do not infringe copyright and related rights, including where such works or other subject matter are covered by an exception or limitation, such as for the purposes of quotation, analysis, comment or critical judgment, review, illustration, parody or pastiche. (...) |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |
| Legal provision | Article 37(3) TRLPI |
| Legal text | Reproduction, loan of and public consultation to works through specialisedterminals in certain establishments<br>Article 37. (3) Authorisation of the author is not required for the communication or making available works to the members of the public for research purposes when these acts are carried out via a closed and internal network through specialisedterminals installed for this purpose in the premises of the establishments mentioned in the previous Section [Article 37(2) TRLPI] and provided that such works appear in the collections of the establishment itself and are not subject to acquisition or license conditions. All this without prejudice to the author's right to receive equitable remuneration. |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Article 33(1) TRLPI<br>Article 35(1) TRLPI |
| Legal text | Works on current issues<br>Article 33. (1) Works and articles on current issues disseminated by the mass media may be reproduced, distributed and communicated to the public by any others of the same mass media entity, as long as they cite the source and the author if the |

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| | work appeared with a signature and if the author of the original works has not explicitly reserved their rights. All this is without prejudice to the author's right to receive the agreed remuneration or, in the absence of an agreement, the one deemed equitable. In the case of literary collaborations, the appropriate authorisation of the author will be necessary in any case. (...) |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Article 69 of the Royal Decree n. 24/2021 |
| Legal text | Preservation of cultural heritage<br>Article 69. (1) The institutions responsible for cultural heritage may, without the authorisation of the owner of the intellectual property rights, make reproductions of the works or other subject matter that are permanently in their collections, using the appropriate conservation tools, means or technologies, in any format or medium, in the amount necessary and at any time in the life of a work or other subject matter, and to the extent necessary for preservation purposes.<br>(2) The institutions responsible for cultural heritage may resort to third parties acting on their behalf and under their responsibility, including those established in other Member States, to carry out the reproductions that they are legally authorised tocarry out.<br>(3) Without prejudice to the provisions of the legal regulation on provisional reproductions and private copies, the authorisation of the author of a legally protected database that has been disclosed will not be required to carry out its reproduction, in the case of preservation purposes of cultural heritage in accordance with Article 37 of the consolidated text of the Intellectual Property Law [TRLPI].<br>(4) The legitimate user of a database, regardless of the form in which it has been disclosed, may, without authorisation from the manufacturer of the database, reproduce a substantial part of its content, in the case of preservation purposes of cultural heritage in accordance with Article 37 of the consolidated text of the Intellectual Property Law [TRLPI]. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Article 72 of the Royal Decree n. 24/2021 |
| Legal text | Works of visual art in the public domain |

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| | Article 72. When the exploitation rights of a visual work of art have expired, any material resulting from an act of reproduction of that work shall not be subject to intellectual property rights, unless the material resulting from the act of reproduction is original to the extent in that it is an intellectual creation of its author. |
| Relevant EU provision | No EU Correspondent |
| Legal provision | Article 41 TRLPI |
| Legal text | Conditions for the use of works in the public domain<br><br>Article 41. The extinction of the exploitation rights of the works will determine their allocation to the public domain.<br>Works in the public domain may be used by anyone, provided that the authorship and integrity of the work is respected, under the terms provided in Sections 3 and 4 of Article 14. |

### 1.4.27. SWEDEN

| Access to and reuse of computer programmes | |
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| Relevant EU provision | Article 5 Software |
| Legal provision | Section 26g(1)-(4) URL |
| Legal text | Section 26g. (1) Whoever has acquired the right to use a computer programme may produce copies of the programme and make changes to the programme as are necessary for them to be able to use the programme for its intended purpose. This also applies to the correction of errors.<br>(2) Whoever has the right to use a computer programme may produce back-up copies of the programme, if this is necessary for the intended use of the programme.<br>(3) Copies produced in accordance with the first or second paragraph may not be used for other purposes, nor may they be used when the right to use the programme has ended.<br>(4) Whoever has the right to use a computer programme may observe, examine or test the operation of the programme in order to determine the ideas and principles underlying the various details of the programme. This applies on the condition that it takes place during such loading, display on the screen, execution, transfer or storage of the programme as they have the right to perform.<br>(5) (...)<br>(6) Contract terms that restrict the user's right according to the second, fourth or fifth paragraphs are invalid. |
| Relevant EU provision | Article 6 Software |
| Legal provision | Section 26h URL |
| Legal text | Section 26h. (1) Reproduction of a computer programme's code or translation of the form of the code is permitted if these measures are required to obtain the information necessary to achieve interoperability between the programme and another programme. However, this only applies once the following conditions are met: |

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| | 1. if the actions are performed by a person who has the right to use the programme or on their behalf by a person who has been given the right to perform such actions,<br>2. if the information necessary to achieve interoperability has not previously been easily accessible to the persons specified in sub-paragraph 1. and<br>3. if the measures are limited to those parts of the original programme that are necessary to achieve the intended interoperability.<br>(2) The first paragraph does not mean that the information may:<br>1. be used for purposes other than achieving the intended interoperability,<br>2. be handed over to other persons, except when this is necessary to achieve the intended interoperability,<br>3. be used for the development, manufacture or marketing of a computer programme which, in relation to the protected programme, has a substantially similar form of expression or<br>4. be used for other actions that constitute an infringement of copyright.<br>(3) Contract terms that limit the user's right under this Section are invalid. |
| **Access to and reuse of databases** | |
| Relevant EU provision | Article 6 Database |
| Legal provision | Section 26g(5) URL |
| Legal text | Section 26g. (...) (5) Whoever has the right to use a compilation [database] may dispose of it in the manner necessary for them to be able to use the compilation [database] for its intended purpose.<br>(6) Contract terms that restrict the user's right according to the second, fourth or fifth paragraph are invalid. |
| Relevant EU provision | Article 8 Database |
| Legal provision | Section 49(3) URL |
| Legal text | Producer of catalogs etc.<br>Section 49. (1) Anyone, who has produced a catalogue, a table or another similar work in which a large number of data has been compiled or which is the result of a substantial investment, has the exclusive right to produce copies of the work and make it available to the public.<br>(2) The right according to the first paragraph applies until 15 years have passed after the year in which the work was produced. If the work has been made available to the public within fifteen years from the presentation, however, the right applies until 15 years have elapsed after the year in which the work was first made available to the public.<br>(3) The provisions of paragraphs 2 to 4, 6 to 9, 11, second paragraph, the first, second and fourth paragraphs of Section 12, Sections 13 to 16, the third paragraph of Section 16a, Section 16e and Section 16f, 17c, 17e, 19-22, 25-26b and 26e, 26g, fifth and sixth paragraphs and Sections 42a to 42k shall apply to the works referred to in this paragraph. If such a work or part of it is subject to copyright, this right may also be asserted.<br>(4) A contractual term that extends the petitioner's right under the first paragraph to a published work is invalid. |
| Relevant EU provision | Article 9 Database |
| Legal provision | Section 49(3) URL |

| | |
|---|---|
| Legal text | Producer of catalogs etc.<br>Section 49. (1) Anyone, who has produced a catalogue, a table or another similar work in which a large number of data has been compiled or which is the result of a substantial investment, has the exclusive right to produce copies of the work and make it available to the public.<br>(2) The right according to the first paragraph applies until 15 years have passed after the year in which the work was produced. If the work has been made available to the public within 15 years from the presentation, however, the right applies until 15 years have elapsed after the year in which the work was first made available to the public.<br>(3) The provisions of paragraphs 2 to 4, 6 to 9, 11, second paragraph, the first, second and fourth paragraphs of Section 12, Sections 13 to 16, the third paragraph of Section 16a, Section 16e and Section 16f, 17c, 17e, 19-22, 25-26b and 26e, 26g, fifth and sixth paragraphs and Sections 42a to 42k shall apply to the works referred to in this paragraph. If such a work or part of it is subject to copyright, this right may also be asserted.<br>(4) A contractual term that extends the petitioner's right under the first paragraph to a published work is invalid. |

## Access to and reuse of works and other subject-matters

### Research-specific E&Ls

#### Illustration for teaching and scientific research

| | |
|---|---|
| Relevant EU provision | Article 5(3)(a) ISD |
| Legal provision | Section 13 URL |
| Legal text | Use of works in connection with teaching<br>Section 13. Teachers and students at educational institutions may reproduce, for illustrative purposes, works in connection with teaching. In the case of distance learning, works may only be reproduced in a secure electronic environment.<br>Paragraph 1 does not apply to uses that may be made under an agreement referred to in Article 42(a), if such an work is readily available on the market.<br>Contractual terms restricting the right to use works under this paragraph shall be null and void. |

#### Text and data mining

| | |
|---|---|
| Relevant EU provision | Article 3 CDSMD |
| Legal provision | Section 15c URL<br>Section 15b URL |
| Legal text | Section 15c. For the purposes of Sections 15(a) and 15(b), 'text and data mining' means an automated technique used to analyse text and data in digital form in order to generate information. (...)<br>Section 15b. Research organisations, libraries and museums that are accessible to the public, archives and film or sound heritage institutions may produce copies of works to which they have lawful access, but not computer programmes, in order to carry out text and data extraction for research purposes.<br>The copies may not be kept longer than necessary for the purpose and shall not be used for other purposes. The copies shall be stored in a manner prevent unauthorised use. |

| | |
|---|---|
| | The first subparagraph shall not prevent the author from taking proportionate measures to ensure the integrity and security of networks and databases containing works.<br>Contractual terms restricting the right to use works under this paragraph shall be null and void. |
| Relevant EU provision | Article 4 CDSMD |
| Legal provision | Section 15c URL<br>Section 15a URL |
| Legal text | Section 15c. For the purposes of Sections 15(a) and 15(b), 'text and data mining' means an automated technique used to analyse text and data in digital form in order to generate information. (...)<br>Production of copies for text and data extraction<br>Section 15a. Any person who has lawful access to a work may make copies of the work for the purposes of text and data extraction. The copies may not be kept longer than is necessary for the purpose and may not be used for other purposes.<br>The first subparagraph shall not apply if the author has appropriately reserved the right referred to therein. |
| **General E&Ls complementary to research-specific E&Ls** | |
| **Quotation** | |
| Relevant EU provision | Article 5(3)(d) ISD |
| Legal provision | Section 22 URL<br>Section 23 URL |
| Legal text | Quotation<br>Section 22. Everyone may quote from published works in accordance with good practices and to the extent justified by the purpose.<br>Rendering of works of art and buildings<br>Section 23. (1) Published works of art may be reproduced: (...)<br>2. in connection with the text in a critical presentation, however not in digital form and (...).<br>(2) The first paragraph only applies if the reproduction takes place in accordance with good practices and to the extent justified by the purpose. |
| Relevant EU provision | Article 17(7) CDSMD |
| Legal provision | Section 52p URL |
| Legal text | Users' right to make material available<br>Section 52p. Notwithstanding Section 2, a user may make available works for quotation, criticism and reviews and for the purposes of caricature, parody or pastiche on a service that referred to in Article 52(i). The provisions of the second paragraph of Article 11 shall apply in the case of these cases.<br>The user shall also have the right, notwithstanding any measures taken by the service provider pursuant to Article 52(1), to make available content which does not entail infringes copyright on the service. |
| **Private study** | |
| Relevant EU provision | Article 5(3)(n) ISD |

| | |
|---|---|
| Legal provision | Section 21(3) URL |
| Legal text | Public performances<br>Section 21. (1) Any person may, with the exception of cinematographic and dramatic works, perform published works in public<br>1. on occasions when the performance of such works is not the principal purpose, access is free of charge and the performance is without the purpose of acquisition; and<br>2. at teaching or worship.<br>(2) The Parliament and State and municipal authorities may, in the cases referred to in the cases referred to in paragraph 1, also perform published cinematographic and dramatic works.<br>(3) The works may be performed only through a connection to an external network provided for the purpose of general information and, in the case of archives and libraries referred to in the second paragraph of Article 16, through a technical means intended for individual visitors with a view to making available works forming part of their own collections. The performance may take place only in the premises of the Parliament or the authorities themselves.<br>Paragraph 2 of the first subparagraph does not entitle the presentation of compilations for the purpose of acquisition during teaching. |
| **Preservation of cultural heritage** | |
| Relevant EU provision | Article 5(2)(c) ISD |
| Legal provision | Section 16(1) URL |
| Legal text | Section 16. (1) The State and municipal archive authorities, the scientific libraries and specialist public libraries and [other] public libraries have the right to produce copies of works, except for computer programmes,<br>1. for conservation, restoration or research purposes,<br>2. to meet the wishes of loan applicants on individual articles or short Sections or on material that for security reasons should not be released in original, or<br>3. for use in reading devices.<br>(2) Copies produced on paper with the support of paragraph (1), sub-paragraph 2. may be distributed to loan applicants.<br>(3) Other archives have the right to make copies of works, except for computer programmes, for preservation purposes. The same applies to other libraries that are accessible to the public. |
| Relevant EU provision | Article 6 CDSMD |
| Legal provision | Section 16(1) URL |
| Legal text | Production and dissemination of copies within cultural heritage institutions<br>Section 16. Libraries and museums open to the public, archives and film or sound heritage institutions have the right to produce copies of works for preservation purposes. Contractual terms that restrict this right are null and void.<br>State and municipal archives authorities, the scientific libraries and specialised libraries run by the public and public libraries have the right to produce copies of works, but not computer programmes, including<br>1. for supplementary or research purposes,<br>2. to satisfy the requests of borrowers for individual articles or short passages or for material which, for security reasons, should not be disclosed in the original; or |

| | |
|---|---|
| | 3. for use in reading machines.<br>Copies produced on paper pursuant to the second paragraph 2 may be distributed to loan applicants. |
| **Licensing schemes** | |
| Relevant EU provision | Article 12 CDSMD |
| Legal provision | Section 42a URL |
| Legal text | n/a. |
| | Common provisions on contractual licenses<br>Section 42a. (1) A contractual license referred to in Sections 42b-42h apply to the use of works in a certain way, when an agreement has been entered into for the use of works in such a way with an organisation that represents a number of authors of works used in Sweden on the area. The license agreement gives the user the right to use works of the type referred to in the agreement, even though the authors of the works are not represented by the organisation. In order for a work to be used in accordance with Section 42c, it is required that the agreement with the organisation has been entered into by someone who carries out teaching activities in organised forms.<br>(2) The conditions regarding the right to use the work that follow from the agreement apply. The author must, in terms of compensation provided in accordance with the agreement and benefits from the organisation which are essentially paid for through the compensation, be equated with the authors that the organisation represents.<br>(3) Regardless of this, however, the author is always entitled to compensation relating to the exploitation, if they request it within 3 years of the year in which the work was exploited.<br>(4) Claims for compensation may only be made against the organisation.<br>(5) Claims for compensation may only be asserted by the contracting organisations against the person who uses a work in accordance with Section 42f. The requirements must be submitted at the same time. |
| **Public domain** | |
| Relevant EU provision | Article 1(2) Software |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | Article 14 CDSMD |
| Legal provision | Not implemented. |
| Legal text | n/a |
| Relevant EU provision | No EU correspondent |
| Legal provision | Section 10 URL |
| Legal text | Section 10. (1) Copyright applies to a work even if the work has been registered as a design.<br>(2) Copyright does not apply to circuit designs for semiconductor products. |

There are special regulations regarding the right to such circuit patterns.

# ANNEX 2: COMPARATIVE ANALYSIS OF GREEN OA PUBLICATIONS SINCE 2011

## Methodological note

This document contains data and charts detailing how Green open access (OA) use has changed in EU-27 countries throughout the years 2011-2022.

Both OpenAlex[1744] and the OpenAIRE Graph[1745] were considered for collecting the data. The data collected from these sources was compared to a reference publication by the EC[1746] for validation purposes. In the end, data from OpenAlex was chosen for the following reasons:

1. The OpenAIRE Graph API[1747] does not differentiate between the different kinds of OA, and from their definition of open access [1748], publications labelled as OA in the OpenAIRE Graph would include both Gold OA (open access provided by the publisher) and Green OA (deposited in an open access repository). Thus, there would be no way to tell whether a publication from OpenAIRE was Gold or Green OA. On the other hand, OpenAlex provides a detailed breakdown of OA types and has a specific parameter for Green OA publications[1749].
2. There was a big difference in the results retrieved from OpenAIRE, OpenAlex, and the reference study on Open Science: Monitoring trends and drivers"[1750]. For example, if looking at the share of (total) OA for EU-27[1751] countries in 2017, the reference publication showed a 40.4% share of OA, while OpenAlex gave a similar value of 41.7%. In contrast, OpenAIRE data showed that 61.2% of all publications in 2017 were open access. Looking specifically at data for Germany for the years 2009-2018, OpenAlex gives a 27.7% share of total OA, compared to the reference publication's 40.7% and OpenAIRE's 57.6%. From these results, it was concluded that, compared to the reference publication, OpenAlex may sometimes underrepresent the share of OA, but OpenAIRE severely overrepresents the share.

However, it should be noted that there are some issues with OpenAlex as well. Namely, the way in which it designates the country of each journal and publisher is not consistent with the estimations made by the EC[1752]. Due to this, Luxembourg and Malta have (almost) no data points in OpenAlex, as there are no publisher and journal combinations associated with these countries in their dataset[1753]. This should be kept in mind when examining the data.

1744 https://openalex.org/

1745 https://graph.openaire.eu/

1746 https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/open-science-monitor/trends-open-access-publications_en

1747 https://graph.openaire.eu/develop/api.html#rproducts

1748 https://www.openaire.eu/a-quick-guide-to-open-access

1749 https://docs.openalex.org/api-entities/works/work-object#any_repository_has_fulltext

1750 https://research-and-innovation.ec.europa.eu/document/download/a5bd70c0-5cc8-45b0-b3f4-0fa35946b768_en?filename=ec_rtd_open_science_monitor_final-report.pdf

1751 Note that the study on "Open Science: Monitoring trends and drivers" contains data from the G7 countries, Russia, and Switzerland as well.

1752 https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science/open-science-monitor/trends-open-access-publications_en

1753 Some publisher and journal combinations are present in OpenAlex, but have no publications associated with them when examined.

Since OpenAlex does not designate the country of an individual publication, a publication was considered as belonging to a country if it was published in that country by a publisher from that country. A publication was considered as Green OA if it was available, among other places, in an open access repository (using the Open Alex *any_repository_has_full text* parameter). This is the same definition as used in previous EC publications on open access (Monitoring the open access policy of Horizon 2020)[1754].

## Green OA in SPR countries

The share of Green open access by country by year for the countries with Secondary Publishing Rights (SPR) can be seen in Table 31 and Figure 41. The year in which SPR was introduced in a country can be seen by the green cells in the table and the markers in the figure. Note that due to the lengthy nature of publication, 2022 figures might not be fully updated yet.

**Overall, the number of Green OA publications increased slightly in all five SPR countries.** A notable increase in the Green OA share since SPR was introduced can be seen in Austria and France. In Austria, the increase was slightly delayed, with SPR introduced in 2015, but there was a jump of over 10% in 2017. In France, 2016, which is when SPR was introduced, there was an increase of over 10% as well. There is no large jump in Germany or the Netherlands, but a constantly increasing trend can be seen. While a small increase can be noted in Belgium as well, it is hard to gauge whether it was because of the introduction of SPR due to the low share across the years.

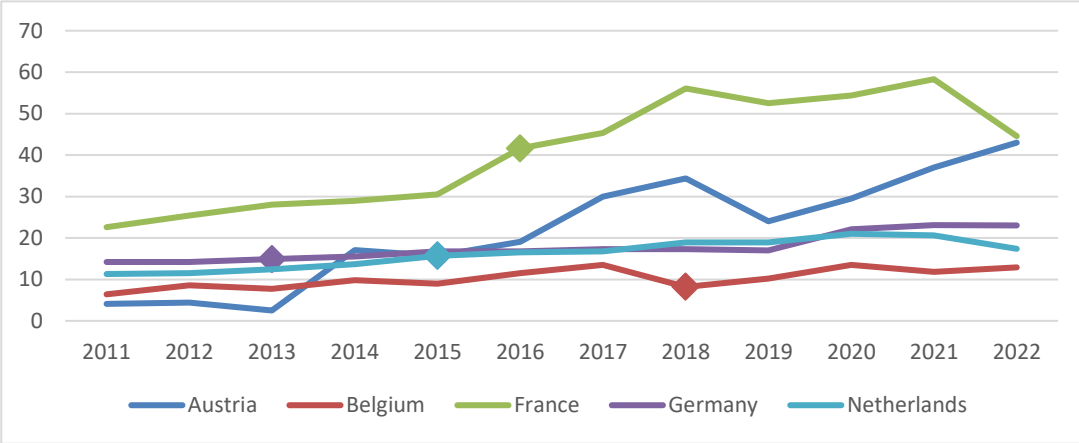
**Table 34. Share (%) of Green OA by country by year**

| Country | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Austria** | 4.1 | 4.4 | 2.5 | 17.1 | **15.7** | 19.1 | 30 | 34.4 | 24 | 29.5 | 37 | 43 |
| **Belgium** | 6.4 | 8.6 | 7.7 | 9.8 | 9 | 11.5 | 13.5 | **8.2** | 10.2 | 13.5 | 11.8 | 12.9 |
| **France** | 22.6 | 25.4 | 28 | 29 | 30.5 | **41.6** | 45.3 | 56.1 | 52.5 | 54.4 | 58.3 | 44.6 |
| **Germany** | 14.2 | 14.2 | **14.9** | 15.5 | 16.8 | 16.8 | 17.3 | 17.3 | 17 | 22.1 | 23.1 | 23 |
| **Netherlands** | 11.3 | 11.5 | 12.4 | 13.7 | **15.7** | 16.5 | 16.8 | 18.9 | 18.9 | 21 | 20.6 | 17.4 |

*Source: Compiled by the study team, using OpenAlex data.*

1754 https://op.europa.eu/en/publication-detail/-/publication/56cc104f-0ebb-11ec-b771-01aa75ed71a1

**Figure 41. Share of Green OA by SPR country by year.**




*Source: Compiled by the study team using OpenAlex data.*

Further, we compare the average ratios of Green OA publications (expressed as percentages of total publications) in the SPR countries with the same measure for the rest of the EU. We see that until around 2016, the shares of Green OA publications were comparable. In 2017, the gap between the SPR and non-SPR countries started growing. This might be signified by the introduction of SPR in the fourth country (France). Ever since the trend has remained rather stable: SPR countries produce more Green OA publications by 7-10 percentage points as compared to the non-SPR countries.

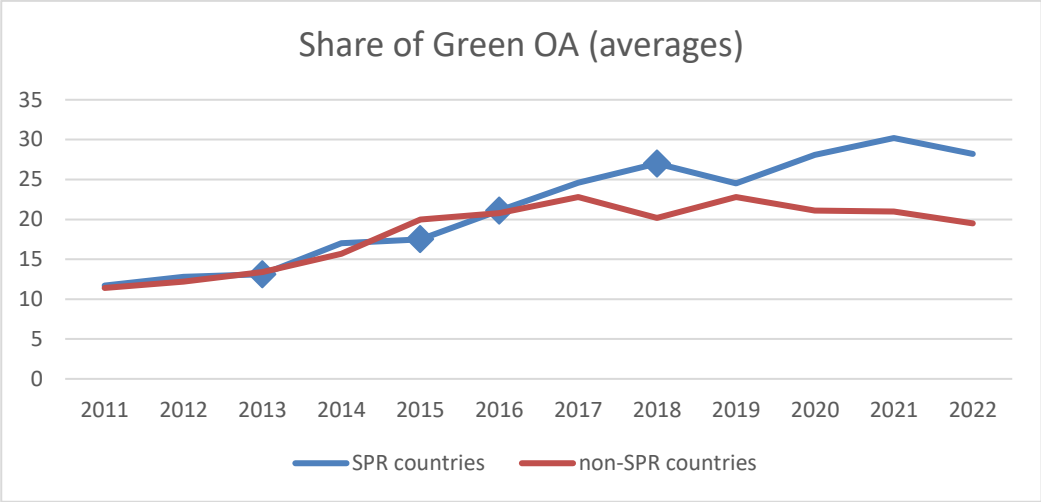
**Table 35. Share of Green OA by country type by year**

| Country type | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SPR countries** | 11.7 | 12.8 | **13.1** | 17 | **17.5** | **21.1** | 24.6 | **27** | 24.5 | 28.1 | 30.2 | 28.2 |
| **non-SPR countries** | 11.4 | 12.2 | 13.4 | 15.7 | 20 | 20.8 | 22.8 | 20.2 | 22.8 | 21.1 | 21 | 19.5 |

*Source: Compiled by the study team using OpenAlex data*[1755]*.*

1755 The year in which SPR was introduced into one of the countries can be seen by the green cells in the table and the markers in the figure. Note that due to the lengthy nature of publication, 2022 figures might not be fully updated yet.

**Figure 42. Share of Green OA by country type by year**




*Source: Compiled by the study team, using OpenAlex data.*

## Raw data

This Annex contains the raw data used to make the figures and tables in the document.

**Table 36. Publication counts by country by year.**

| EU MS | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Austria** | 800 | 882 | 487 | 788 | 897 | 1494 | 1243 | 1122 | 1560 | 1668 | 1505 | 1157 |
| **Belgium** | 2031 | 2137 | 2097 | 2174 | 2236 | 2479 | 2275 | 3406 | 3191 | 2133 | 1864 | 1412 |
| **Bulgaria** | 396 | 450 | 864 | 994 | 1184 | 1016 | 1094 | 1386 | 1085 | 1304 | 1055 | 1344 |
| **Croatia** | 2939 | 3227 | 3265 | 3284 | 3698 | 4000 | 5094 | 4997 | 4363 | 4248 | 4523 | 3775 |
| **Cyprus** | 46 | 97 | 136 | 102 | 99 | 99 | 93 | 139 | 123 | 187 | 383 | 553 |
| **Czechia** | 5433 | 5369 | 6795 | 6908 | 6565 | 6893 | 7573 | 8295 | 7019 | 7031 | 7397 | 6593 |
| **Denmark** | 1022 | 905 | 857 | 991 | 1231 | 1012 | 1584 | 1008 | 887 | 1284 | 1333 | 818 |
| **Estonia** | 695 | 846 | 775 | 871 | 834 | 776 | 800 | 755 | 768 | 879 | 671 | 564 |
| **Finland** | 619 | 622 | 665 | 762 | 1094 | 638 | 792 | 914 | 949 | 1108 | 1173 | 1144 |
| **France** | 26633 | 27210 | 27635 | 27090 | 27153 | 31427 | 32386 | 39845 | 34187 | 34617 | 39619 | 25085 |
| **Germany** | 100491 | 109960 | 113745 | 118436 | 123130 | 133288 | 130889 | 136004 | 137358 | 144473 | 161433 | 146673 |
| **Greece** | 2378 | 2723 | 3978 | 4280 | 5244 | 6824 | 10354 | 8333 | 6410 | 7162 | 6200 | 3689 |
| **Hungary** | 2618 | 2903 | 3283 | 3179 | 3213 | 3812 | 3619 | 4262 | 4797 | 4398 | 4376 | 5397 |
| **Ireland** | 250 | 285 | 313 | 279 | 338 | 420 | 376 | 611 | 502 | 427 | 447 | 270 |
| **Italy** | 10135 | 10164 | 10119 | 10118 | 11053 | 10821 | 10653 | 10131 | 10340 | 11413 | 10060 | 8606 |
| **Latvia** | 71 | 96 | 158 | 107 | 845 | 642 | 710 | 908 | 930 | 945 | 891 | 673 |
| **Lithuania** | 4759 | 3696 | 3624 | 4648 | 4405 | 3532 | 3236 | 2882 | 2915 | 2890 | 2589 | 2455 |
| **Luxembourg** | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Malta** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Netherlands** | 184684 | 198845 | 210114 | 225688 | 242850 | 262372 | 272481 | 263113 | 284952 | 312300 | 327366 | 321252 |
| **Poland** | 25122 | 27180 | 31102 | 34012 | 37697 | 35736 | 38799 | 36555 | 32396 | 32702 | 30229 | 26300 |
| **Portugal** | 1913 | 3150 | 2549 | 2542 | 2588 | 3034 | 3295 | 4299 | 3842 | 4102 | 3664 | 3236 |
| **Romania** | 4726 | 4141 | 3968 | 4234 | 4418 | 4063 | 4492 | 4559 | 5466 | 6137 | 5799 | 4752 |
| **Slovakia** | 473 | 837 | 804 | 1023 | 1669 | 1887 | 3160 | 2928 | 3041 | 2970 | 3226 | 2871 |
| **Slovenia** | 1110 | 1140 | 1317 | 1242 | 2013 | 1508 | 1535 | 1600 | 1738 | 1623 | 1656 | 1514 |
| **Spain** | 18383 | 19840 | 19849 | 21466 | 25524 | 29137 | 33494 | 45026 | 31643 | 33052 | 32729 | 27949 |
| **Sweden** | 1456 | 1242 | 1383 | 1555 | 1531 | 1974 | 1430 | 1339 | 1429 | 1727 | 1422 | 1951 |

*Source: Compiled by the study team.*

**Table 37. Green OA publication counts by country by year.**

| EU MS | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Austria** | 33 | 39 | 12 | 135 | 141 | 286 | 373 | 386 | 375 | 492 | 557 | 497 |
| **Belgium** | 130 | 184 | 162 | 214 | 202 | 285 | 307 | 280 | 325 | 288 | 220 | 182 |
| **Bulgaria** | 6 | 12 | 47 | 89 | 63 | 38 | 41 | 100 | 193 | 59 | 63 | 45 |
| **Croatia** | 629 | 834 | 868 | 988 | 1436 | 1627 | 2378 | 1591 | 1900 | 1883 | 1957 | 1813 |
| **Cyprus** | 5 | 5 | 15 | 13 | 8 | 8 | 19 | 12 | 10 | 9 | 11 | 16 |
| **Czechia** | 419 | 475 | 701 | 837 | 1086 | 1166 | 1353 | 1368 | 1113 | 1192 | 1135 | 748 |
| **Denmark** | 48 | 72 | 91 | 98 | 153 | 173 | 272 | 209 | 185 | 196 | 155 | 162 |
| **Estonia** | 20 | 49 | 44 | 62 | 56 | 42 | 60 | 36 | 51 | 44 | 50 | 31 |
| **Finland** | 158 | 144 | 137 | 176 | 191 | 176 | 238 | 301 | 304 | 385 | 375 | 370 |
| **France** | 6012 | 6920 | 7747 | 7846 | 8271 | 13071 | 14676 | 22334 | 17962 | 18819 | 23086 | 11185 |
| **Germany** | 14260 | 15566 | 16942 | 18323 | 20733 | 22398 | 22599 | 23495 | 23365 | 31866 | 37216 | 33684 |
| **Greece** | 727 | 1187 | 1515 | 2226 | 2937 | 3717 | 6056 | 5639 | 4382 | 4459 | 3994 | 1940 |
| **Hungary** | 516 | 612 | 810 | 887 | 1762 | 2036 | 1956 | 2126 | 2054 | 2076 | 2129 | 1604 |
| **Ireland** | 40 | 26 | 31 | 20 | 39 | 68 | 72 | 79 | 158 | 80 | 151 | 43 |
| **Italy** | 1338 | 1287 | 1496 | 1564 | 1623 | 1857 | 1924 | 1912 | 1939 | 2318 | 2217 | 2320 |
| **Latvia** | 3 | 3 | 13 | 11 | 466 | 218 | 230 | 53 | 217 | 205 | 51 | 50 |
| **Lithuania** | 150 | 227 | 190 | 277 | 314 | 655 | 512 | 279 | 324 | 298 | 249 | 198 |
| **Luxembourg** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Malta** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Netherlands** | 20804 | 22815 | 26084 | 30861 | 38210 | 43297 | 45759 | 49717 | 53917 | 65596 | 67563 | 55951 |
| **Poland** | 2000 | 2906 | 3708 | 5156 | 6474 | 6031 | 7429 | 8307 | 7889 | 8020 | 7413 | 5486 |
| **Portugal** | 383 | 582 | 610 | 766 | 967 | 1363 | 1657 | 1986 | 1737 | 1855 | 1659 | 1570 |
| **Romania** | 42 | 145 | 211 | 295 | 379 | 411 | 498 | 644 | 677 | 854 | 652 | 608 |
| **Slovakia** | 10 | 18 | 35 | 55 | 62 | 82 | 144 | 141 | 124 | 122 | 123 | 111 |
| **Slovenia** | 213 | 174 | 153 | 176 | 245 | 185 | 245 | 248 | 244 | 209 | 311 | 392 |
| **Spain** | 5077 | 5955 | 6548 | 7513 | 9396 | 9979 | 11941 | 15414 | 12116 | 12370 | 10995 | 9364 |
| **Sweden** | 239 | 287 | 331 | 401 | 452 | 630 | 631 | 563 | 638 | 920 | 866 | 838 |

*Source: Compiled by the study team.*

# ANNEX 3: INTERVIEW PROGRAMME

## Introduction to the Interview Programme

**Purpose of the interview programme**

The study carried out a carefully curated interview programme, which targeted legal experts within and outside academia, as well as other experts, such as policy organisations, advocacy organisations, umbrella organisations linked to the publishers and relevant EC officers.

The interview programme is a valuable complement to the study's comprehensive literature review, desk research and survey. Targeted interviews with legal experts and key stakeholders provide valuable input to this study allowing for data triangulation and ensuring that the two legal frameworks are assessed in a balanced way. The interviews also fill in literature gaps for the data and digital legislation part of the study.

## Specific objectives of the interview programme

The interview programme aimed to capture evidence and views regarding the proposed interventions to the EU Copyright legislation. The interviews explored proposed options that are derived as part of Task 3, and some interviews considered Task 4 as a mitigation to potential risks of limited literature sources on research organisations.

The interview programme focused on three strands of interviews:

- Curated programme with 4 stakeholder groups (academia and research organisations, umbrella organisations linked to universities and ROs, policy-related or advocacy organisations, umbrella organisations linked to publishers);
- Data and Digital legislation-related interviews per legislative instrument and framework (EOSC, Data Act, AI Act, Open Data Directive, Data Governance Act, Digital Services Act, Digital Markets Act,
- Follow-up interviews from the researchers, publishers, and RPO's survey.
- The copyright legislation part of the interview programme focused on questions regarding general copyright law, the potential introduction of the secondary publication right, and access to publication and data databases, aiming to gather inputs on copyright law and identify issues and challenges currently faced by stakeholders.
- The Data and Digital legislation part of the interview programme focused on questions specifically related to EOSC, the Data Act, the Artificial Intelligence Act, the Open Data Directive, the Digital Services Act, the Digital Markets Act, and the Data Governance Act, aimed at filling in the gaps that arose in the literature.

In addition to these interviews with legal experts, the study team conducted follow-up interviews from the survey programme to explore case scenarios and build evidence for the report based on the answers/input provided in the respondents' answers.

## Methodology

The interview programme aimed to fill in the literature gaps for the Data and Digital legislation part, get perspective from stakeholders and identify specific issues and challenges concerning the EU Copyright and Data and Digital Legislation. For the purposes of the interview programme, insights and evidence were collected by conducting individual semi-structured interviews, allowing researchers to provide indicative questions to guide the discussion and providing space for additional questions when needed.

After the proposal stage, the study team created a master list of potential organisations that could participate in the interview programme. The list was refined as the study team went through the inception and interim stage, considering the SG suggestions. The organisations were grouped based on the area of expertise, size, and country, and the list was finalised by eventually choosing as representative a sample as possible.

For the Copyright legislation part of the interview, the study team organised the questionnaires based on the targeted group of legal experts (i.e. academia and research organisations, umbrella organisations linked to universities, policy-related or advocacy organisations, and umbrella organisations linked to publishers). The initial goal was to complete up to 20 interviews in total. The study team prepared a questionnaire that served as a base; however, it was personalised for each interviewee on a case-by-case basis.

## Implementation

The study team reached out to potential interviewees via email. In the email they provided an overview of the study, EC privacy note and letter of support, and invited them to participate in the study. Once the interviewees had confirmed their participation, and agreed on the time and date, the MS Teams (or the preferred conferencing tool) calendar invite was sent to the interviewee and relevant study team colleagues. Interviews took between 45 to 60 minutes and, on some occasions, over 60 minutes with agreement of the interviewee. The study team conducted **44 interviews**, 26 concerning Copyright legislation and 18 concerning Data and Digital legislation.

The interview questionnaires were shared with the interviewees prior to the interview, containing an introduction to the study and study team, presenting the objectives of the study, and providing indicative questions for shaping the interview discussion.

## Confidentiality

The participants in the interview programme were guaranteed confidentiality through the use of an EC-provided privacy note. This privacy note was shared with the participants prior to the interview, and was attached to the first email inviting them to participate in the study.

During the interview, participants were ensured that their input is used only for data analyses and data triangulation. They were informed that no direct quotations would be used in the report. The interview was recorded only for note-taking purposes with the consent of the participants. The recordings will be destroyed upon completion of the study.

## Analysis

Our approach to analysing interview inputs follows **a systematic process aimed at extracting valuable insights**. Initially, we organised the interview responses into thematic categories, identifying recurring patterns and significant themes that aligned **with the study's focus**. For this particular study, **findings were organised thematically** and **matched to the survey questions**. Through this categorisation, we thoroughly evaluated each segment to extract key insights and relevant examples that contribute substantively to the analysis.

These **insights and examples were then synthesised and integrated into the broader context of the study, enriching the overall analysis and findings**. This method ensures that interview inputs serve as an essential complement to the research, providing a deeper understanding and contributing to the comprehensive perspective presented in the study.

## Limitations

The study team used semi-structured individual interviews as one of the data collection instruments of this study. This required the study team to interact directly with the interviewees. The team ensured confidentiality by providing the EC privacy note, a safe environment during the interview and anonymity. However, limitations could have occurred.

All the interviews were conducted online, through the MS Teams or ZOOM platform, which is a potential limitation as respondents might have been distracted by parallel activities or connection issues that sometimes occurred. Another related limitation of the interview programme is the language barrier. All the interviews were conducted in English, and only some of the interviewees were fluent in English. Thus, language could have been a constraint, requiring interviewees to express themselves in a non-native language. As with any consultation activity, there is a potential for biases, for example:

**Response bias:** Interviewees might feel inclined to provide socially desirable responses, particularly when discussing sensitive topics related to copyright, digital legislation, or potential interventions. They might shape their answers to align with perceived expectations or norms rather than presenting authentic viewpoints.

**Industry perspective bias**: Stakeholders might present views that predominantly align with their specific interests or objectives.

**Information bias:** Interviewees might lack comprehensive information on all aspects of the EU copyright framework or digital legislation. Their responses could be limited to their specific roles, experiences, or understandings within their respective organisations, potentially leading to incomplete or biased perspectives.

**Confirmation bias:** There might be a tendency for interviewees to confirm pre-existing beliefs or positions rather than critically evaluating alternative viewpoints or acknowledging the limitations or drawbacks of their perspectives.

**Power dynamics:** Power differentials between interviewers and interviewees could influence the information shared. Interviewees, particularly in hierarchical organisations, might hesitate to express dissenting opinions or share critical information that could challenge organisational norms or policies.

**Institutional bias:** Institutional affiliations or organisational cultures might influence interviewees' perspectives. For instance, a stakeholder might represent the views of their organisation rather than providing a holistic industry viewpoint.

To mitigate these biases, the study team strived for neutrality and used open-ended questions to encourage diverse perspectives. We aim to maintain confidentiality and triangulate findings with other data sources.

## ANNEX 4: SURVEY PROGRAMME

The survey's detailed methodological approach, encompassing the timeline, data cleaning procedures, and limitations, is provided in Annex 5. For a comprehensive understanding of the research design and implementation, including population selection, sampling strategies, and survey administration, please refer to Annex 5.

### ERA 2 Action study - Researchers survey

*Introductory questions*

**1) What is the core scientific discipline or area of your research?***

( ) Natural sciences

( ) Engineering and technology

( ) Medical and health sciences

( ) Agricultural and veterinary sciences

( ) Social sciences

( ) Humanities and the arts

( ) Other (please specify): _____

2) **How would you describe your current career stage as a researcher?***

( ) First Stage Researcher (R1, up to the point of PhD)

( ) Recognised Researcher (R2, PhD holders or equivalent who are not yet fully independent)

( ) Established Researcher (R3, researchers who have developed a level of independence)

( ) Leading Researcher (R4, researchers leading their research area or field)

( ) Other (please specify): _____

3) **What is the type of your organisation?***

( ) University/Higher Education institution

( ) Public research centre

( ) Private research centre

( ) Large enterprise

( ) SME (small and medium-sized enterprise)

( ) Incubator, start-up, or spin-off

( ) Public administration/government

( ) Other (please specify): _____

4) **What is the country of your organisation?***

( ) Austria

( ) Belgium

( ) Bulgaria

( ) Croatia

( ) Cyprus

( ) Czech Republic

( ) Denmark

( ) Estonia

( ) Finland

( ) France

( ) Germany

( ) Greece

( ) Hungary

( ) Iceland

( ) Ireland

( ) Italy

( ) Latvia

( ) Liechtenstein

( ) Lithuania

( ) Luxembourg

( ) Malta

( ) Netherlands

( ) Norway

( ) Poland

( ) Portugal

( ) Romania

( ) Slovakia

( ) Slovenia

( ) Spain

( ) Sweden

( ) Switzerland

( ) United Kingdom

( ) Other (please specify): _____

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*Your publishing practices and access to knowledge resources*

5) **Overall, how important are the following factors when deciding where to publish your scientific publications?**

Please select the most suitable option on the level of importance for each of the presented factors. Explanation: Embargo is a period from the publishing date of the original publication, during which it is not allowed to publish a self-archived Open access copy of the publication in question.

| | It is a primary/deciding factor | It is an important but not a deciding factor | Not an important factor | Do not know/cannot answer |
|---|---|---|---|---|
| Prestige of the journal | ( ) | ( ) | ( ) | ( ) |
| If the journal allows Open access publication | ( ) | ( ) | ( ) | ( ) |
| The extent to which the publisher allows Open access via self-archiving | ( ) | ( ) | ( ) | ( ) |
| If the publisher allows authors to keep their rights on the final peer-reviewed manuscript accepted for publication or the final published peer-reviewed version | ( ) | ( ) | ( ) | ( ) |
| Publication costs (i.e., APCs, BPCs, other costs) related to Open access | ( ) | ( ) | ( ) | ( ) |
| Length of the embargo period (related to self-archiving) | ( ) | ( ) | ( ) | ( ) |
| The duration of the peer-review process | ( ) | ( ) | ( ) | ( ) |
| The quality of the peer-review process | ( ) | ( ) | ( ) | ( ) |
| If the journal accepts non-English publications | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**6) In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?**

Explanation: By non-Horizon scientific publications, we mean publications that did not result from Horizon 2020 or Horizon Europe projects.

( ) 0 non-Horizon funded publications

( ) 1 non-Horizon funded publication

( ) 2 non-Horizon-funded publications

( ) 3 non-Horizon-funded publications

( ) 4 non-Horizon-funded publications

( ) 5 non-Horizon-funded publications

( ) More than 5 non-Horizon-funded publications

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #6 Question is one of the following answers ("1 non-Horizon funded publication","2 non-Horizon-funded publications","3 non-Horizon-funded publications","4 non-Horizon-funded publications","5 non-Horizon-funded publications","More than 5 non-Horizon-funded publications")**

7) **Considering your non-Horizon funded publications that you published in 2022, what number of them were published in Open access via a journal, platform or repository?** *Explanation: By non-Horizon scientific publications, we mean publications that did not result from Horizon 2020 or Horizon Europe projects.*

( ) 0 publications

( ) 1 publication

( ) 2 publications

( ) 3 publications

( ) 4 publications

( ) 5 publications

( ) More than 5 publications

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #7 Question is one of the following answers ("1 non-Horizon funded publication","2 non-Horizon-funded publications","3 non-Horizon-funded publications","4 non-Horizon-funded publications","5 non-Horizon-funded publications","More than 5 non-Horizon-funded publications")**

8) **Out of your Open access scientific publications published in 2022, how many were published in the following places?**

Please select the most suitable option.

| | 1 publication | 2 publications | 3 publications | 4 publications | 5 publications | More than 5 publications | Do not know/cannot answer/not relevant |
|---|---|---|---|---|---|---|---|
| Fully Open access journals (journals in which all content is openly accessible to everyone) or platforms (e.g. Open Research Europe) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Open access repository | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other places (please specify)_____

Logic: Hidden unless: #7 Question is one of the following answers ("1 publication")

9) **To which version of the publication did you provide Open access?**

( ) Final published peer-reviewed version (article as published by the journal or platform after going through peer-review)

( ) Final peer-reviewed manuscript accepted for publication (a manuscript that has gone through peer-review and has been accepted for publication by the publishing venue)

( ) Preprint (a manuscript that has not gone through peer-review)

( ) Other (please specify): _____

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #7 Question is one of the following answers ("1 publication")**

10) **When did you provide Open access to the publication?**

( ) Before the publication on the journal/platform's website

( ) Immediately after publication on the journal/platform's website

( ) After the end of the embargo period

( ) Other (please specify): _____

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #7 Question is ("1 publication","2 publications","3 publications","4 publications","5 publications","More than 5 publications")**

11) **Why did you make your non-Horizon funded publication(s) Open access via a journal, platform or repository? (choose all that apply)**

Explanation: By non-Horizon scientific publications, we mean publications that did not result from Horizon 2020 or Horizon Europe projects.

[ ] To increase exposure to my research

[ ] I believe in the principle that scientific knowledge should be widely accessible

[ ] The publishers allowed it, so I made these publications Open access

[ ] My research funder required me to make these publications Open access

[ ] My employer requires me to make my research Open access

[ ] Other reasons (please specify): _____

**Logic: Hidden unless: #7 Question ("0 publications")**

12) ***Why did you NOT make any of your non-Horizon-funded publications Open access? (choose all that apply)***

Explanation: By non-Horizon scientific publications, we mean publications that did not result from Horizon 2020 or Horizon Europe projects.

[ ] I did not have the time/resources

[ ] I did not see the need/benefit

[ ] I see the need/benefit, but I don't think it's my job to make my research Open access

[ ] The journal/publisher did not allow Open access

[ ] I did not want to risk violating copyright/licensing provisions

[ ] There was no explicit requirement from my research funder to make these publications Open access

[ ] There was no explicit requirement from my employer to make these publications Open access

[ ] Other reasons (please specify): _____

**Logic: Show/hide trigger exists. Hidden unless: #6 Question is one of the following answers ("1 non-Horizon funded publication","2 non-Horizon-funded publications","3 non-Horizon-funded publications","4 non-Horizon-funded publications","5 non-Horizon-funded publications","More than 5 non-Horizon-funded publications")**

13) **When publishing your publications in 2022, did you (i.e., individually or with your institution's help) attempt to negotiate any provisions related to publication access**

**and reuse rights with the publisher?**
( ) Yes

( ) No

( ) Don't know/cannot answer

**Logic: Hidden unless: #13 Question is one of the following answers ("Yes")**

14) **Which provisions did you attempt to negotiate with the publisher when publishing your publications in 2022? Please provide some details.**

(Open-ended)

**Logic: Hidden unless: #13 Question is one of the following answers ("Yes")**

15) **Were the negotiations successful (i.e., you obtained the rights you wanted) or not?**

(Open-ended)

16) **Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?**

Explanation: “Transformative agreement” is an umbrella term describing agreements negotiated between institutions and publishers in which former subscription expenditures are repurposed to support Open access publishing. These agreements are based on a centrally negotiated procedure.

( ) Yes, positive impact

( ) Yes, negative impact

( ) No impact

( ) Don't know/cannot answer

**Logic: Hidden unless: #16 Question is one of the following answers ("Yes, positive impact","Yes, negative impact")**

17) **Could you provide details on transformative agreements' positive or negative impact on your ability to access and reuse scientific articles?**

(Open-ended)

18) **Overall, have you ever faced one of the following situations in your career? (choose all that apply)**

[ ] I was unable to obtain access to knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music, webpages and (social media) posts, social media and online platform data, and other data collections) because I could not get permission from the copyright or other right owner

[ ] I was unable to obtain access to copyright-protected knowledge resources because my research organisation did not have the necessary subscription

[ ] I was unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall/electronic fence

[ ] I refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films and music, because I did not want to risk copyright infringement

[ ] I refrained from using copyright-protected knowledge resources because I collaborated with industry partners

[ ] I refrained from sharing knowledge resources which I had co-created with other researchers working with me on the same project because I did not want to risk copyright infringement

**Logic: Hidden unless: #18 Question is one of the following answers ("I was unable to obtain access to knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music, webpages and (social media) posts, social media and online platform data, and other data collections) because I could not get permission from the copyright or other right owner")**

19) **Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?**

( ) The copyright owner said no

( ) The copyright owner was willing to give permission against remuneration, but I could not pay the requested amount

( ) I did not know how to find and contact the copyright owner

( ) Other (please specify): _____

( ) Do not know/cannot answer/not relevant

**Logic: Hidden unless: #18 Question is one of the following answers ("I was unable to obtain access to copyright-protected knowledge resources because my research organisation did not have the necessary subscription","I was unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall/electronic fence","I refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films and music, because I did not want to risk copyright infringement","I refrained from using copyright-protected knowledge resources because I collaborated with industry partners","I refrained from sharing knowledge resources which I had co-created with other researchers working with me on the same project because I did not want to risk copyright infringement")**

20) **What happened when you faced these situations? Please provide some details if possible.**

(Open-ended)

21) **Apart from the situations described in the previous question, have there been any challenges that you have faced/are facing currently due to the current copyright legislation? Please give examples of such cases.**

(Open-ended)

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*Institutional Open access/Open Science policies*

22) **Does your organisation/institution have an Open access/open science policy?**

( ) Yes

( ) No

( ) Don't know/cannot answer

**Logic: Show/hide trigger exists. Hidden unless: #22 Question is one of the following answers ("Yes")**

23) **How well do you know your organisation's/institution's Open access/open science policy?**

( ) Very well

( ) Rather well

( ) Not very well/not at all

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #23 Question is one of the following answers ("Very well","Rather well")**

24) **To the best of your knowledge, does your institution's Open access policy mandate, recommend, discourage or prevent any of the following provisions?**

Please indicate the most appropriate answer for each of the presented provisions.

| | Mandates | Recommends | Discourages | Prevents | Does not mention | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Providing Open access to scientific publications | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Providing Open access to scientific publications via repositories | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Providing immediate Open access to scientific publications | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Ensuring sufficient copyright retention to provide Open access (you are retaining the necessary rights to provide Open access) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Make accompanying research data available under open licence (e.g., Creative Commons By) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Indicates how to ensure that the accompanying research data is complete and well-documented to facilitate reuse | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Indicates data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

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*Your perceptions about potential changes to the copyright legislation*

We would like to shift the survey's focus and ask a question about potential changes to the copyright legislation. Imagine that the lawmaker in your country wants to introduce specific copyright legislation that helps researchers publish their research output in Open access.

We would like to emphasise that these provisions are hypothetical. The goal of the question is to understand which types of provisions would be most or least appreciated by researchers. Other stakeholders' (e.g. rightsholders') perceptions will also be considered in a separate survey.

25) **Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| The legislation would give me the right to make my research output available in Open access directly after the official publication elsewhere. There would be no embargo period that obliges me to wait for 6 months or longer | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The legislation would cover all types of my scientific output, including not only articles but also writings, datasets and other research results | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| My right to publish research output in Open access would not depend on whether my research was publicly funded | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The legislation would give me the right to publish the final published peer-reviewed version of my article in Open access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The legislation would make it clear that users of my research output can use it freely for all purposes. The use of my Open access publications would not be limited to non-commercial use | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

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**Page entry logic:** This page will show when: #4 Question "**What is the country of your organisation?**" is one of the following answers ("Austria","Belgium","France","Germany","Netherlands")

*Your experience with the Secondary Publication Right*

**Logic: Hidden unless: #4 Question is one of the following answers ("Germany")**

26) Before this information, were you aware that Germany had introduced the Secondary Publication Right (SPR) legislation?

( ) Yes, I was very well aware of it and knew the details of the provisions

( ) Yes, I was somewhat aware of the fact/knew some details

( ) No, this information was new to me

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #4 Question is one of the following answers ("Germany") AND #26 Question is one of the following answers ("Yes, I was very well aware of it and knew the details of the provisions","Yes, I was somewhat aware of the fact/knew some details"))**

27) **To what extent do the Secondary Publication Right (SPR) provisions in Germany impact the way you publish, access, disseminate and enable others to reuse your research?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #4 Question is one of the following answers ("Germany")**

28) **Could you give any examples, positive or negative, of how the provisions in Germany impacted how you publish, access, disseminate and enable others to reuse your research?**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Germany")**

29) **Are any additional publication access and reuse provisions needed in Germany? Please give some examples.**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("France")**

30) **Before this information, were you aware that France had introduced the Secondary Publication Right (SPR) legislation?**

( ) Yes, I was very well aware of it and knew the details of the provisions

( ) Yes, I was somewhat aware of the fact/knew some details

( ) No, this information was new to me

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #4 Question is one of the following answers ("France") AND #30 Question is one of the following answers ("Yes, I was very well aware of it and knew the details of the provisions","Yes, I was somewhat aware of the fact/knew some details"))**

31) **To what extent do the Secondary Publication Right (SPR) provisions in France impact the way you publish, access, disseminate and enable others to reuse your research?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #4 Question is one of the following answers ("France") AND #31 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

32) **Could you give any examples, positive or negative, of how the provisions in France impacted how you publish, access, disseminate and enable others to reuse your research?**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("France")**

33) **Are any additional publication access and reuse provisions needed in France? Please give some examples.**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Netherlands")**

34) **Before this information, were you aware that the Netherlands had introduced the Secondary Publication Right (SPR) legislation?**

( ) Yes, I was very well aware of it and knew the details of the provisions

( ) Yes, I was somewhat aware of the fact/knew some details

( ) No, this information was new to me

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #4 Question is one of the following answers ("Netherlands") AND #34 Question is one of the following answers ("Yes, I was very well aware of it and knew the details of the provisions","Yes, I was somewhat aware of the fact/knew some details"))**

35) **To what extent do the Secondary Publication Right (SPR) provisions in the Netherlands impact the way you publish, access, disseminate and enable others to reuse your research?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #4 Question is one of the following answers ("Netherlands") AND #35 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent"))**

36) **Could you give any examples, positive or negative, of how the provisions in the Netherlands impacted how you publish, access, disseminate and enable others to reuse your research?**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Netherlands")**

37) **Are any additional publication access and reuse provisions needed in the Netherlands? Please give some examples.**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Austria")**

38) **Before this information, were you aware that Austria had introduced the Secondary Publication Right (SPR) legislation?**

( ) Yes, I was very well aware of it and knew the details of the provisions

( ) Yes, I was somewhat aware of the fact/knew some details

( ) No, this information was new to me

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #4 Question "What is the country of your organisation?" is one of the following answers ("Austria") AND #38 Question is one of the following answers ("Yes, I was very well aware of it and knew the details of the provisions","Yes, I was somewhat aware of the fact/knew some details"))**

39) **To what extent do the Secondary Publication Right (SPR) provisions in Austria impact the way you publish, access, disseminate and enable others to reuse your research?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #4 Question is one of the following answers ("Austria") AND #39 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent"))**

40) **Could you give any examples, positive or negative, of how the provisions in Austria impacted how you publish, access, disseminate and enable others to reuse your research?**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Austria")**

41) **Are any additional publication access and reuse provisions needed in Austria? Please give some examples.**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Belgium")**

42) **Before this information, were you aware that Belgium had introduced the Secondary Publication Right (SPR) legislation?**

( ) Yes, I was very well aware of it and knew the details of the provisions

( ) Yes, I was somewhat aware of the fact/knew some details

( ) No, this information was new to me

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #4 Question is one of the following answers ("Belgium") AND #42 Question is one of the following answers ("Yes, I was very well aware of it and knew the details of the provisions","Yes, I was somewhat aware of the fact/knew some details")**

43) **To what extent do the Secondary Publication Right (SPR) provisions in Belgium impact the way you publish, access, disseminate and enable others to reuse your research?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #4 Question is one of the following answers ("Belgium") AND #43 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent"))**

44) **Could you give any examples, positive or negative, of how the provisions in Belgium impacted how you publish, access, disseminate and enable others to reuse your research?**

(Open-ended)

**Logic: Hidden unless: #4 Question is one of the following answers ("Belgium")**

45) **Are any additional publication access and reuse provisions needed in Belgium? Please give some examples.**

(Open-ended)

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*Accessing and reusing research data*

This is the last part of the questionnaire. We would like to learn more about how you access and reuse research data.

46) **Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?**

( ) Yes

( ) No

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #46 Question is one of the following answers ("Yes")**

47) **Who produced/generated the respective research data?**

( ) Other university/higher education institution

( ) Public research center

( ) Private research center

( ) Large enterprise

( ) Small or medium-sized enterprise

( ) Non-profit organisation

( ) Public administration (government, parliament, courts)

( ) Other (please specify): _____

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #46 Question is one of the following answers ("Yes")**

48) **Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?**

( ) Yes

( ) No

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #48 Question is one of the following answers ("Yes")**

49) **What type of restrictions or conditions did you encounter with respect to the use of the data? (choose all that apply)**

[ ] Acknowledgement of source

[ ] Reservation of intellectual property rights (copyright or other)

[ ] Commercial confidentiality

[ ] Data protection/privacy

[ ] Payment of fees to access or use data

[ ] Obligation to share subsequent (enriched) own research data

[ ] Other (please specify): _____

**Logic: Hidden unless: #48 Question is one of the following answers ("Yes")**

50) **To what extent do you think that the data access restrictions were reasonable/legitimate?**

( ) To a large extent

( ) To some extent

( ) To little or no extent

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #50 Question is one of the following answers ("To a large extent","To some extent","To little or no extent")**

51) **Please specify what was the condition(s) by another party?**

(Open-ended)

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*Allowing access and reuse of research data*

52) **In the past year, were you obliged to deposit research data generated as part of a project?**

( ) Yes

( ) No

( ) Do not know / not relevant

**Logic: Hidden unless: #52 Question is one of the following answers ("Yes")**

53) **What were the reasons why you were obliged to deposit research data generated as part of a project? (choose all that apply)**

[ ] Because it was a condition for publication of research results by the journal (e.g. data accompanying journal article)

[ ] Because it was a condition of the funder

[ ] Because it was a condition of my institution

[ ] Because it was a condition by another party (please specify):
_____

[ ] Do not know / not relevant

[ ] Other (please specify): _____

**Logic: Hidden unless: #52 Question is one of the following answers ("Yes")**

54) **As part of the deposit, did you have to agree to grant a licence for the use of your research data?**

( ) Yes

( ) No

( ) Don't know/cannot answer/not relevant

**Logic: Hidden unless: #54 Question is one of the following answers ("Yes")**

55) **Did you have any say over the terms and conditions for the use of your research data by others?**

( ) No

( ) Yes, some freedom to choose between a few standard licenses (e.g. Creative Commons-By or Creative Commons non-commercial)

( ) Yes, freedom to set terms and conditions

( ) Other (please specify): _____

*Final questions*

56) **Would you have to share any other observations that were not covered in this survey?**

(Open-ended)

57) **Would you agree to participate in a follow-up interview (up to 45 minutes) on certain aspects covered in this survey?**

( ) Yes

( ) No

**Logic: Hidden unless: #57 Question is one of the following answers ("Yes")**

58) **Could you provide your email address?**

(Open-ended answer)

## ERA 2 Action study – Research Performing Organisations (RPOs) survey

*Introductory questions*

0) Are you the right person to complete the survey?

**Page exit logic:** Skip / Disqualify Logic **IF:** #2 Question is one of the following answers ("No") **THEN:** Disqualify and display: "Thank you for your time, but it seems that you are not the targeted population for this survey."

1) This survey targets persons who lead the library and/or publishing function within your organisation. Alternatively, this could be the person who leads your organisation's overall Open access/Open Science policy. What is your role within the organisation?*

( ) Library Director

( ) Lead Copyright Officer

( ) Open access Officer/Advisor (or similar)

( ) Other: _____

**Logic: Hidden unless: #1 Question is one of the following answers ("Other")**

2) **The survey will ask questions about your organisation's Open access policy, challenges faced related to Open access and copyright regulations, and your perspective on the right to publish Open access regardless of previous commercial publication (aka Secondary Publication Rights). The survey also explores the impact of various legislative frameworks on research activities and data reuse at your organisation. Would you be able to provide insights and views on such questions?***

( ) Yes

( ) Yes, for the most part

( ) No

---

*Introductory questions*

3) **Please indicate the type of organisation you are representing***

( ) University/Higher Education institution

( ) Public research centre

( ) Private research centre

( ) Large enterprise

( ) SME (small and medium-sized enterprise)

( ) Incubator, start-up, or spin-off

( ) Public administration/government

( ) Other (please specify): _____

4) **What is the size of your organisation?***

( ) 1-100 employees

( ) 101-500 employees

( ) 501-1000 employees

( ) 1001-2000 employees

( ) Over 2000 employees

5) **In which country is the organisation that you represent established?***

( ) Austria

( ) Belgium

( ) Bulgaria

( ) Croatia

( ) Cyprus

( ) Czech Republic

( ) Denmark

( ) Estonia

( ) Finland

( ) France

( ) Germany

( ) Greece

( ) Hungary

( ) Iceland

( ) Ireland

( ) Italy

( ) Latvia

( ) Liechtenstein

( ) Lithuania

( ) Luxembourg

( ) Malta

( ) Netherlands

( ) Norway

( ) Poland

( ) Portugal

( ) Romania

( ) Slovakia

( ) Slovenia

( ) Spain

( ) Sweden

( ) Switzerland

( ) United Kingdom

( ) Other (please specify): _____

*Tell us about your organisation's Open access policy*

6) **Can you describe the services that scientific publishers offer that you as a research performing organisation appreciate the most in helping the publication?**

(Open-ended answer)

7) **Does your organisation have an Open access/open science policy?**

( ) Yes

( ) No

( ) Don't know/cannot answer

8) **In 2022, approximately what share of your organisation's publications were published in Open access via a journal, platform, or repository?**

( ) More than 90% of publications

( ) Between 75-89% of publications

( ) Between 50-74% of publications

( ) Between 25-49% of publications

( ) Less than 24% of publications

( ) Do not know/cannot answer

9) **To what extent do the following factors represent an obstacle to providing immediate Open access to publicly funded research outputs?**

Please select the most suitable option

Explanation: Please note, here, we only ask about fully or partially publicly funded research

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/not applicable |
|---|---|---|---|---|---|---|
| Researchers are attracted to the most prestigious journals in their fields, which may still have restricted access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Open access publishing is perceived as too expensive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Ownership rules which do not give research institutions initial copyright ownership of research outputs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Embargo periods set by some scientific publishers | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #7 Question is one of the following answers ("Yes")**

10) **To the best of your knowledge, does your institution's Open access/open science policy mandates, recommends, discourages, or prevents any of the following provisions?**

Please select the most suitable option

| | Mandates | Recommends | Discourages | Prevents | Does not mention | Do not know/cannot answer |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Providing Open access to scientific publications | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Providing Open access to scientific publications via repositories | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Providing immediate Open access to scientific publications | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Ensuring sufficient copyright retention to provide Open access (researchers retaining the necessary rights to provide Open access) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Make accompanying research data available under open licence (e.g., Creative Commons Attribution - (CC BY)) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Indicates how to ensure that the accompanying research data is complete and well-documented to facilitate reuse | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Indicates data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

11) **Is your organisation involved in research projects in which researchers collaborate with partners in the private sector?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: is one of the following answers ("Yes")**

12) **Please indicate the percentage of such public-private partnerships in comparison to all research activities carried out at your organisation.**

( ) More than 90%

( ) Between 75-89%

( ) Between 50-74%

( ) Between 25-49%

( ) Less than 24%

( ) Do not know/cannot answer

13) **Has your organisation adopted any policy regarding access to publications resulting from such public-private collaborations?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: is one of the following answers ("Yes")**

14) **Please briefly describe the main provisions.**

(Open-ended answer)

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*Tell us about your institution's copyright policy and the challenges faced*

15) **Does your organisation have a copyright policy?**

( ) Yes, a uniform copyright policy across the organisation

( ) Yes, but the policy varies across faculties/departments/units within my organisation

( ) No

( ) Do not know/cannot answer

16) **Who is the original copyright owner at your organisation?**

( ) Researchers are the original copyright owners

( ) The organisation is the original copyright owner

( ) Do not know/cannot answer

**Logic: Hidden unless: #16 Question is one of the following answers ("Researchers are the original copyright owners")**

17) **What is the copyright policy at your organisation with regard to scientific output produced by your organisation's researchers? Please select the option that describes your situation the best.**

( ) There is no transfer of rights from researchers to my organisation

( ) There is an exclusive transfer of rights from researchers to my organisation for the organisation to provide Open access to scientific publications

( ) There is a non-exclusive transfer of rights from researchers to my organisation for the organisation to provide Open access to scientific publications

( ) No transfer of rights from researchers to scientific publishers is permitted

( ) Exclusive transfer of rights from researchers to scientific publishers is permitted

( ) Non-exclusive transfer of rights from researchers to scientific publishers is permitted

( ) Exclusive/non-exclusive transfer of rights from researchers to scientific publishers is permitted insofar as immediate Open access to scientific publications is ensured

( ) Do not know/cannot answer

( ) Other (please specify): _____

18) **Overall, does your organisation face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #18 Question is one of the following answers ("Yes")**

19) **Please specify the challenges**

(Open-ended answer)

20) **Overall, does your organisation face specific challenges when trying to make publicly funded research and innovation (R&I) results and data available in Open access due to copyright law?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #20 Question is one of the following answers ("Yes")**

21) **Please specify the challenges**

(Open-ended answer)

22) **Has your organisation entered into any agreements with publishers that define Open access policies/requirements?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #22 Question is one of the following answers ("Yes")**

23) **Overall, how challenging were the following issues during your negotiations with publishers?**

Please select the most suitable option.

| | Very challenging | Somewhat challenging | Not challenging | This issue was not discussed during the negotiations | Do not know/cannot answer |
|---|---|---|---|---|---|
| Terms and conditions relating to Open access to publications/research results | ( ) | ( ) | ( ) | ( ) | ( ) |
| Terms and conditions relating to rights/ownership of different types of research works | ( ) | ( ) | ( ) | ( ) | ( ) |
| Embargo periods for publishing in self-archives | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cost of Open access publishing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Subscription terms/costs to journals with restricted access | ( ) | ( ) | ( ) | ( ) | ( ) |

Others (please specify)_____

24) **Overall, how frequent are the following situations in your organisation?**

Please select the most suitable option.

Explanation: When answering, please give your best estimate. 'Frequent' situations may be those where you receive the largest number of inquiries from researchers, or they can be most actively raised by researchers or surface in discussions in your organisation. ‘‘Copyright-protected knowledge resources means all works and data resources enjoying copyright or related rights protection, including books, articles and other texts, images, pictures, videos and films, music, webpages and (social media) posts, social media and online platform data, other data collections)".

| | Very frequent (weekly/monthly occurrences) | Somewhat frequent (happens once every 3-6 months) | Not frequent/does not happen | Do not know/cannot answer |
|---|---|---|---|---|
| Your researchers refrained from using copyright-protected knowledge resources because they could not get permission for free licence from the copyright or other right owner | ( ) | ( ) | ( ) | ( ) |
| Your researchers were unable to obtain access to copyright-protected knowledge resources because your organisation did not have the necessary subscription | ( ) | ( ) | ( ) | ( ) |

| | | | | |
|---|---|---|---|---|
| Your researchers were unable to share copyright-protected knowledge resources with research partners in other countries because the subscriptions of your organisation are limited to the researchers working at your organisation | ( ) | ( ) | ( ) | ( ) |
| Your researchers were unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall | ( ) | ( ) | ( ) | ( ) |
| Your researchers refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films and music, because your organisation did not want to risk copyright infringement | ( ) | ( ) | ( ) | ( ) |
| Your researchers refrained from using copyright-protected knowledge resources because they collaborated with industry partners and felt that use permissions given in copyright law would no longer apply because these permissions only cover non-commercial use | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: Question 24 is one of the following answers ("Very frequent (weekly/monthly occurrences)","Somewhat frequent (happens once every 3-6 months)") for any option**

25) **Could you provide more details on the issues that your organisation encountered? Please provide some examples.**

(Open-ended answer)

26) **How did your organisation try to resolve these issues? Please provide some details.**

(Open-ended answer)

27) **Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research?**

Please select the most suitable option.

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Do not know/ canno |
|---|---|---|---|---|---|---|

| | | | | | | t answe r |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licenses covering various types of copyright-protected knowledge resources) or lumpsum remuneration regimes (copyright holders receive a pre-determined lumpsum payment for research use). | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

28) **What specific services provided by scientific publishers do you find the most valuable for supporting the publication process as a research performing organisation? Please describe.**

(Open-ended answer)

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*Tell us about your views on the provisions of a potential EU-wide Secondary Publication Right legislation*

Secondary Publication Right (SPR) is a right conferred to the original author of an already published (written) work, such as a book, article, or research paper, to grant permission for others to republish or reuse their content in various forms, without losing their rights or ownership, and bypassing the potential opposition of the original publisher. This means that after an author's work has been initially published, they can give others the right to republish it in different formats, languages, or platforms while still retaining the primary ownership and control over their creation. SPR aims to facilitate wider dissemination of knowledge and information while protecting the author's intellectual property rights. SPR has already been introduced in 5 EU Member States (i.e., Austria, Belgium, Germany, France and the Netherlands). Currently, the SPR provisions vary from country to country.

This study explores various ***hypothetical*** provisions of an EU-wide Secondary Publication Right legislation. We emphasise that, at this stage, these are ***only potential considerations***. The study will also collect feedback and perspectives from other stakeholders, including researchers and publishers.

29) **In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?**

( ) Very positively

( ) Rather positively

( ) Neither positively nor negatively

( ) Rather negatively

( ) Very negatively

( ) Do not know/cannot answer

**Logic: Hidden unless: #29 Question is one of the following answers ("Rather negatively","Very negatively")**

30) **Could you explain why you negatively view the potential introduction of an EU-wide Secondary Publication Right legislation?**

(Open-ended answer)

**Logic: Hidden unless: #29 Question is one of the following answers ("Very positively","Rather positively","Rather negatively","Very negatively")**

31) **To what extent do you believe the following features of the potential Secondary Publication Right would increase or decrease provision of immediate Open access to publicly funded research, assuming that they are implemented across the EU?**

| | Strongly increase | Rather increase | Neither increase nor decrease | Rather decrease | Strongly decrease | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| A harmonised Secondary Publication Right should cover a broad range of scientific output, including not only articles but also writings and other contributions more generally – regardless of the publication | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right should not be limited to publications following from projects with 100% public funding. A lower threshold should be enough, such as 50% or less public funding. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| should cover the version of record. It should not be confined to author-accepted version or earlier versions. | | | | | | |
| A harmonised Secondary Publication Right should permit publication without any embargo period or only contain a short embargo period, such as six months. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right should allow Open access publication covering all types of uses. It should not be confined to specific forms of use, such as use for non-commercial purposes. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

32) **Your country's current Secondary Publishing Right framework limits its scope to "articles published in journals". To what extent would you see a need to cover other scientific outputs such as books, writing, databases, and other outputs?**

( ) Yes, to a large extent

( ) Yes, to some extent

( ) To a little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria", "Germany", "Netherlands")**

33) **The current Secondary Publication Right legislation in your country has an embargo period of 12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals?**

| | Strongly positive effect | Positive effect | Neither positive, nor negative effect | Negative effect | Strongly negative effect | Do not know/not applicable |
|---|---|---|---|---|---|---|
| 3 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| 6 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| 12 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #5 Question is one of the following answers ("Belgium","France")**

34) **The current Secondary Publication Right legislation in your country has an embargo period of 6-12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals?**

| | Strongly positive effect | Positive effect | Neither positive, nor negative effect | Negative effect | Strongly negative effect | Do not know/not applicable |
|---|---|---|---|---|---|---|
| 3 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| 6 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| 12 months | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria", "Germany", "Netherlands")**

35) **The current Secondary Publication Right legislation in your country has an embargo period of 12 months. To what extent would you see a need for the embargo period to become shorter?**

( ) Yes, I see the need to shorten the current embargo periods

( ) No, I see no need to shorten the current embargo periods

( ) Do not know/cannot answer

**Logic: Hidden unless: #5 Question is one of the following answers ("Belgium","France")**

36) **The current Secondary Publication Right legislation in your country has an embargo period of between 6-12 months. To what extent would you see a need for the embargo period to become shorter?**

( ) Yes, I see the need to shorten the current embargo periods

( ) No, I see no need to shorten the current embargo periods

( ) Do not know/cannot answer

**Logic: Hidden unless: #35 Question is one of the following answers ("Yes, I see the need to shorten the current embargo periods") OR #36 Question is one of the following answers ("Yes, I see the need to shorten the current embargo periods")**

37) **In the previous question you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most?**

( ) Shorten embargo periods by 12 months (there would be no embargo period at all)

( ) Shorten embargo periods by 6-12 months

( ) Shorten embargo periods by 3-6 months

( ) Shorten embargo periods by 0-3 months

( ) Do not know/cannot answer

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

38) **The current Secondary Publication Right is limited to author-accepted manuscripts (or manuscript). To what extent do you see the need to extend this provision to the version of record, i.e., article as published by the journal or platform after going through peer-review?**

( ) Yes, to a large extent

( ) Yes, to some extent

( ) To a little or no extent

( ) Do not know/cannot answer

**39) As an alternative to introducing a Secondary Publication Right, would you agree that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licenses covering various types of copyright-protected knowledge resources) or lumpsum remuneration regimes (publishers receive a pre-determined lumpsum payment for Open access publishing), could facilitate the mission of research organisations such as yours in a comparable way? Please explain the reasons for your answer.**

(Open-ended answer)

40) **As an alternative to introducing a Secondary Publication Right, what other legislative interventions or practices can you envisage to facilitate the mission of research organisations such as yours?**

(Open-ended answer)

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**Page entry logic:** This page will show when: #5 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands")

*Tell us about your experiences with Secondary Publication Right (SPR) legislation in your country*

**Logic: Hidden unless: #5 Question is one of the following answers ("Germany")**

41) **Overall, to what extent do the Secondary Publication Right provisions in Germany impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #41 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #5 Question is one of the following answers ("Germany")**

42) **Specifically, how strongly do the Secondary Publication Right provisions in Germany affect the following?**

Please select the most suitable option.

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to cover Open access publishing costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("France")**

43) **Overall, to what extent do the Secondary Publication Right provisions in France impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #43 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #5 Question is one of the following answers ("France"))**

44) **Specifically, how strongly do the Secondary Publication Right provisions in France affect the following?**

Please select the most suitable option.

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| publications published in Open access | | | | | | |
| Size of your organisation's budget allocated to cover Open access publishing costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Netherlands")**

45) **Overall, to what extent do the Secondary Publication Right provisions in the Netherlands impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #45 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #5 Question is one of the following answers ("Netherlands")**

46) **Specifically, how strongly do the Secondary Publication Right provisions in the Netherlands affect the following?**

Please select the most suitable option.

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Size of your organisation's budget allocated to cover Open access publishing costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria")**

47) **Overall, to what extent do the Secondary Publication Right provisions in Austria impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #47 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #5 Question is one of the following answers ("Austria")**

48) **Specifically, how strongly do the Secondary Publication Right provisions in Austria affect the following?**

Please select the most suitable option.

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to cover Open access publishing costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Belgium")**

49) **Overall, to what extent do the Secondary Publication Right provisions in Belgium impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #49 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #5 Question is one of the following answers ("Belgium")**

50) **Specifically, how strongly do the Secondary Publication Right provisions in Belgium affect the following?**

Please select the most suitable option.

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open access | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to cover Open access publishing costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Size of your organisation's budget allocated to subscriptions to | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| journals/access to knowledge costs | | | | | | |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

51) **Does your organisation consider that the Secondary Publication Right creates uncertainties in relation to access and reuse activities covering protected publications or data repositories?**

( ) Yes

( ) No

( ) Do not know/cannot answer

52) **What challenges and risks do you see?**

(Open-ended answer)

**Logic: Hidden unless: #5 Question is one of the following answers ("Germany")**

53) **Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Germany? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #5 Question is one of the following answers ("France")**

54) **Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in France? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #5 Question is one of the following answers ("Netherlands")**

55) **Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in the Netherlands? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria")**

56) **Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Austria? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #5 Question is one of the following answers ("Belgium")**

57) **Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Belgium? Please suggest some examples.**

(Open-ended answer)

*Tell us about your organisation's perspective as a publishing house/entity*

58) **Does your organisation have a publishing/press house or a related entity?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #58 Question is one of the following answers ("Yes")**

59) **What is the status of this entity?**

( ) For-profit

( ) Not-for-profit

( ) Do not know/cannot answer

( ) Other (please specify): _____

**Logic: Hidden unless: #5 Question is one of the following answers ("Germany")**

60) **In your opinion, did the Secondary Publication Right provisions in Germany increase or decrease the following**

Please select the most suitable option.

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share of research publications published in Open access by your organisation's publishing house/entity | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Number of manuscripts submitted by authors for review (i.e., popularity of your journals) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from users/readers accessing your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("France")**

61) **In your opinion, did the Secondary Publication Right provisions in France increase or decrease the following**

Please select the most suitable option.

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share of research publications published in Open access by your organisation's publishing house/entity | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Number of manuscripts submitted by authors for review (i.e., popularity of your journals) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from users/readers accessing your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Netherlands")**

62) **In your opinion, did the Secondary Publication Right provisions in the Netherlands increase or decrease the following**

Please select the most suitable option.

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share of research publications published in Open access by your organisation's publishing house/entity | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Number of manuscripts submitted by authors for review (i.e., popularity of your journals) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from users/readers accessing your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Austria")**

63) **In your opinion, did the Secondary Publication Right provisions in Austria increase or decrease the following**

Please select the most suitable option.

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share of research publications published in Open access by your organisation's publishing house/entity | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Number of manuscripts submitted by authors for review (i.e., popularity of your journals) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from users/readers accessing your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #5 Question is one of the following answers ("Belgium")**

64) **In your opinion, did the Secondary Publication Right provisions in Belgium increase or decrease the following**

Please select the most suitable option.

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Share of research publications published in Open access by your organisation's publishing house/entity | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Number of manuscripts submitted by authors for review (i.e., popularity of your journals) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from users/readers accessing your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

*Data and digital legislation-related questions*

66) **To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect research at your organisation in the next few years?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/Cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: Question 66 is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") to any of the options**

67) **To what extent does your organisation (expect to) benefit from the following laws and framework?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/Cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: Question 67 is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") to any of the options**

68) **What aspects of the laws and framework do you expect or consider to be an opportunity for scientific research?**

Please select all that apply

| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data for research purposes | Wider availability of private sector data for research purposes | Promotes trustworthy access and sharing of research data | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open Data Directive | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Governance Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| AI Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Markets Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Services Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| European Open Science Cloud (EOSC) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |

Other (please specify)_____

**Logic: Hidden unless: Question 66 is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") to any of the options**

69) **To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g., compliance costs, restrictions on freedom to manage research data)?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/Cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: Question 69 is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") to any of the options**

70) **What aspects of the laws and framework (are expected to) pose challenges for your organisation the most? (Select all that apply).**

Select all that apply

| | Legal uncertainty, i.e., unclear what use of data is allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Do not know/cannot answer |
|---|---|---|---|---|---|
| Open Data Directive | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Governance Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| AI Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Markets Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Services Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| European Open Science Cloud (EOSC) | [ ] | [ ] | [ ] | [ ] | [ ] |

Other (please specify)_____

**Logic: Hidden unless: Question 66 "Open Data Directive" is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

71) **Does the obligation of Article 10(2) Open data directive to allow the reuse of research data made publicly available in repositories require changes in the way you allow the reuse of research data by others of data produced in your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To a small extent

( ) Not at all

( ) Do not know/cannot answer

**Logic: Hidden unless: Question 66 "Data Governance Act" is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

72) **How relevant are the following elements of the Data Governance Act (DGA) to your organisation?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/Cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Wider availability of public sector data for research purposes (Chapter II DGA) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Regulation of data intermediary service providers (Chapter III DGA) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Regulation of data altruism organisations (Chapter IV DGA) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: Question 66 "Digital Services Act" is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

73) **To what extent does your organisation expect to make use – through its vetted researchers - of the research data access mechanism introduced by Article 40 DSA (e.g., by supporting researchers in satisfying and proving the requirements to become vetted)**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To a small extent

( ) Not at all

( ) Do not know/cannot answer

---

*Final questions*

74) **Would you have to share any other observations that were not covered in this survey?**

75) **Would you agree to participate in a follow-up interview (up to 45 minutes) on certain aspects covered in this survey?**

( ) Yes

( ) No

**Logic: Hidden unless: #75 Question is one of the following answers ("Yes")**

76) **Could you provide your email address?**

(Open-ended answer)

## ERA 2 Action study – Scientific Publishers survey

*Introductory questions*

2) **What is the type of your organisation?***

( ) Commercial publisher

( ) Non-commercial publisher

( ) Institutional publisher

( ) Other (please specify): _____

3) **In which country is the organisation that you represent located?***

( ) Austria

( ) Belgium

( ) Bulgaria

( ) Croatia

( ) Cyprus

( ) Czech Republic

( ) Denmark

( ) Estonia

( ) Finland

( ) France

( ) Germany

( ) Greece

( ) Hungary

( ) Iceland

( ) Ireland

( ) Italy

( ) Latvia

( ) Lichtenstein

( ) Lithuania

( ) Luxembourg

( ) Malta

( ) Netherlands

( ) Norway

( ) Poland

( ) Portugal

( ) Romania

( ) Slovakia

( ) Slovenia

( ) Spain

( ) Sweden

( ) Switzerland

( ) United Kingdom

( ) Other country (please specify): _____

**Logic: Hidden unless: #3 Question is one of the following answers ("Austria", "Belgium", "Bulgaria", "Croatia", "Cyprus", "Czech Republic", "Denmark", "Estonia", "Finland", "France", "Germany", "Greece", "Hungary", "Iceland", "Ireland", "Italy", "Latvia", "Lichtenstein", "Lithuania", "Luxembourg", "Malta", "Netherlands", "Norway", "Poland", "Portugal", "Romania", "Slovakia", "Slovenia", "Spain", "Sweden", "Switzerland", "United Kingdom")**

4) **In 2022, approximately what revenue did you generate from scientific publishing?***

( ) I prefer not to reveal this information

( ) Less than 0.5 million euros

( ) Between 0.5 and 2.4 million euros

( ) Between 2.5 and 4.9 million euros

( ) Between 5 and 9.9 million euros

( ) More than 10 million euros

( ) Do not know/cannot answer

5) **Overall, what estimated share of revenue did you generate from the following sources in 2022?**

Please select the most suitable option.

| | 75-100% of revenue in 2022 | 50-74% of revenue in 2022 | 25-49% of revenue in 2022 | 1-25% of revenue in 2022 | No revenue | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Journal subscriptions | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Article processing charges | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Book sales | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Licensing and permissions (e.g., for use in course materials, textbooks, digital resources) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Online databases and platforms | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Revenue was generated from other sources (please specify)_____

6) **Is access to your journals uniform in all countries where you offer access to your scientific content?**

( ) Yes, access to the same journals is uniform in all countries

( ) Access to a journal depends on the country

( ) Other (please specify): _____

*Your overall publishing model and Open access policy*

7) **How many scientific publications did you publish in 2022?**

( ) 0 Publications

( ) 1-49 Publications

( ) 50-249 Publications

( ) 250-999 publications

( ) 1000-4999 publications

( ) More than 5000 publications

( ) Do not know/cannot answer

8) **How many scientific journals and/or publishing platforms does your portfolio include?**

( ) 0

( ) 1-9

( ) 10-24

( ) 25-49

( ) 50-99

( ) 100-249

( ) More than 250

( ) Do not know/cannot answer

**Logic: Hidden unless: #8 Question is one of the following answers ("1-9","10-24","25-49","50-99","100-249","More than 250")**

9) **In the previous question, you indicated that you have at least one scientific journal and/or publishing platform. Could you tell us, out of those, what percentage of them are:**

| | 100% of your scientific journals and/or publishing platforms | 50-99% of your scientific journals and/or publishing platforms | 25-49% of your scientific journals and/or publishing platforms | 1-24% of your scientific journals and/or publishing platforms | 0% of your scientific journals and/or publishing platforms | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Open access publishing journals in which some scientific publications are openly accessible to everyone upon the payment of a fee, and some others are only accessible to subscribers. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Closed journals in which all scientific publications are only accessible to subscribers. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #9 Question is one of the following answers ("100% of your scientific journals and/or publishing platforms","50-99% of your scientific journals and/or publishing platforms")**

10) **You have indicated that 50-99% or 100% of your portfolio included Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?**

| | 100% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 0% of these specific scientific journals and/or publishing platforms | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open access is provided immediately (no embargo period) to all scientific publications under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| immediately (no embargo period) | | | | | | |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the published version of the publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the published version of the publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the published version of the publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available under open licences (e.g., Creative Commons By) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require researchers to ensure that the | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| accompanying research data is complete and well-documented to facilitate reuse | | | | | | |
| Our journals indicate data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #9 Question is one of the following answers ("100% of your scientific journals and/or publishing platforms","50-99% of your scientific journals and/or publishing platforms")**

11) **You have indicated that 50-99% or 100% of your portfolio included Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?**

| | 100% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 0% of these specific scientific journals and/or publishing platforms | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open access is provided immediately (no embargo period) to all scientific publications under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| manuscript accepted for publication immediately and under open licenses | | | | | | |
| Authors/institutions are allowed to provide Open access to the published version of the publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the published version of the publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the published version of the publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available under open licences (e.g., Creative Commons By) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require researchers to ensure that the accompanying research data is complete and well-documented to facilitate reuse | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals indicate data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #9 Question is one of the following answers ("100% of your scientific journals and/or publishing platforms","50-99% of your scientific journals and/or publishing platforms")**

12) **You have indicated that 50-99% or 100% of your portfolio included Open access publishing platform(s)/journals in which in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?**

| | 100% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 0% of these specific scientific journals and/or publishing platforms | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open access is provided immediately (no embargo period) to all scientific publications under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| published version of the publication after an embargo period | | | | | | |
| Authors/institutions are allowed to provide Open access to the published version of the publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the published version of the publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available under open licences (e.g., Creative Commons By) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require researchers to ensure that the accompanying research data is complete and well-documented to facilitate reuse | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals indicate data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #9 Question "Closed journals in which all scientific publications are only accessible to subscribers." is one of the following answers ("100% of your scientific journals and/or publishing platforms","50-99% of your scientific journals and/or publishing platforms")**

13) **You have indicated that 50-99% or 100% of your portfolio included journals in which all scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?**

| | 100% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 0% of these specific scientific journals and/or publishing platforms | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open access is provided immediately (no embargo period) to all scientific publications under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the published version of the publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Authors/institutions are allowed to provide Open access to the published version of the publication | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| immediately (no embargo period) | | | | | | |
| Authors/institutions are allowed to provide Open access via repositories to the published version of the publication immediately and under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require making accompanying research data available under open licences (e.g., Creative Commons By) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals require researchers to ensure that the accompanying research data is complete and well-documented to facilitate reuse | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Our journals indicate data standards or practices to be used | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: #9 is one of the following answers ("100% of your scientific journals and/or publishing platforms","50-99% of your scientific journals and/or publishing platforms","25-49% of your scientific journals and/or publishing platforms","1-24% of your scientific journals and/or publishing platforms")**

14) **What is the approximate article processing cost that you charge per article? If the cost differs by journal, please indicate the most common/frequent price that you charge.**

( ) Other cost/our pricing model differs (please specify):

_____

( ) Less than 500 euros per article

( ) Between 500 and 999 euros per article

( ) Between 1, 000 and 1 999 euros per article

( ) Between 2 000 and 2 999 euros per article

( ) Between 3 000 and 3 999 euros per article

( ) Between 3 999 and 4 999 euros per article

( ) More than 5 000 euros per article

( ) Do not know/cannot answer

( ) Other (please specify): _____

**Logic: Hidden unless: in 10-12 Questions the option "Authors/institutions are allowed to provide Open access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period" is one of the following answers ("100% of these specific scientific journals and/or publishing platforms","50-99% of these specific scientific journals and/or publishing platforms","25-49% of these specific scientific journals and/or publishing platforms","1-24% of these specific scientific journals and/or publishing platforms")**

15) **Now consider your journals where Open access can be provided after an embargo period. What is the length of the embargo period in these journals?** Please select all that apply

| | All/almost all of our journals have this embargo period | Some of our journals have this embargo period | None of our journals have this embargo period | Do not know/cannot answer |
|---|---|---|---|---|
| 0-3 months | [ ] | [ ] | [ ] | [ ] |
| 4-5 months | [ ] | [ ] | [ ] | [ ] |
| 6-12 months | [ ] | [ ] | [ ] | [ ] |
| Longer than 12 months | [ ] | [ ] | [ ] | [ ] |

16) **In the EU Member States where you operate, have you entered into any agreements with institutional users or representative organisations that define Open access policies/requirements?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #16 Question is one of the following answers ("Yes")**

17) **Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?**

Please select the most suitable option for each of the below issues

| | Very challenging | Somewhat challenging | Not challenging | This issue was not discussed during the negotiations | Do not know/cannot answer |
|---|---|---|---|---|---|
| Terms and conditions relating to Open access to publications/research results | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | |
|---|---|---|---|---|---|
| Terms and conditions relating to rights/ownership of different types of research works | ( ) | ( ) | ( ) | ( ) | ( ) |
| Embargo periods for publishing in self-archives | ( ) | ( ) | ( ) | ( ) | ( ) |
| Cost of Open access publishing | ( ) | ( ) | ( ) | ( ) | ( ) |
| Subscription terms/costs to journals with restricted access | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

18) **Which contractual practice identifies your organisation's approach to publishing agreements? If more than one practice applies to your journals, please mark them all.**

[ ] Copyright is not assigned by the author, and the author grants an exclusive licence

[ ] Copyright is not assigned by the author, and the author grants a non-exclusive licence

[ ] Copyright is assigned by the author(s) in its entirety

[ ] Copyright is assigned partially by the author(s)

[ ] Do not know/cannot answer

**Logic: Hidden unless: in #18 Question there are more than one selected options**

19) **If your organisation employs multiple contractual practices for publishing agreements, please specify the approximate percentage breakdown for each of the selected practices.**

[ ] Copyright is not assigned by the author, and the author grants an exclusive licence:
_____

[ ] Copyright is not assigned by the author, and the author grants a non-exclusive licence:
_____

[ ] Copyright is assigned by the author(s) in its entirety:
_____

[ ] Copyright is assigned partially by the author(s):
_____

[ ] Do not know/cannot answer

20) **In case the grant of rights from the author to your organisation remains limited, please specify in which instance(s) the author retains rights.** Please select all that apply

[ ] The grant of rights only covers a specific period of time

[ ] The grant of rights only covers specific types of rights

[ ] The grant of rights only covers a specific territory/specific territories

[ ] Other (please specify): _____

[ ] Do not know/cannot answer

**Logic: Hidden unless: #18 Question is one of the following answers ("Copyright is assigned by the author(s) in its entirety","Copyright is assigned partially by the author(s)")**

21) **Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?**

Please select the most suitable option

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Do not know/ cannot answer |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorization | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| permission from copyright holders | | | | | | |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licenses covering various types of copyright-protected knowledge resources) or | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| lumpsum remuneration regimes (copyright holders receive a pre-determined lumpsum payment for research use) | | | | | | |

Other (please specify)_____

*Tell us about your views on the provisions of a potential EU-wide Secondary Publication Right legislation*

22) **In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?**

( ) Very positively

( ) Rather positively

( ) Neither positively nor negatively

( ) Rather negatively

( ) Very negatively

( ) Do not know/cannot answer

**Logic: Hidden unless: #22 Question is one of the following answers ("Rather negatively", "Very negatively")**

23) **Could you explain why you negatively view the potential introduction of an EU-wide Secondary Publication Right legislation?**

(Open-ended answer)

**Logic: Hidden unless: #22 Question is one of the following answers ("Very positively","Rather positively","Rather negatively","Very negatively")**

24) **To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Do not know/cannot answer |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including | ( ) | ( ) | ( ) | ( ) |

| | | | | |
|---|---|---|---|---|
| not only articles but also other works – regardless of the publication | | | | |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right would cover the version of record (i.e., the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions. | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as six months. | ( ) | ( ) | ( ) | ( ) |
| A harmonised Secondary Publication Right would allow Open access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes. | ( ) | ( ) | ( ) | ( ) |

25) **What change of revenue would you expect to your organisation if Open access was allowed via repositories to scientific publications resulting from public funding in one of the following ways:**

When answering this question, assume that these Secondary Publication Rights provisions were adopted at an EU level.

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| To the peer-reviewed manuscript accepted for publication immediately | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication immediately under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| To the published version after an embargo period | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| To the published version immediately | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| To the published version immediately under open licenses | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

26) **The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?**

( ) Option 1: an EU-wide embargo period that is the same across all disciplines

( ) Option 2: an EU-wide embargo period that differs by discipline

( ) Neither option, as I am strongly against the potential introduction of an EU-wide embargo period

( ) Other (please specify): _____

( ) Do not know/cannot answer

**Logic: Hidden unless: #26 Question is one of the following answers ("Option 1: an EU-wide embargo period that is the same across all disciplines")**

27) **Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?**

( ) 12 months

( ) Between 9-11 months

( ) Between 6-8 months

( ) Between 3-5 months

( ) Between 1-2 months

( ) 0 months/no embargo period

( ) Other (please specify): _____

( ) Do not know/cannot answer

28) **As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licenses covering various types of copyright-protected knowledge resources) or lumpsum remuneration regimes (publishers receive a pre-determined lump sum payment for Open access publishing), could be acceptable to your organisation?**

( ) Yes

( ) No

( ) Do not know/cannot answer

**Logic: Hidden unless: #28 Question is one of the following answers ("Yes","No")**

29) **Please explain the reasons for your answer to the previous question.**

(Open-ended answer)

30) **As an alternative to introducing an EU-wide Secondary Publication Right, what other legislative interventions or practices can you envisage to facilitate the uptake of Open access and open science?**

(Open-ended answer)

31) **As scientific publishers, what extra services do you provide to authors that enhance the value of their publication compared to self-publishing?**

(Open-ended answer)

32) **How does/would the introduction of the EU-wide Secondary Publication Right impact your publication services offered to authors?**

(Open-ended answer)

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*Tell us about your experiences with Secondary Publication Right (SPR) legislation in the five EU countries that have introduced it*

33) **Do you offer access to your scientific journals in any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)?** Please select all that apply

[ ] Austria

[ ] Belgium

[ ] France

[ ] Germany

[ ] Netherlands

[ ] Do not know/cannot answer

[ ] No, we do not offer access to scientific journals in any of the five EU Member States

**Logic: Hidden unless: #33 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

34) **If you do not offer access in all five EU Member States (Austria, Belgium, France, Germany, the Netherlands), could you provide reasons, why certain Members States are excluded from access to your scientific journals?**

(Open-ended answer)

**Logic: Hidden unless: #33 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

35) **Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?**

( ) To a very large extent

( ) To a large extent

( ) To a moderate extent

( ) To little or no extent

( ) Do not know/cannot answer

**Logic: Hidden unless: #35 Question is one of the following answers ("To a very large extent","To a large extent","To a moderate extent") AND #33 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands"))**

36) **In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following:**

Please select all that apply

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e., after factoring all increases/decreases in different sources of revenue) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The share of research publications published in Open access that appeared originally in your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The number of manuscripts submitted by authors for review (i.e., the popularity of your journals among researchers looking to publish their papers) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Readership or citations of your journals' publications (i.e., journal visits, reads, downloads, etc. of your publications) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from article processing charges | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from subscriptions to your journals | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Amount of revenue generated from access to online databases/platforms that you offer | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: #33 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

37) **To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?**

Please select the most suitable option.

| | Differs to a large extent from other countries | Differs to some extent | Differs to a little extent | Does not differ | Do not know/cannot answer |
|---|---|---|---|---|---|
| Your publishing policy, e.g., how you accept/reject submissions, promote your journals, etc., in the five countries | ( ) | ( ) | ( ) | ( ) | ( ) |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | ( ) | ( ) | ( ) | ( ) | ( ) |

Other (please specify)_____

**Logic: Hidden unless: in #37 Question is one of the following answers ("Differs to a large extent from other countries","Differs to some extent") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

38) **Can you explain the adjustments you had to make with regard to any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)?**

(Open-ended answer)

**Logic: Hidden unless: #3 Question is one of the following answers ("Austria") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

39) **To support public policy goals aiming at Open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Austria that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #3 Question is one of the following answers ("Belgium") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

40) **To support public policy goals aiming at Open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Belgium that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #3 Question is one of the following answers ("France") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

41) **To support public policy goals aiming at Open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in France that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #3 Question is one of the following answers ("Germany") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

42) **To support public policy goals aiming at Open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Germany that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: (#3 Question is one of the following answers ("Netherlands") AND #33 Question is one of the following answers ("Austria","Belgium","France","Germany","Netherlands"))**

43) **To support public policy goals aiming at Open access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in the Netherlands that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

(Open-ended answer)

**Logic: Hidden unless: #33 Question is one of the following answers ("Austria", "Belgium", "France", "Germany", "Netherlands")**

44) **Would you have any specific reservations about the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands), considering your position as a scientific publisher?**

(Open-ended answer)

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*Data and digital legislation-related questions*

45) **To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: in #45 Question to any of the options is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

46) **To what extent does your organisation (expect to) benefit from the following laws and framework?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: in #45 Question to any of the options is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

47) **What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?**

Please select all that apply.

| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data | Wider availability of private sector data | Promotes trustworthy access and sharing of research data | Do not know/cannot answer |
|---|---|---|---|---|---|---|
| Open Data Directive | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Governance Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| AI Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Markets Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Services Act | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |
| European Open Science Cloud (EOSC) | [ ] | [ ] | [ ] | [ ] | [ ] | [ ] |

Other (please specify)_____

**Logic: Hidden unless: in #45 Question to any of the options is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

48) **To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g., compliance costs, restrictions on freedom to manage research data)?**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Do not know/cannot answer | Not applicable |
|---|---|---|---|---|---|---|---|
| Open Data Directive | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Governance Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AI Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Data Act (proposal) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Markets Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Digital Services Act | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| European Open Science Cloud (EOSC) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |

**Logic: Hidden unless: in #48 Question to any of the options is one of the following answers ("To a very large extent","To a large extent","To a moderate extent")**

49) **What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?**

Please select all that apply.

| | Legal uncertainty, i.e., unclear what use of data is allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Do not know/cannot answer |
|---|---|---|---|---|---|
| Open Data Directive | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Governance Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| AI Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] |
| Data Act (proposal) | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Markets Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| Digital Services Act | [ ] | [ ] | [ ] | [ ] | [ ] |
| European Open Science Cloud (EOSC) | [ ] | [ ] | [ ] | [ ] | [ ] |

Other (please specify)_____

*Final questions*

50) **Would you have to share any other observations that were not covered in this survey?**

(Open-ended answer)

51) **Would you agree to participate in a follow-up interview (up to 45 minutes) on certain aspects covered in this survey?**

( ) Yes

( ) No

**Logic: Hidden unless: #51 Question is one of the following answers ("Yes")**

52) **Could you provide your email address?***

(Open-ended answer)

# ANNEX 5: SYNOPSIS OF THE SURVEY PROGRAMME RESULTS

The survey programme comprised **three distinct surveys targeting different stakeholders — researchers, research performing organisations, and publishers**. This approach was essential to encompass a comprehensive range of respondents whose perspectives are crucial for gathering evidence in this study.

## The overall aim of the surveys

The surveys were designed to collect evidence for evaluating various intervention options related to the accessibility and reuse of scientific publications and research data resulting from public funding. Both copyright and data and digital legislation were addressed in these surveys.

The purpose of the surveys was twofold. Firstly, the surveys played a vital role in collecting data that contributed to specific study tasks, particularly Tasks 2 and 3. Building upon the insights from Task 1, which assessed the concrete effects of the EU copyright framework on research through comprehensive methods, including desk research, literature reviews, surveys, and interviews with legal experts and stakeholders, Task 2 involved cross-national legal analyses concerning the Secondary Publication Right to identify improvement areas and potential interventions. Task 3 aimed to estimate the potential impact of these proposed interventions by analysing their expected benefits and advantages, drawing on the data and findings from Tasks 1 and 2. Second, the study team conducted surveys to collect evidence for assessing different intervention options related to the accessibility and reuse of scientific publications and research data. The focus was on access to and reuse of publications, data, and other works for research purposes. The surveys also aimed to identify potential measures to address these issues.

## Methodological approach

Designing a comprehensive methodological approach for all three surveys involved several key elements to ensure the study's rigour and reliability. Below are the components that are presented for each of the three surveys:

- **Population and sampling.** The surveys employed distinct methods for acquiring and gathering potential respondents. The researchers' survey involved a sampling approach. Further specifics regarding the population and sampling strategy are provided in the respective sections for each survey below.

- **Data collection procedure and the timeline.** The timeline methodology, including release and planned reminders to boost response rates, is outlined in the respective survey sections below.

- **Survey instrument.** The launching process for all three surveys utilised the Alchemer tool, which is customised to accommodate the complexity of the studies and evaluations. Alchemer possesses all the necessary functionalities for conducting precise yet anonymous surveys, providing each respondent with exclusive invitation-only access to the questionnaire. The tool also facilitates advanced survey branching, allowing for the programming and funnelling of questionnaires with diverse question types, formulations, and answer options tailored to different respondent categories. Data processed through the in-house tool are encrypted, and all information is securely stored on PPMI's internal servers.

- **Ethical considerations.** The safeguards ensuring participant protection involved a privacy statement provided by the European Commission, which was included with each survey. Participants were required to confirm their agreement with the Privacy Statement, specifically tailored to the type of survey (researchers, RPOs, and publishers), before initiating the survey. Furthermore, the data collected from participants was exclusively stored in the PPMI cloud, with no sharing beyond the study team.

- **Pilot Testing.** All three surveys underwent pilot procedures prior to being distributed to the selected pool of respondents. Additional information is provided in the respective survey sections.

- **Limitations.** The limitations are discussed in the separate section below.

The overall timeline of all three surveys is presented in Table below. However, extensive explanations of the timeline are presented in each survey's sections on the *Timeline and dissemination.*

**Table 38. Survey programme schedule**

| Survey | Targeted stakeholders | Number of contacts | Launch date | Reminder 1 | Reminder 2 | Reminder 3 | Closure date |
|---|---|---|---|---|---|---|---|
| **Survey 1: Researchers** | Participant Contacts (PACO) | 14 000 | 6-10 Oct | 17 Oct | 24 Oct | 30 Oct | 30 Oct |
| **Survey 2: Research-performing organisations** | Legal Entity Appointed Representative | 4 915 | 19-26 Oct | 3 Nov | 9 Nov | 14 Nov | 15 Nov |
| **Survey 3: Scientific publishers** | Scientific publishers | 553 | 3-8 Nov | 13 Nov | 21 Nov | 29 Nov | 30 Nov |

*Source: Compiled by the study team.*

## Researchers' survey

A survey of researchers ran between 6 October 2023 and 6 November 2023. It was divided into two main sections - the copyright legislation and the data and digital legislation.

### *Population and sampling*

The **surveyed researchers were drawn from a contacts database provided by the European Commission** on 19 September 2023, which included participant contact (PACO[1756]) details from Horizon 2020 and Horizon Europe projects.

Initially, the database comprised 592 592 contacts, but after filtering out participants from the EU/EEA, Switzerland and the UK, the list was narrowed down to 568 985 contacts.

- Subsequently, participants without email addresses ("Project PACO email") were excluded, resulting in a further refined list of 523 802 contacts.

1756 This is a representative of any other organisation in the consortium that is not the coordinating organisation. An organisation can have an unlimited number of PACOs per project, https://ec.europa.eu/research/participants/docs/h2020-funding-guide/user-account-and-roles/roles-and-access-rights_en.htm

- In order to ensure uniqueness, duplicate emails were removed, applying the logic that the combination of each project and organisation should have only one contact. **The final list comprised 107 102 unique contacts.**

Reaching the researchers through the EU Framework programme's participants databases was the best way to have a good quality sample of email addresses. Nevertheless, to ensure the representativeness of the researcher's responses, some of the survey questions only focused on publications that did not result from Horizon 2020 and Horizon Europe projects. These methodological considerations are further elaborated in the section on limitations of the survey design.

The goal of our sampling process was to have a representative sample and avoid overflooding. The goal was to reach 1 000 responses from beneficiaries, with a targeted response rate of 10-15%. By using random selection, 10 000 PACOs were chosen from the list. Stratified sampling was employed to ensure representation in the sample, dividing the population into subgroups (strata) based on country groups. While the ideal parameters for sample selection would include the researcher's career stage and disciplinary focus, the EC-provided file lacked this information. Consequently, the study team used country groups for sampling, covering three categories: 1) 5 countries with implemented Secondary Publication Rights - SPR (Austria, Germany, Belgium, the Netherlands, and France); 2) EEA countries (excluding SPR countries and Switzerland); 3) the UK and Switzerland. Each of the first two groups had 4 200 selected contacts, while the third group had 1 600 contacts.

In order to ensure the functionality of the tool and assess whether the uploaded questionnaire operated as intended, **a pilot survey was conducted on 6 October 2023**. Following internal testing within the study team, the pilot survey was distributed to 100 randomly selected contacts. The distribution maintained the same representation across the three country groups, with 42 invitations sent to each of the Secondary Publication Right (SPR) and European Economic Area (EEA) countries (excluding Switzerland) and 16 invitations sent to the UK and Switzerland.

Ultimately, the survey population was augmented with a booster on 24 October 2023. Upon reviewing the results, an imbalance was observed, with over 55% of researchers coming from the engineering and technology scientific disciplines. In order to address this, an additional 4 000 researchers were targeted, focusing on three specific disciplines: health (including project calls from Horizon 2020 Societal Challenge 1 and Horizon Europe Cluster 1), social sciences (encompassing project calls from Horizon 2020 Societal Challenge 6 and Horizon Europe Cluster 2), and agriculture and environment (covering project calls from Horizon 2020 Societal Challenge 2 and Horizon Europe Cluster 6). Similar to the initial 10 000 contacts, the three country groups were maintained, with each Secondary Publication Right (SPR) and EEA group (excluding Switzerland) receiving 1 680 invitations and the UK and Switzerland receiving 640 invitations. The discipline was not factored into the initial sampling, given the inclusion of not only Horizon 2020/Horizon Europe thematic calls but also calls from other project types where the discipline may not be explicitly defined (e.g. Marie-Curie actions).

### *The timeline and dissemination*

The timeline of the researchers' survey, as depicted in Figure 1, commenced with the pilot survey sent to the initial 100 researchers on 6 October 2023. This was succeeded by the official launch of the survey to 10 000 researchers on 10 October 2023.

Subsequent events in the survey timeline unfolded as follows: a reminder to the pilot on 11 October, the first reminder to the initial contacts on 17 October, and the release of a survey booster to an additional 4 000 contacts on 24 October. Concurrently, the second reminder was dispatched to the initial 10 000 contacts. On 30 October, the survey process continued with the

first reminder to the newly boosted contacts and the third reminder to the initial 10 000 contacts. The survey period concluded with data extraction on 6 November 2023, coinciding with the holiday week from 30 October to 3 November.

**Figure 43. Timeline of the researchers' survey**


*Source: Compiled by the study team.*

After the data extraction, frequency tables and graphs were generated, and the results were communicated to the study team on10 November 2023. The researchers' survey responses were divided into three sections: overall results, results from the SPR countries, and results from non-SPR countries. Additionally, the open-ended responses were categorised using artificial intelligence.

## Research Performing Organisations' (RPOs) survey

A survey of the research performing organisations (RPOs) ran between 6 October 2023 and 6 November 2023. Like the researchers' survey, it was divided into two main sections – the copyright legislation and the data and digital legislation.

### *Population and sampling*

For the RPOs survey, the study team utilised the Legal Entity Appointed Representative (LEAR) of organisations, which had received funds or indicated an interest to apply for funds from Horizon 2020 and Horizon Europe, to distribute the survey to the targeted individuals, such as those leading the library and/or publishing functions within the organisation. Alternatively, this could be the person overseeing the organisation's overall Open Access/Open Science policy.

The contact list used for survey dissemination was received on 20 October.

The shared file initially contained 8 316 contacts. After removing duplicates and selecting only the LEARs from EEA, Switzerland and the UK, the list was narrowed down to 4 915 contacts. The study team did not apply sampling to the population due to the manageable number of contacts.

Although reaching the targeted persons via LEAR required an additional step of forwarding the survey, it was deemed the best option. Other manual selection options were not feasible due to the vast number of RPOs in EEA, Switzerland and the UK and the lack of access to

the correct contact positions, potentially resulting in contacting colleagues with a 'cold' email and not reaching the right individuals.

To mitigate the risk of not reaching the right contacts, the study team implemented several steps. Firstly, in the survey invite, recipients were asked to forward the invitation to individuals leading the library and/or publishing function within their organisation ("As a designated Legal Entity Appointed Representative of your organisation, we are kindly asking you to **forward this invitation to a person who leads the library and/or publishing function within your organisation** (e.g. your Library Director or your Lead Copyright Officer). Alternatively, this could be the person who leads your organisation's overall Open Access/Open Science policy.")

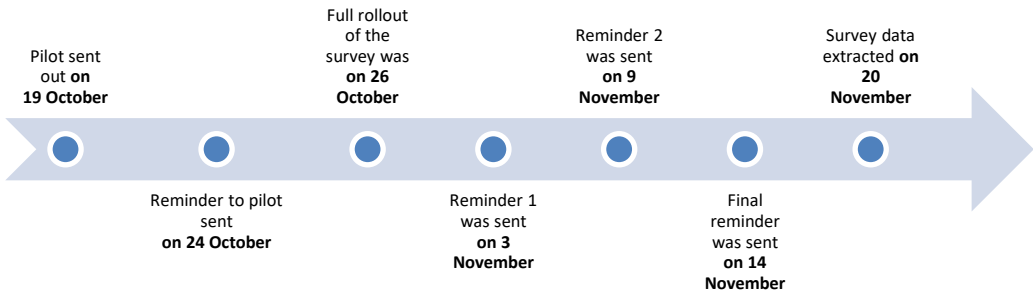
Secondly, in the survey itself, participants were asked to indicate whether they held the position of Library Director, Lead Copyright Officer, Open Access Officer/Adviser (or similar), or Other. Thirdly, if the RPO selected the *other category*, they were prompted with a question ensuring their ability to provide insights and views on Open Access policy, challenges, copyright regulations, and Secondary Publication Rights. Only those who affirmed their capability to contribute were qualified to proceed with the survey.

### *The timeline and dissemination*

The timeline for the RPO survey, illustrated in Figure 2, initiated with the pilot survey dispatched to the initial 200 RPOs on 19 October 2023, followed by the official launch to 4 715 respondents RPOs on 26 October 2023. Sequential developments in the survey timeline unfolded as follows: a reminder to the pilot on 24 October, the first reminder to the initial contacts on 3 November, the second reminder on 9 November, and the final reminder on 14 November. The survey concluded on 15 November at midnight, and data extraction occurred on 20 November.

Aside from the invitations dispatched through our email campaign, the research team enlisted the assistance of two organisations, LIBER Europe and Knowledge Rights 21, to help circulate the survey among their members. Although the study team garnered 26 responses through the Knowledge Rights 21-distributed link and no responses from the LIBER-distributed link, it is crucial to acknowledge that these links were employed only to enhance the response rate. It is plausible that individuals who were encouraged to complete the survey through these organisations opted to utilise the initial email link received from the study team rather than the one disseminated through LIBER or Knowledge Rights 21.

**Figure 44. Timeline of the RPO survey**




*Source: Compiled by the study team.*

By 24 November, the frequency tables had been compiled and distributed among the study team. Subsequently, on 27 November, graphs were incorporated. Furthermore, artificial intelligence was employed to categorise the open-ended responses.

## Scientific publishers' survey

A survey of the publishers ran between 3 November 2023 and 30 November 2023. It was divided into two sections -– the copyright legislation and the data and digital legislation.

*Population and sampling*

Regarding the list of publishers, the study team generated the scientific publishers' list using the OpenAlex catalogue for the global research system. We matched the publishers with the Horizon 2020 publications and counted the publications per publisher; in total, there were 1 269 publishers with at least one publication. Then, we filtered out the list by country, including the European Union Member States, countries from the European Economic Area (EEA), and Switzerland. The final list of organisations included 615 publishers. Using OpenAlex allowed the study team to have the required information from the publishers to find the contacts via Apollo.io tool (e.g. country and website). Apollo was selected as a primary tool for finding contacts as it is the leading data intelligence and sales engagement platform. Using it, the study team aimed to target an audience by selecting filters that match specific criteria (e.g. based on industry, job title, company size, and location). The platform allowed exporting the compiled contact list containing targeted persons' email addresses and/or other contact information. Importantly, Apollo.io allowed persons with very specific job titles within specific industries and organisations to be found.

Furthermore, the final list was checked to ensure that it would include at least one publisher from EEA and Switzerland, and double-checked with the one sent by the European Commission Excel sheet on 17 August 2023, with the list of publishers publishing the peer-reviewed publications resulting from Horizon 2020 and Horizon Europe projects, extracted from the Horizon 2020 Dashboard. Furthermore, the study team received 13 additional publishers' contacts **from the STM Association,** which were integrated into the contact list. If their shared contact persons were from the same publishers' organisations where the study team already had contact points, we changed those with the ones shared by STM.

To optimise the likelihood of quality responses and achieve a higher response rate, the study team aspired to secure up to three contact persons from each organisation. The primary contact targeted high-ranking positions such as the head of the library or managing director. However, for some organisations, mid-level managers or executives were engaged based on the company's size and structure. In instances where selected keywords yielded insufficient results, contacts were extended to the Vice President, President, or Chief Executive Officer (CEO). In cases where relevant contact information for these positions was unavailable, the study team resorted to manual contact mapping for publishing organisations. Challenges encountered in locating contacts stemmed from non-functional publisher websites, instances where multiple publishers merged into a single organisation, and duplicates of organisations with minor variations in their names. Ultimately, 553 publishers were contacted, each with at least one designated contact person.

**The boost to dissemination included the distribution of the survey via publishers' associations and LinkedIn outreach:**

- A LinkedIn Sales Navigator in-mail was sent to 50 contacts on 8 November 2023. However, it yielded limited productivity, with most publishers expressing better suitability for the RPO survey, indicating they had already completed it.

- The survey was disseminated through the STM Association email sent by STM on 14 November 2023.

- The French Publishers Association (SNE) collaborated with the study team, disseminating the survey to its members on15 November.

- On 20 November, the French Publishers Journal Association (FNPS), recommended by the French Publishers Association (SNE), participated by disseminating the survey via their weekly newsletter and specific mailing to their members.

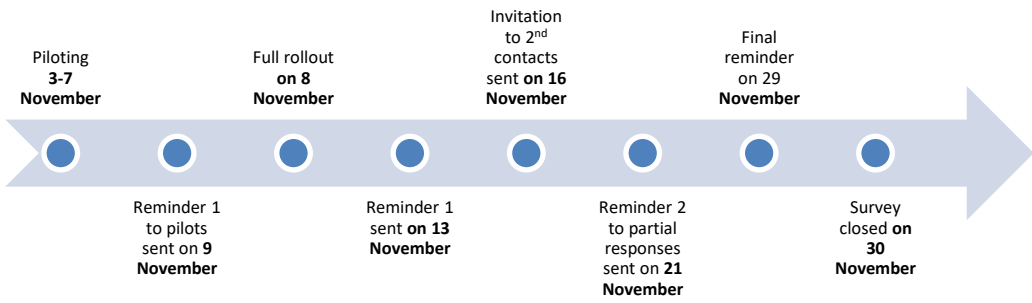
*The timeline and dissemination*

The timeline for the publishers' survey was meticulously structured to ensure comprehensive coverage and maximum participation. The initial phase involved two pilots: the first, launched on 3 November, targeted 50 scientific publishers, predominantly comprising institutional and non-commercial entities. With an absence of responses within the initial four days, adjustments were made to the survey message and subject line to bolster visibility. Subsequently, a second pilot, featuring an updated invitation, was introduced on 7 November to an additional 30 contacts. It is crucial to highlight that throughout both the pilot and the full deployment of the survey, proactive measures were implemented to maintain accessibility. In instances where the primary contact of a publisher's organisation proved unreachable due to non-functional or unsubscribed email addresses, swift replacements were made with the 2nd or 3rd contacts, ensuring seamless continuity and engagement in the survey process. This strategic approach contributed to the survey's effectiveness.

Both the 50 contacts from the first pilot and the 30 contacts from the second pilot received timely reminders on 9 November 2023. Following these preliminary phases, the full campaign was officially launched on 8 November 2023, extending to the remaining contacts. In order to ensure engagement throughout the campaign, the first reminder was dispatched on 13 November 2023. Additionally, for those who opened the survey but only provided partial responses, a reminder was sent on 21 November. It was sent only to the partial responses to enhance response rates, and secondary invitations were sent to second contacts of publishers' organisations that exhibited no reaction (those who did not open the survey) on 16 November 2023. To avoid sending reminders to the 1st contacts who did not open the survey and to prevent potential duplication of results, the reminder was only sent to those who provided a partial response (from both 1st and 2nd invites).

As the campaign progressed, the final reminder for all partial responses was issued on 29 November 2023. The survey officially concluded on 30 November 2023; however, data extraction was scheduled for 5 December 2023, allowing those with delayed responses an opportunity to finalise their input. This meticulous timeline was designed to balance thorough engagement and flexibility for participants.

**Figure 45. Timeline of the publishers' survey**




*Source: Compiled by the study team.*

## Data cleaning and overview of the results

### Justification

Surveys were distributed through the Alchemer tool, affording the study team visibility into partial responses. Alchemer's functionality includes the capacity to capture incomplete responses to survey questionnaires, enabling access to valuable data even in instances where respondents do not fully complete the questionnaire or neglect to click the 'submit' button upon completion.

This feature proves particularly crucial for lengthy questionnaires, where respondent survey fatigue might occur, and they can just drop out. However, it is imperative to approach partial survey responses with caution. A notable share of these partial responses originates from respondents who engaged with the survey, addressing only a few background questions without progressing to the main section of the questionnaire. Others may have cursorily navigated through the survey, providing arbitrary responses to gain insight into the survey's content without furnishing accurate or valid information.

To ensure the integrity of our analysis and deliver insights based on robust, accurate, and valuable data, our study team meticulously cleaned partial survey responses thoroughly. This process aimed to exclude instances where respondents did not engage meaningfully with the survey, thereby enhancing the reliability of our findings.

### General criteria for eliminating irrelevant partial responses

In implementing the data-cleaning process, the study team adhered to a set of general criteria to eliminate irrelevant partial responses. The following guidelines were applied:

1. **Exclusion based on question skipping.** Partial and completed responses that omitted more than two survey questions within each section (copyright and data and digital legislation, treated separately) were excluded. This initial step aimed to filter out responses that lacked substantial information relevant to the evaluation questions beyond basic background details. Notably, open-ended questions were not considered in the count, as these fields typically capture responses only from individuals with specific opinions on the given topic. Additionally, for questions employing logic, respondents were evaluated based on their answers to preceding questions, ensuring a tailored response approach (e.g. only those who answer that their organisation has an OA policy get the following questions related to that). It is important to note that, **in the publishers' survey, a more personalised approach was adopted** due to the lower total number of responses. In the data analysis phase, the results of participants who provided meaningful responses to the open-ended questions and answered more than 50% of the survey questions were considered.

2. **Suspicious answer patterns.** Partial responses exhibiting suspicious answer patterns were excluded. Instances where respondents consistently chose the first answer option in multiple-choice questions or consistently selected the same response option in matrices (e.g. consistently opting for "do not know" or "very important") were flagged and removed. This step aimed to enhance the credibility of the retained responses by eliminating potentially unreliable patterns.

3. **Time threshold for response exclusion.** Respondents who completed the survey in less than 5 minutes were excluded from the dataset. This criterion was implemented to filter out rushed or hasty responses, ensuring that the retained data

reflected thoughtful engagement with the survey questions. This final step served to enhance the overall quality and reliability of the dataset used for analysis.

By applying these rigorous criteria, the study team sought to refine the dataset, excluding partial responses that may not have contributed meaningful or reliable information to the evaluation process.

We collected a total of 1 673 responses, comprising both completed and partial submissions. It is noteworthy that the sections focusing on copyright, data, and digital legislation exhibit varying response counts. This divergence stems from a distinct data-cleaning process conducted independently for each of these components across the three studies.

Of particular interest is the commendable response rate from publishers, constituting approximately 15.1% of all invitations sent, including both completed and partial responses. Despite the publishers' survey receiving the fewest invitations among the three, it is imperative to acknowledge the concentrated nature of the publishers' market[1757] [1758]. Given our study's inclusion of responses from the top five publishers[1759] — Springer, Elsevier, Wiley, Taylor & Francis, and SAGE — the ensuing analysis aptly captured the predominant voices in the publishers' domain.

Conversely, researchers exhibited the lowest response rate at 6.9%. Nevertheless, the sheer volume of responses stands at the highest figure of 962, owing to the substantial number of invitations disseminated. For a more detailed breakdown, please refer to Table 39 provided below.

**Table 39. Number of survey responses and response rates**

| | Completed responses | Partial responses * | Total number of responses (completed and partial) | Invites sent (valid)** | Response rate (completed) | Total response rate (with partials) |
|---|---|---|---|---|---|---|
| **Researchers' survey** | 934 | 28 | 962 | *13 874* | 6.7% | 6.9% |
| *Copyright legislation* | 895 | 27 | 922 | *13 874* | 6.5% | 6.6% |
| *Data and digital legislation* | 896 | 4 | 900 | *13 874* | 6.5% | 6.5% |
| **RPO survey** | 564 | 19 | *583* | *4 827* | 11.7% | 12.1% |
| *Copyright legislation* | 533 | 17 | *550* | *4 827* | 11% | 11.4% |
| *Data and digital legislation* | 441 | 9 | *450* | *4 827* | 8.5% | 9.3% |
| **Scientific publishers' survey*** ** | 105 | 23 | 128 | 848**** | 12.4% | 15.1% |
| *Copyright legislation* | 103 | 19 | 122 | 848**** | 12.1% | 14.4% |
| *Data and digital legislation* | 100 | 13 | 113 | 848**** | 11.8% | 13.3% |

*Source: Compiled by the study team based on the surveys' results.*

** Partial responses include only cleaned data, i.e. with irrelevant partial responses removed (e.g. respondents that opened the survey, skipped more than 2 questions, and left).*

1757 https://research-and-innovation.ec.europa.eu/system/files/2020-11/ec_rtd_background-note-open-access.pdf

1758 https://journals.plos.org/plosone/article%3Fid=10.1371/journal.pone.0127502

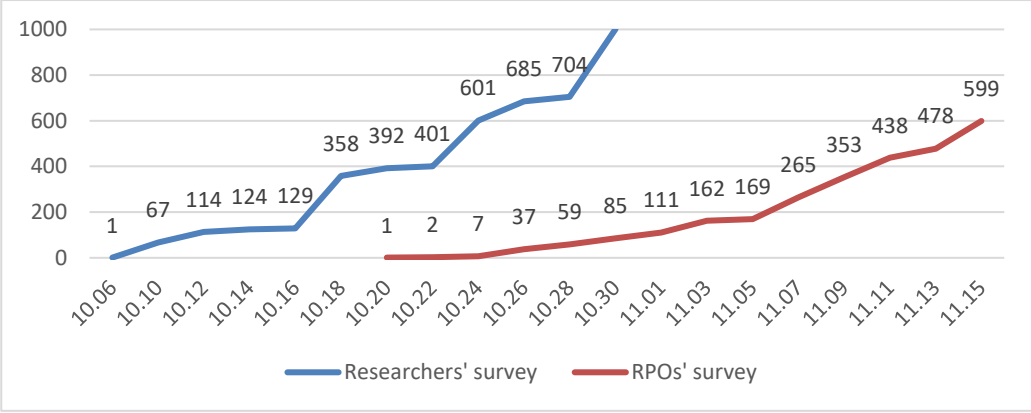
1759 https://www.peeref.com/collections/top-10-largest-academic-publishers-in-2022

*** The invites do not account for unsubscribed respondents. Please note that the table only shows the invites which were sent to valid email addresses. The contact list was cleaned for duplicates before sending out survey invites.*
**** The scientific publishers' survey shows only the preliminary completed results, as the survey is ongoing. Partial responses are not reflected in the report yet.*
***** 848 sent invites, including the invites sent to the same organisation's second contact (277 second contact invites)*

Figure 46 illustrates the survey's progression, showcasing the cumulative results over time for both researchers' and RPO surveys. It is important to acknowledge that these figures represent the data before the application of data cleaning procedures, resulting in slight variations compared to the previously presented numbers.

A noteworthy observation is that the advancement of the researchers' survey was primarily influenced by the timing of reminders, indicating fluctuations corresponding to these reminders. In contrast, the progression of the RPO survey exhibited a more gradual trend, suggesting a steadier response pattern over time. This insight underscores the nuanced dynamics influencing survey participation across different respondent groups.

**Figure 46. Survey progress: amount of completed results over time**




*Source: Compiled by the study team based on the surveys' results.*

## Limitations

### Researchers' survey

**Sampling bias.** The survey exclusively targeted participants from Horizon 2020 and Horizon Europe projects, potentially resulting in findings that are more specific to the priorities and perspectives of researchers within these frameworks, introducing a potential sampling bias. Having said this, the study team employed the following rationale:

- ***Asking about non-Horizon-funded scientific publications:*** In the survey questionnaire, researchers were asked, "Considering your non-Horizon funded publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?" (provided explanation - By non-Horizon scientific publications, we mean publications that did not result from Horizon 2020 or Horizon Europe projects, Q5.). Only those researchers who selected that they had at least 1 non-Horizon funded publication, received the following questions related to publishing in Open Access vie journal, platform or repository, such as the places of publishing (fully open access journals or open access repositories), version of the publication, timing of the publication, reasons of selecting publishing in open access journals, platforms or repositories and related negotiations.

- ***Overall open access requirements.*** The majority of national research funding bodies in Europe implement open access mandates akin to those of Horizon Europe, rendering it inappropriate to distinctly classify Horizon grantees as a group uniquely inclined towards Open Science practices.

- ***Balanced representation.*** Contact information would otherwise have been collected via Apollo and LinkedIn, which do not have the same amount of contact details and would not have given the same balanced representation as the data from Horizon 2020 and Horizon Europe projects.

- ***Relevance and expertise*****:** Participants in these projects are likely to be actively engaged in research and innovation activities. Their involvement means they have first-hand experience dealing with copyright issues, data and digital legislation, and digital frameworks within the EU.

- ***Diversity in perspectives:*** Projects funded under Horizon 2020 and Horizon Europe cover a wide array of research areas and disciplines. This diversity ensures that the surveyed population can offer diverse perspectives on how copyright laws affect research across various fields, making the findings more comprehensive and representative.

- ***Informed responses:*** Participants in these projects are likely to be well-informed about EU regulations, policies, and the challenges faced by researchers due to copyright frameworks. They might provide nuanced and detailed feedback based on their experiences and knowledge.

- ***Access to participants:*** The EU actively encourages collaboration and knowledge sharing among participants in these projects. This could facilitate easier access to potential respondents who are engaged in cutting-edge research and **have a vested interest in policy discussions related to copyright and digital legislation.**

**Limited time frame.** The study faced constraints due to a limited time frame, potentially impacting the depth and breadth of data collection. The survey period might have been too brief to extract more comprehensive insights. To address this, the study team implemented two key strategies. Firstly, additional boosters were sent to balance the distribution of the study field. Second, the study team sent three reminders to the researchers.

**RPO survey**

**Sampling bias.** Directed to legal entity appointment representatives with a request to distribute to library heads and Open Access specialists, the survey might reflect the perspectives of individuals not representing the targeted population, thus introducing a potential sampling bias. To mitigate this, the study team inserted control questions at the beginning of the survey to ensure respondents qualified for the study. Additionally, in all the initial messages and reminders, it was mentioned who the right contacts for this survey are and which positions to forward it to.

**Limited time frame.** Similar to the researchers' survey, the RPOs survey faced time constraints that could impact the depth and breadth of data collection. In order to address this, control questions were inserted at the beginning to qualify respondents for the survey. In addition to that, we sent reminders to the LEARs asking them to remind the relevant contacts to fill out the survey.

**Scientific publishers' survey**

**Manual contact search and industry-specific representation.** Contacts for the publishers' survey were manually sourced via Apollo and other streams, potentially resulting in incomplete coverage or the omission of relevant stakeholders, introducing a potential limitation. To mitigate this, we have contacted various associations with requests to disseminate our survey to their members.

**Varied responsiveness.** The nature of contact acquisition could lead to varied responsiveness from publishers, impacting the overall response rate and introducing potential bias. To mitigate this, the study team implemented several measures. Publishers' associations were contacted for further distribution, additional contacts were collected for each organisation, and prompt follow-ups were conducted for unresponsive contacts.

**Limited time frame.** Similar to the other surveys, the publishers' survey faced constraints due to a limited time frame. In order to mitigate this, the survey period was extended, and proactive steps were taken to enhance contact outreach, including the involvement of publishers' associations and strategic follow-up procedures.

# FREQUENCY TABLES

## RESEARCHERS' SURVEY

The survey conducted among researchers was split into two sections, focusing on copyright and data and digital legislation. As a result, the tasks of data cleaning and interpreting the results were carried out independently for each of these segments. Subsequently, the outcomes for both surveys are outlined below.

The majority of responses were analysed collectively and complemented by insights from countries with Secondary Publication Rights (SPR). This approach enabled us to examine how the responses differ when it comes to the researchers who are from the five SPR countries, i.e. Austria, Belgium, France, Germany and the Netherlands.

### Copyright

### Status and introduction

The section of the researchers' survey pertaining to copyright received a total of 922 responses. This comprises 895 (97.1%) complete responses and 27 (2.9%) partial responses, indicating that researchers filled out the entire set of copyright-related questions or they only skipped one question in the copyright section. In terms of the SPR countries, a total of 306 researchers represented these countries, comprising 33.2% of the total count. Table 40 illustrates the number of responses from all researchers and the number of responses from SPR countries.

**Table 40. Overview of responses received to the researchers' survey (part on in copyright) (n=922)**

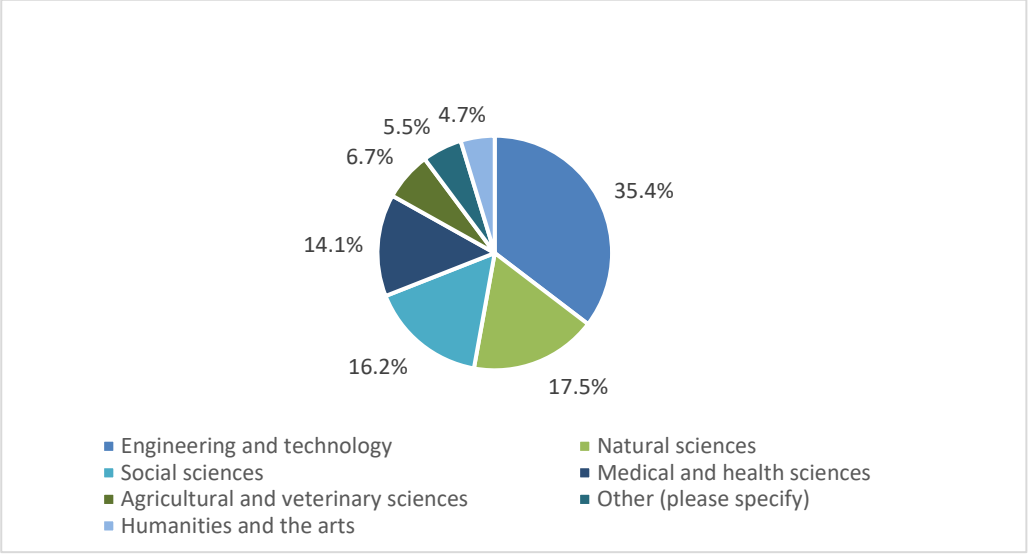
| | Count (total) | Share of responses, % (total) (total) | Count (SPR) |
|---|---|---|---|
| Complete | 895 | 97.1% | 302 |
| Partial | 27 | 2.9% | 4 |
| Total | 922 | 100% | 306 |

*Source: Compiled by the study team using data from the researchers' survey.*

### QUESTION 1: What is the core scientific discipline or area of your research?

Regarding the primary scientific discipline and research field Figure 47 depicts the outcomes. A large share of researchers belonged to engineering and technology (35.4%), followed by natural sciences (17.5%), social sciences (16.2%), and medical and health sciences (14.1%).

**Figure 47. Researchers' core scientific discipline or area of research (n=922)**




*Source: Compiled by the study team using data from the researchers' survey.*

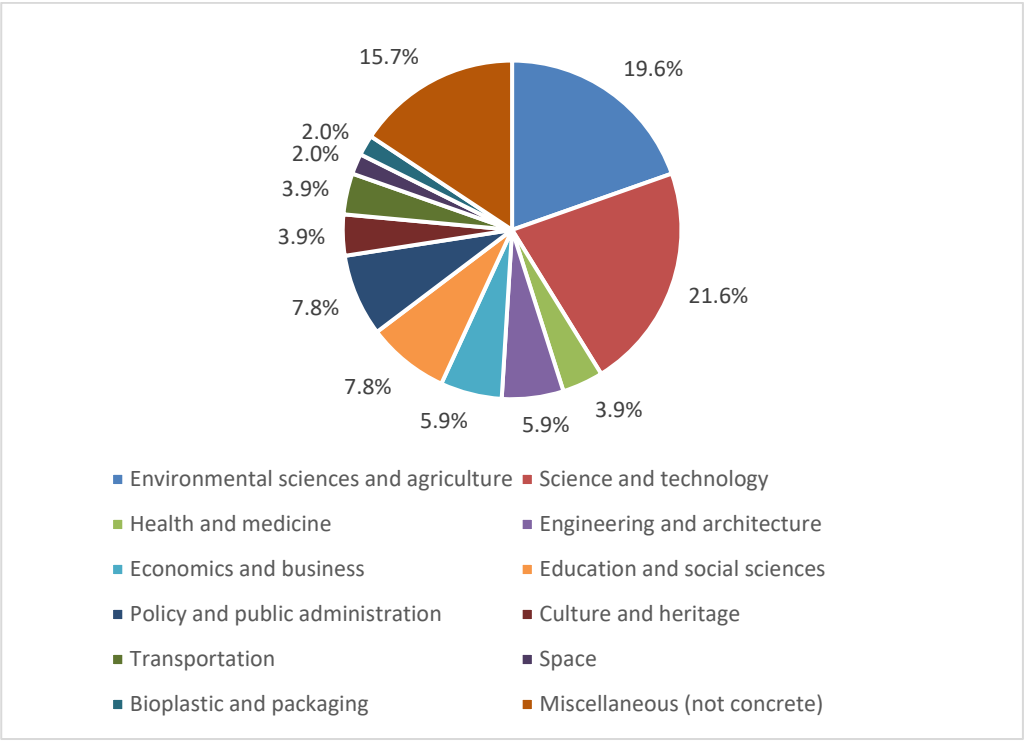
**Table 41. Researchers' core scientific discipline or area of research (n=922)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Engineering and technology | 326 | 35.4% |
| Natural sciences | 161 | 17.5% |
| Social sciences | 149 | 16.2% |
| Medical and health sciences | 130 | 14.1% |
| Agricultural and veterinary sciences | 62 | 6.7% |
| Other (please specify) | 51 | 5.5% |
| Humanities and the arts | 43 | 4.7% |
| Total | 922 | 100% |

*Source: Compiled by the study team using data from the researchers' survey.*

Out of the researchers who indicated that their core discipline is other than the provided ones, there was a variety of responses; the main discipline indicated being in science and technology (21.6%), followed by environmental sciences and agriculture (19.6%).

**Figure 48. Researchers' other core scientific discipline or area of research (n=51)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 42. Researchers' other core scientific discipline or area of research (n=51)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Science and technology | 11 | 21.6% |
| Environmental sciences and agriculture | 10 | 19.6% |
| Miscellaneous (not concrete) | 8 | 15.7% |
| Education and social sciences | 4 | 7.8% |
| Policy and public administration | 4 | 7.8% |
| Engineering and architecture | 3 | 5.9% |
| Economics and business | 3 | 5.9% |
| Health and medicine | 2 | 3.9% |
| Culture and heritage | 2 | 3.9% |
| Transportation | 2 | 3.9% |
| Space | 1 | 2.0% |
| Bioplastic and packaging | 1 | 2.0% |
| Total | 51 | 100% |

*Source: Compiled by the study team using data from the researchers' survey.*

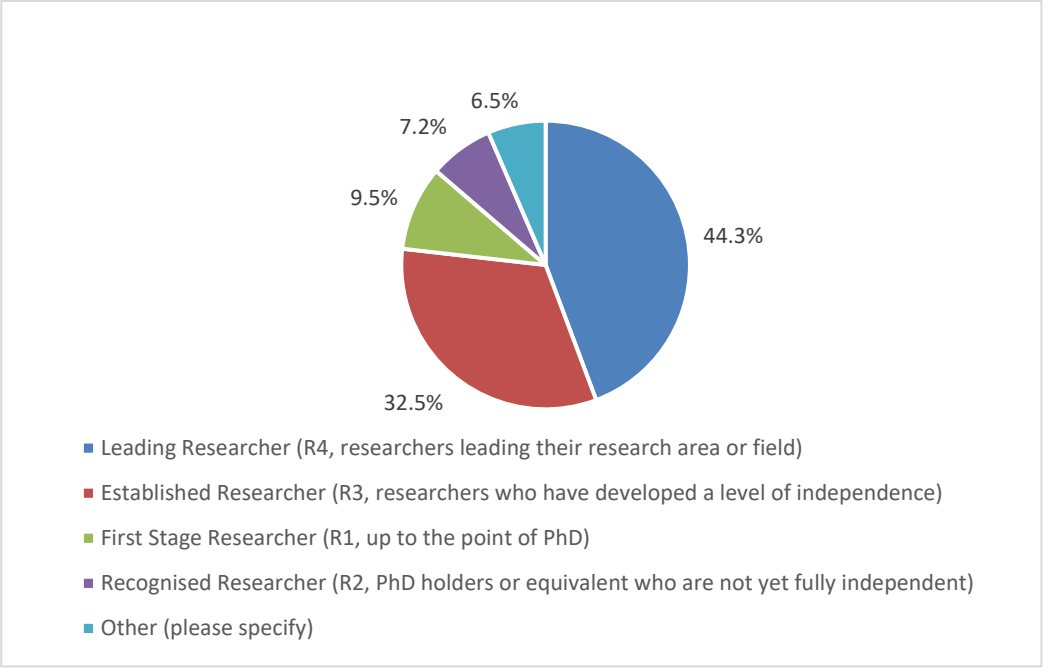
### QUESTION 2: How would you describe your current career stage as a researcher?

The researchers were asked to indicate their current career stage as a researcher. Out of the options, there were 4 different stages presented: Leading Researcher (R4, researchers leading their research area of field), Established Researcher (R3. Researchers who have developed a level of independence), Recognised Researcher (R2, PhD holders or equivalent who are not yet fully independent) and First Stage Researcher (R1, up to the point of PhD).

The majority of the surveyed researchers were Leading or Established Researchers (44.3% and 32.5%, respectively). Other researchers indicated their stage as First Stage Researcher (9.5%), Recognised Researcher (7.2%) and 6.5% selected the “Other” option. Figure 49 illustrates the results.

Among 60 (6.5%) researchers who chose 'Other' as their current career stage in research, the common roles identified included researchers who also act as project managers or coordinators (e.g. R&D manager, manager of core facility clinical studies, leader of industrial R&D projects), or serving as CEOs of organisations.

**Figure 49. The current career stage of surveyed researchers (n=922)**




*Source: Compiled by the study team using data from researchers’ survey, n=922.*

**Table 43. The current career stage of surveyed researchers (n=922)**

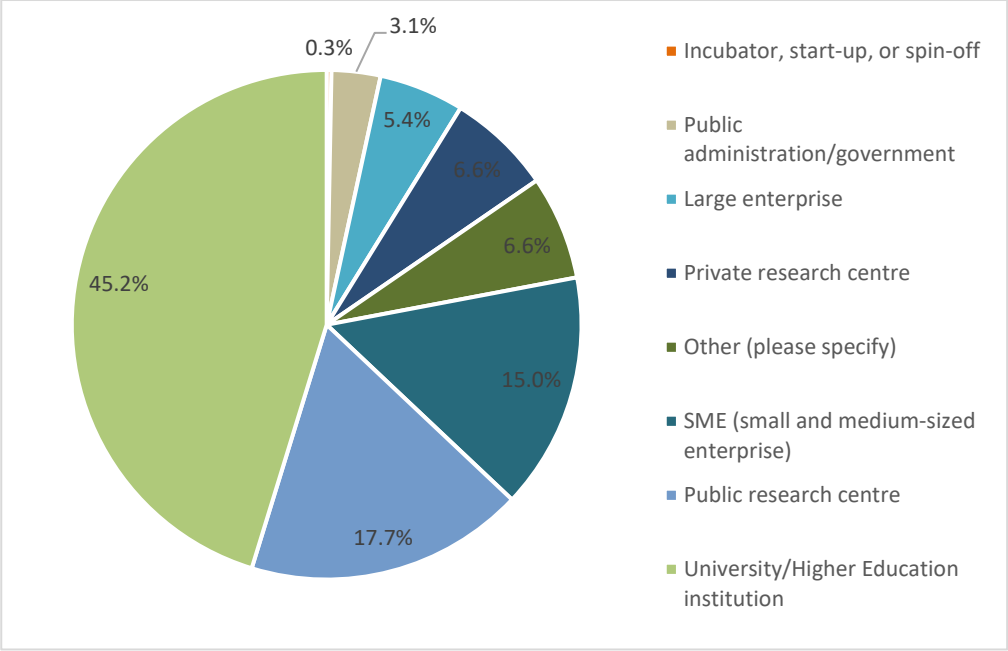
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Leading Researcher (R4, researchers leading their research area or field) | 408 | 44.3% |
| Established Researcher (R3, researchers who have developed a level of independence) | 300 | 32.5% |
| First Stage Researcher (R1, up to the point of PhD) | 88 | 9.5% |
| Recognised Researcher (R2, PhD holders or equivalent who are not yet fully independent) | 66 | 7.2% |
| Other (please specify) | 60 | 6.5% |
| Total | 922 | 100% |

*Source: Compiled by the study team using data from the researchers’ survey.*

## QUESTION 3: What is the type of your organisation?

Figure 50 illustrates the organisational affiliations of the researchers. A predominant percentage of researchers are affiliated with University/Higher Education institutions (45.2%). A smaller proportion is associated with public research centres (17.7%), SMEs (15.0%), and private research centres (6.6%). Additionally, 6.6% of researchers chose the 'other' option for their organisation type; among those who selected "Other," 39.3% specified working at NGOs, while others mentioned various foundations and charities.

**Figure 50. The organisational affiliations of the researchers (n=922)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 44. The organisational affiliations of the researchers (n=922)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| University/Higher Education institution | 417 | 45.2% |
| Public research centre | 163 | 17.7% |
| SME (small and medium-sized enterprise) | 138 | 15.0% |
| Private research centre) | 61 | 6.6% |
| Other (please specify) | 61 | 6.6% |
| Large enterprise | 50 | 5.4% |
| Public administration/government | 29 | 3.1% |
| Incubator, start-up, or spin-off | 3 | 0.3% |
| Total | 922 | 100% |

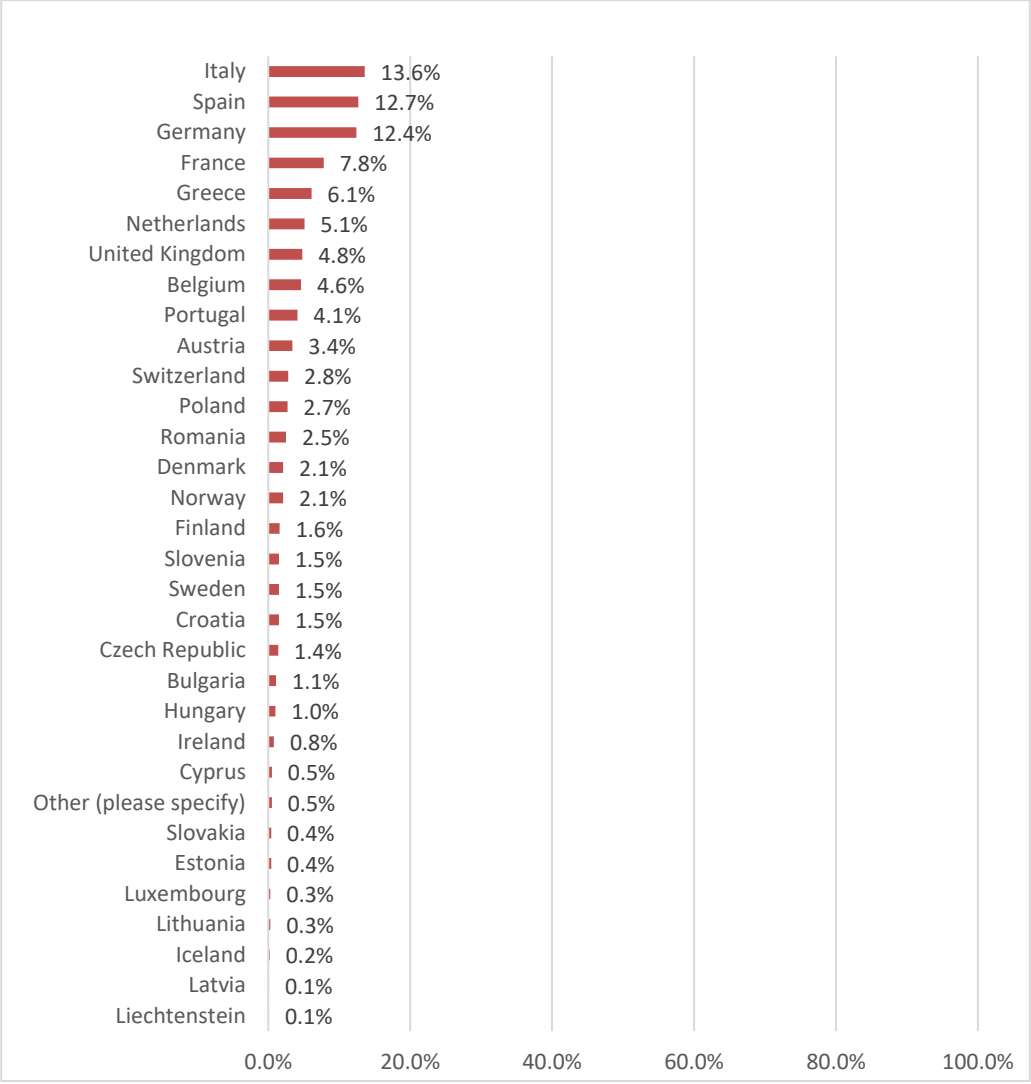
*Source: Compiled by the study team using data from the researchers' survey.*

## QUESTION 4: What is the country of your organisation?

Concerning the countries in which researchers are employed, Figure 51 below depicts the distribution of responses. The countries with more than 5% of researchers include Italy (13.6%), followed by Spain (12.7%), Germany (12.4%), France (7.8%), Greece (6.1%), and

the Netherlands (5.1%). This aligns with expectations, as these are the nations where the majority of researchers were approached for survey participation.

**Figure 51. Country of researchers' organisations (n=922)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 45. Country of researchers' organisations (n=922)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Italy | 125 | 13.6% |
| Spain | 117 | 12.7% |
| Germany | 114 | 12.4% |
| France | 72 | 7.8% |
| Greece | 56 | 6.1% |
| Netherlands | 47 | 5.1% |
| United Kingdom | 44 | 4.8% |
| Belgium | 42 | 4.6% |

| | | |
|---|---|---|
| Portugal | 38 | 4.1% |
| Austria | 31 | 3.4% |
| Switzerland | 26 | 2.8% |
| Poland | 25 | 2.7% |
| Romania | 23 | 2.5% |
| Norway | 19 | 2.1% |
| Denmark | 19 | 2.1% |
| Finland | 15 | 1.6% |
| Croatia | 14 | 1.5% |
| Sweden | 14 | 1.5% |
| Slovenia | 14 | 1.5% |
| Czechia | 13 | 1.4% |
| Bulgaria | 10 | 1.1% |
| Hungary | 9 | 1.0% |
| Ireland | 7 | 0.8% |
| Other (please specify) | 5 | 0.5% |
| Cyprus | 5 | 0.5% |
| Estonia | 4 | 0.4% |
| Slovakia | 4 | 0.4% |
| Lithuania | 3 | 0.3% |
| Luxembourg | 3 | 0.3% |
| Iceland | 2 | 0.2% |
| Liechtenstein | 1 | 0.1% |
| Latvia | 1 | 0.1% |
| Total | 922 | 100% |

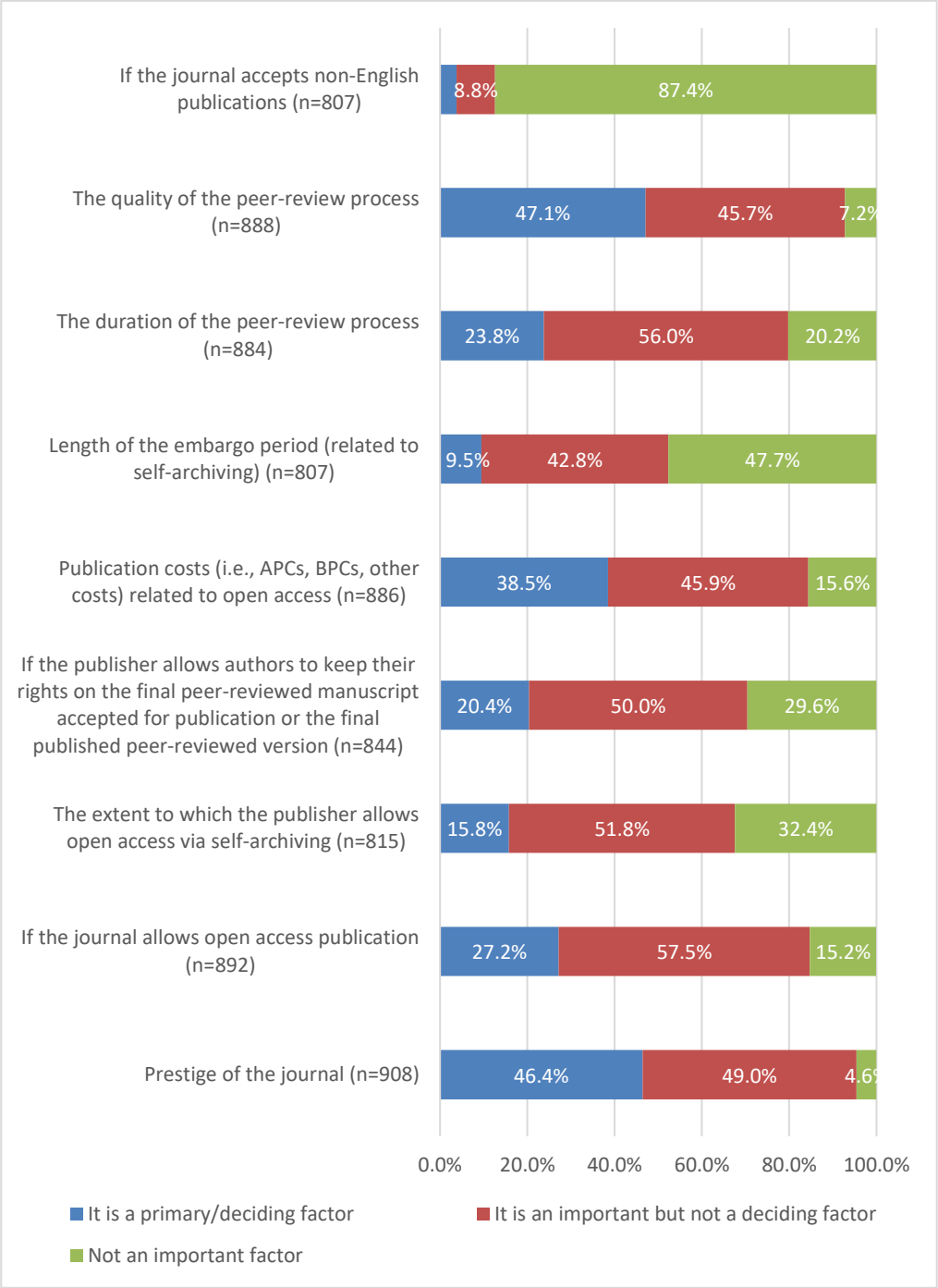
*Source: Compiled by the study team using data from the researchers' survey.*

## Your publishing practices and access to knowledge resources

### QUESTION 5: Overall, how important are the following factors when deciding where to publish your scientific publications?

Researchers were inquired about the factors influencing their choice of venues for publishing scientific works. Notably, the critical determinants (which researchers indicated as a primary/deciding factor) include the quality of the peer-review process (47.1%), the prestige of the journal (46.4%), and the costs associated with publication (38.5%). Conversely, the acceptance of non-English publications by the journal is perceived as the least significant factor, with only 12.6% considering it as being primary or important. Additionally, there are other factors, while not categorised as primary, that are important in the decision-making process for selecting publication venues. For instance, the fact that a journal allows Open Access publication was considered important but not a deciding factor for 57.5% of researchers. Similarly, the duration of the peer-review process is an important but not deciding factor for 56.0% of researchers. Furthermore, the extent to which the publisher allows Open Access via self-archiving for 51.8%, the rights on the final peer-reviewed manuscript for 50.0%, and the length of the embargo period was considered important but not a deciding factor for 42.8% researchers.

**Figure 52. The deciding factors for the venues of publishing**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

As the question allowed for multiple choices, the overall number of researchers is not specified. However, the tables below (Table 46 and Table 47) indicate the total count for each of the options.

**Table 46. The deciding factors for the venues of publishing**

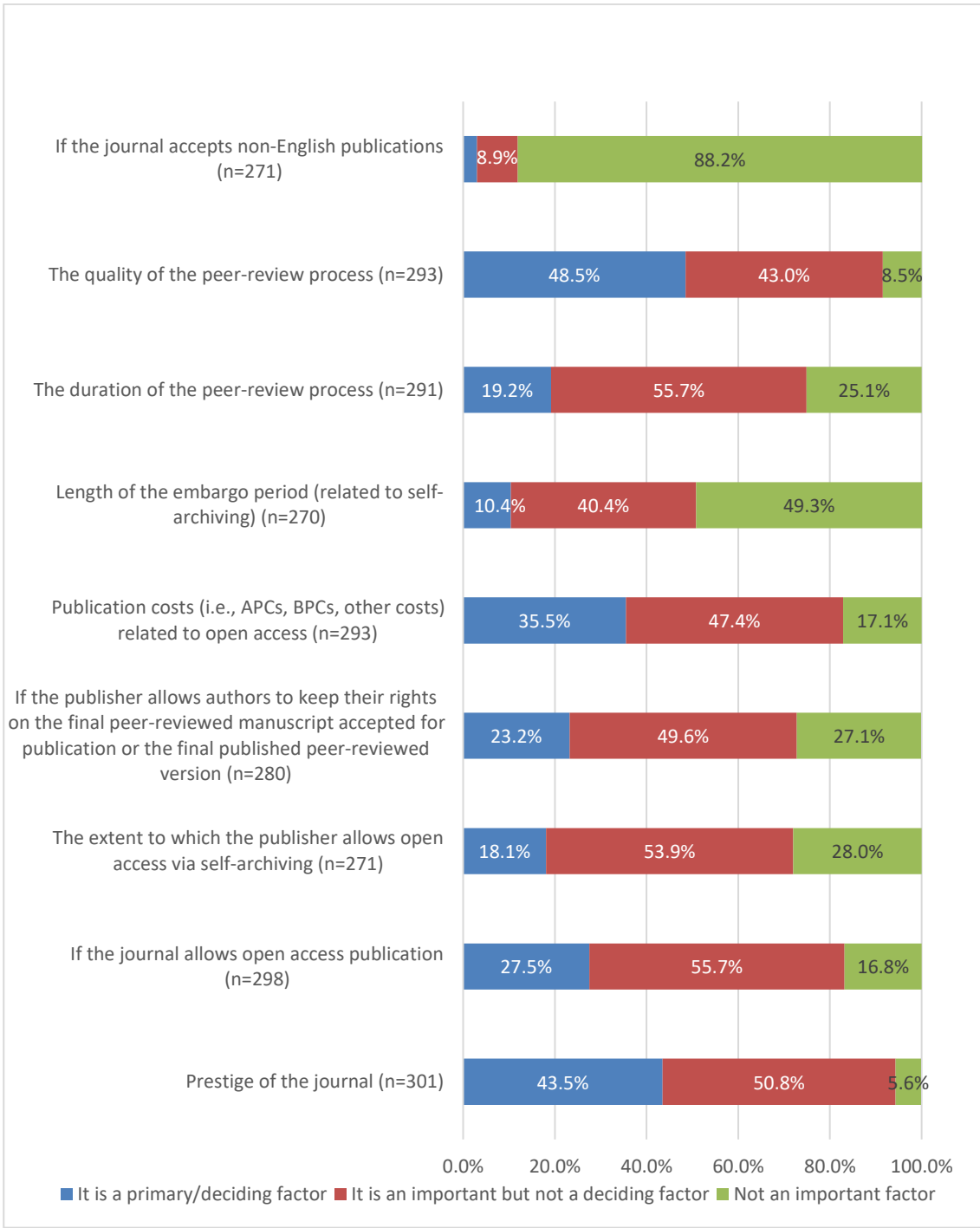
| | It is a primary/deciding factor | It is an important but not a deciding factor | Not an important factor | Total |
|---|---|---|---|---|
| Prestige of the journal | 421 (46.4%) | 445 (49.0%) | 42 (4.6%) | 908 |
| If the journal allows Open Access publication | 243 (27.2%) | 513 (57.5%) | 136 (15.2%) | 892 |
| The extent to which the publisher allows Open Access via self-archiving | 129 (15.8%) | 422 (51.8%) | 264 (32.4%) | 815 |
| If the publisher allows authors to keep their rights on the final peer-reviewed manuscript accepted for publication or the final published peer-reviewed version | 172 (20.4%) | 422 (50.0%) | 250 (29.6%) | 844 |
| Publication costs (i.e. APCs, BPCs, other costs) related to Open Access | 341 (38.5%) | 407 (45.9%) | 138 (15.6%) | 886 |
| Length of the embargo period (related to self-archiving) | 77 (9.5%) | 345 (42.8%) | 385 (47.7%) | 807 |
| The duration of the peer-review process | 210 (23.8%) | 495 (56.0%) | 179 (20.2%) | 884 |
| The quality of the peer-review process | 418 (47.1%) | 406 (45.7%) | 64 (7.2%) | 888 |
| If the journal accepts non-English publications | 31 (3.8%) | 71 (8.8%) | 705 (87.4%) | 807 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

Figures 53 and 54 depict the three primary factors influencing the decision on where to publish scientific publications in SPR and non-SPR countries. The three main determinants remain consistent for both country groups: encompassing the quality of the peer-review process (non-SPR 46.4%, SPR 48.5%), the prestige of the journal (non-SPR 47.8%, SPR 43.5%), and the publication costs (non-SPR 40.0%, SPR 35.5%) are perceived as the primary/deciding factor.

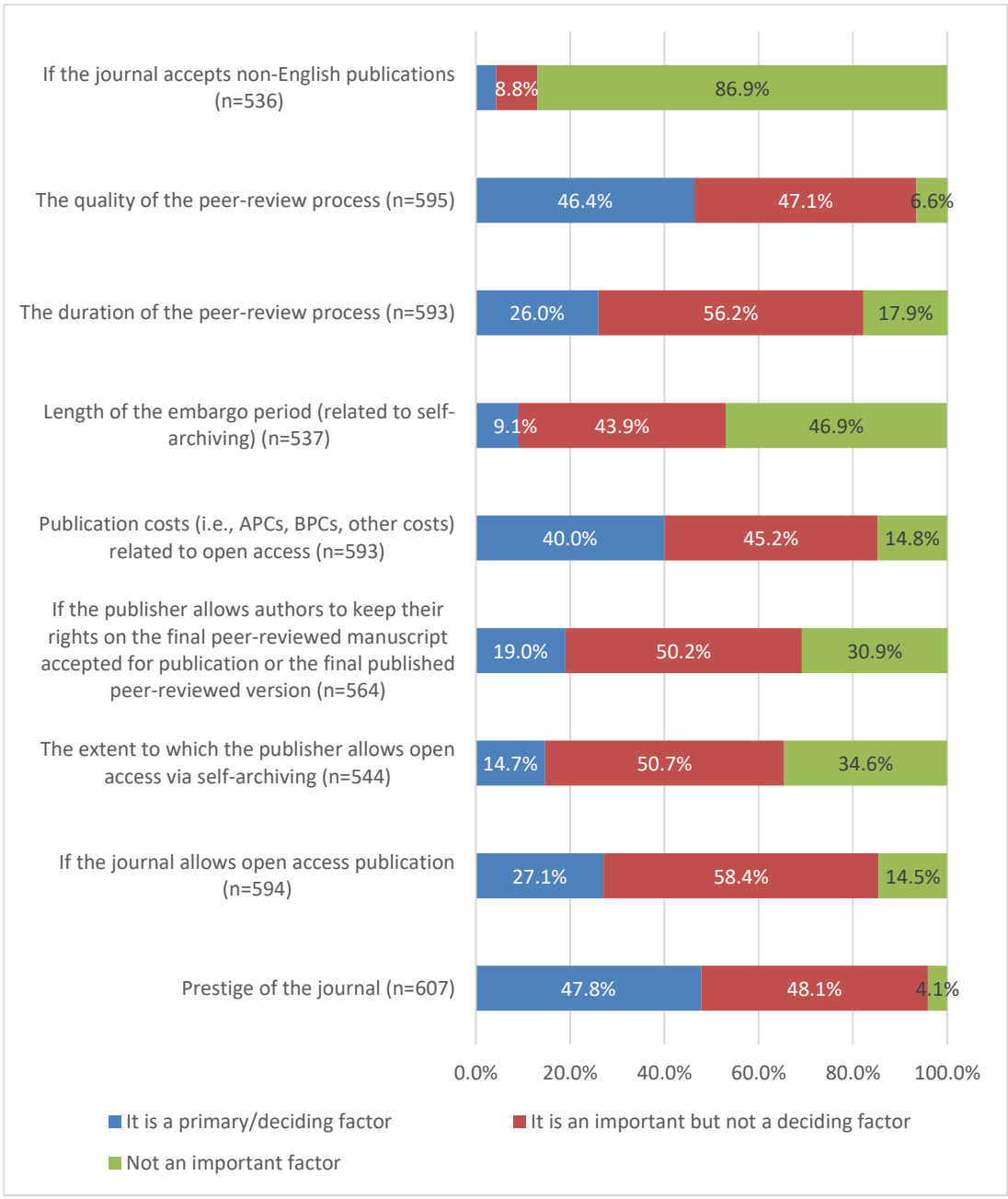
Table 47 indicates the total number of responses from each country group, along with the corresponding percentages for each factor.

**Figure 53. The deciding factors for the venues of publishing in SPR countries**




*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

**Figure 54. The deciding factors for the venues of publishing in non-SPR countries**




*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

**Table 47. The deciding factors for the venues of publishing in SPR and non-SPR countries**

| | Non-SPR countries | | | |
|---|---|---|---|---|
| | It is a primary/deciding factor | It is an important but not a deciding factor | Not an important factor | Total |
| Prestige of the journal | 290 (47.8%) | 292 (48.1%) | 25 (4.1%) | 607 |
| If the journal allows Open Access publication | 161 (27.1%) | 347 (58.4%) | 86 (14.5%) | 594 |
| The extent to which the publisher allows Open Access via self-archiving | 80 (14.7%) | 276 (50.7%) | 188 (34.6%) | 544 |
| If the publisher allows authors to keep their rights on the final peer-reviewed manuscript accepted for publication or the final published peer-reviewed version | 107 (19.0%) | 283 (50.2%) | 174 (30.9%) | 564 |
| Publication costs (i.e. APCs, BPCs, other costs) related to Open Access | 237 (40.0%) | 268 (45.2%) | 88 (14.8%) | 593 |
| Length of the embargo period (related to self-archiving) | 49 (9.1%) | 236 (43.9%) | 252 (46.9%) | 537 |
| The duration of the peer-review process | 154 (26.0%) | 333 (56.2%) | 106 (17.9%) | 593 |
| The quality of the peer-review process | 276 (46.4%) | 280 (47.1%) | 39 (6.6%) | 595 |
| If the journal accepts non-English publications | 23 (4.3%) | 47 (8.8%) | 466 (86.9%) | 536 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

**Table 47 (continuation). The deciding factors for the venues of publishing in SPR and non-SPR countries**

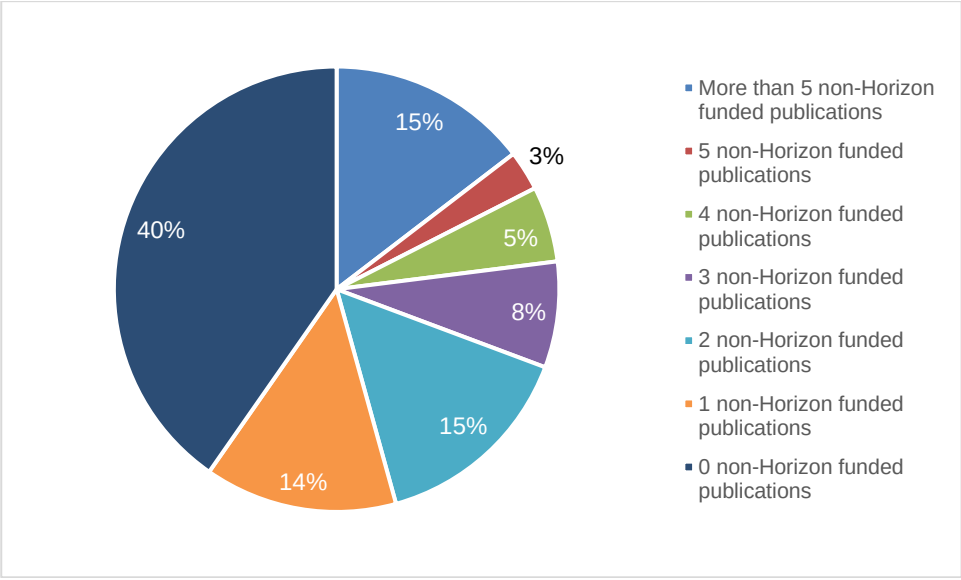
| | SPR countries | | | |
|---|---|---|---|---|
| | It is a primary/deciding factor | It is an important but not a deciding factor | Not an important factor | Total |
| Prestige of the journal | 131 (43.5%) | 153 (50.8%) | 17 (5.6%) | 301 |
| If the journal allows Open Access publication | 82 (27.5%) | 166 (55.7%) | 50 (16.8%) | 298 |
| The extent to which the publisher allows Open Access via self-archiving | 49 (18.1%) | 146 (53.9%) | 76 (28.0%) | 271 |
| If the publisher allows authors to keep their rights on the final peer-reviewed manuscript accepted for publication or the final published peer-reviewed version | 65 (23.2%) | 139 (49.6%) | 76 (27.1%) | 280 |
| Publication costs (i.e. APCs, BPCs, other costs) related to Open Access | 104 (35.5%) | 139 (47.4%) | 50 (17.1%) | 293 |
| Length of the embargo period (related to self-archiving) | 28 (10.4%) | 109 (40.4%) | 133 (49.3%) | 270 |
| The duration of the peer-review process | 56 (19.2%) | 162 (55.7%) | 73 (25.1%) | 291 |
| The quality of the peer-review process | 142 (48.5%) | 126 (43.0%) | 25 (8.5%) | 293 |
| If the journal accepts non-English publications | 8 (3.0%) | 24 (8.9%) | 239 (88.2%) | 271 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Overall, how important are the following factors when deciding where to publish your scientific publications?"*

**QUESTION 6: In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?**

Regarding the quantity of non-Horizon-funded scientific publications authored by researchers as the corresponding author, excluding those who reported 0 non-Horizon-funded publications (40.3%), there is a diverse range of responses. Specifically, 15.0% of researchers mentioned publishing 2 publications, 14.6% reported more than 5 publications, and 14.0% reported 1 publication.

**Figure 55. Number of scientific publications where the researcher was a corresponding author (n=871)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?"*

**Table 48. Number of scientific publications where the researcher was a corresponding author (n=871)**

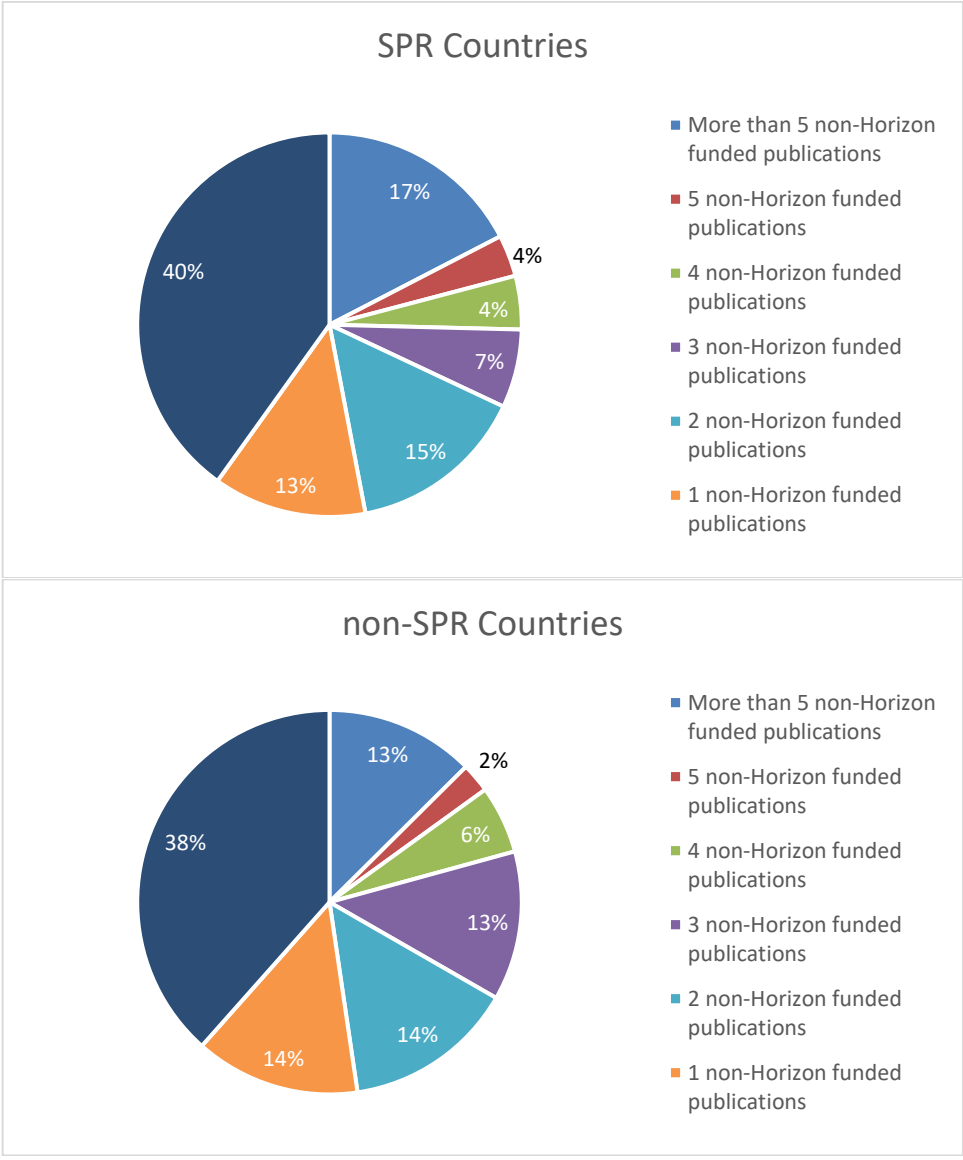
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| 0 non-Horizon funded publications | 351 | 40.3% |
| 2 non-Horizon-funded publications | 131 | 15.0% |
| More than 5 non-Horizon-funded publications | 127 | 14.6% |
| 1 non-Horizon funded publication | 122 | 14.0% |
| 3 non-Horizon-funded publications | 67 | 7.7% |
| 4 non-Horizon-funded publications | 48 | 5.5% |
| 5 non-Horizon-funded publications | 25 | 2.9% |
| Total | 871 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?"*

Figure below indicates that the distribution of non-Horizon-funded publications in both SPR and non-SPR countries follows a similar pattern. The primary responses from researchers in SPR countries include more than 5 publications (17.4%), 2 publications (15.0%), and 1

publication (12.9%). In non-SPR countries, researchers predominantly published 2 non-Horizon-funded publications (15.1%), 1 publication (14.6%), and more than 5 publications (13.2%).

**Figure 56. Number of scientific publications where the researcher was a corresponding author (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?"*

**Table 49. Number of scientific publications where the researcher was a corresponding author (SPR and non-SPR countries)**

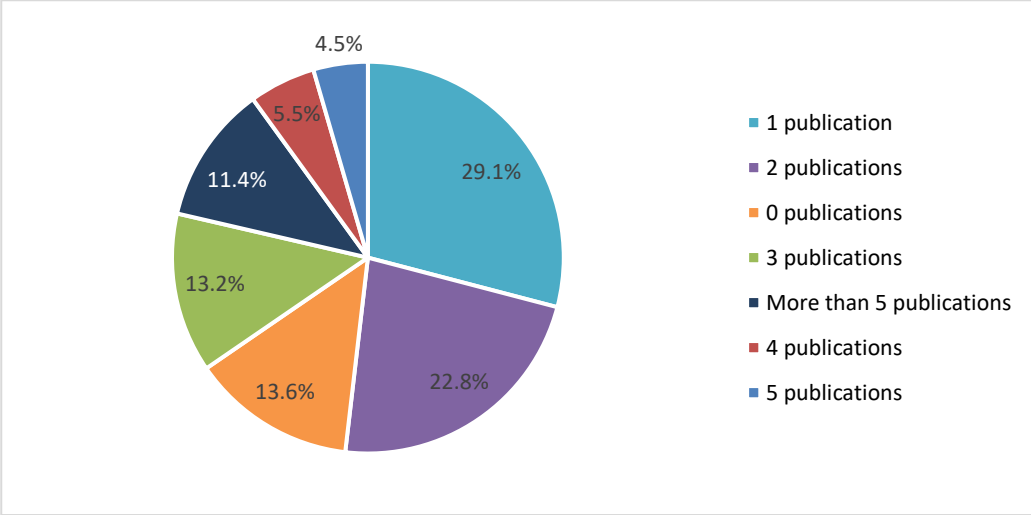
| | Non-SPR | | SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) (total) | Count (total) | Share of responses, % (total) (total) |
| 0 non-Horizon funded publications | 236 | 40.4% | 115 | 40.1% |
| 2 non-Horizon-funded publications | 88 | 15.1% | 43 | 15.0% |
| More than 5 non-Horizon-funded publications | 77 | 13.2% | 50 | 17.4% |
| 1 non-Horizon funded publication | 85 | 14.6% | 37 | 12.9% |
| 3 non-Horizon-funded publications | 48 | 8.2% | 19 | 6.6% |
| 4 non-Horizon-funded publications | 35 | 6.0% | 13 | 4.5% |
| 5 non-Horizon-funded publications | 15 | 2.6% | 10 | 3.5% |
| Total | 584 | 100% | 287 | 100% |

*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "In 2022, how many non-Horizon-funded scientific publications did you publish where you were the corresponding author?"*

## QUESTION 7: Considering your non-Horizon funded scientific publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?

Researchers who published non-Horizon-funded publications were inquired about the extent to which these publications, published in 2022, were accessible in Open Access through a journal, platform, or repository. Nearly one third of the researchers (29.1%) indicated publishing 1 publication in Open Access, 22.8% published 2 Open Access publications, 13.6% reported 0 Open Access publications, and 13.2% published 3 Open Access publications.

**Figure 57. Number of non-Horizon funded scientific publications (published in 2022) published in Open Access via journal, platform or repository (n=492)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Considering your non-Horizon funded scientific publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?"*

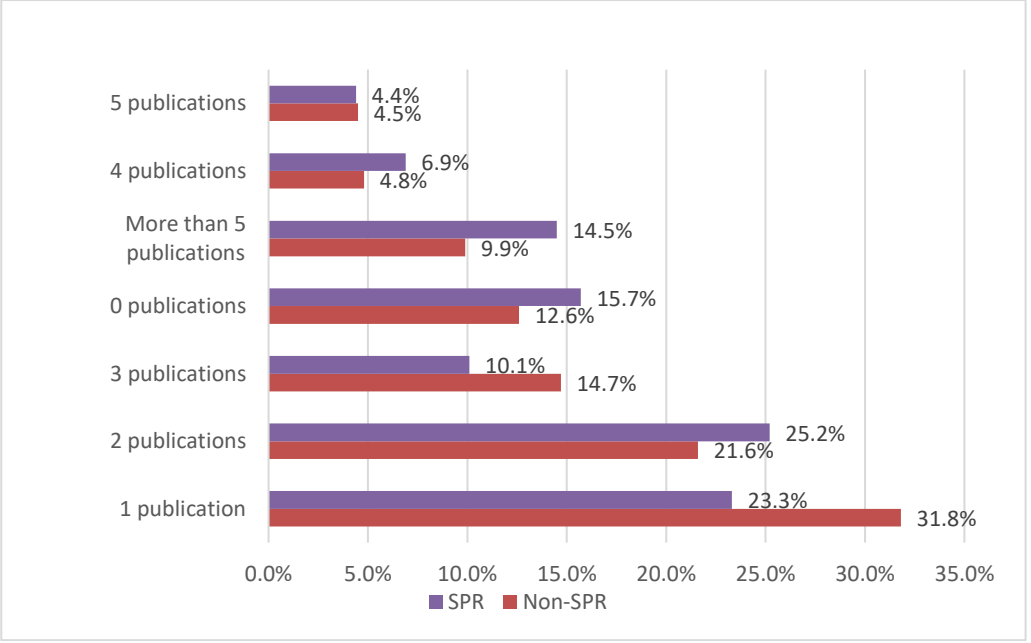
**Table 50. Number of non-Horizon funded scientific publications (published in 2022) published in Open Access via journal, platform or repository (n=492)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| 1 publication | 143 | 29.1% |
| 2 publications | 112 | 22.8% |
| 0 publications | 67 | 13.6% |
| 3 publications | 65 | 13.2% |
| More than 5 publications | 56 | 11.4% |
| 4 publications | 27 | 5.5% |
| 5 publications | 22 | 4.5% |
| Total | 492 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Considering your non-Horizon funded scientific publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?"*

Looking at the breakdown of responses for SPR and non-SPR countries, only a very slight difference can be noted in Open Access publishing practices. A total 15.7% of researchers from SPR countries declared having no Open Access publication, compared to 12.6% of researchers from non-SPR countries. In contrast, 14.5% of SPR countries' researchers declared publishing more than 5 publications in Open Access, versus 9.9% of those from non-SPR countries. A similar trend was observed among those who selected 2 publications (14.5% from SPR countries and 9.9% from non-SPR countries) and 4 publications (6.9% and 4.8%, respectively).

**Figure 58. Number of non-Horizon funded scientific publications published in Open Access via journal, platform or repository (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Considering your non-Horizon funded scientific publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?"*

**Table 51. Number of non-Horizon funded scientific publications published in Open Access via journal, platform or repository (SPR and non-SPR countries)**

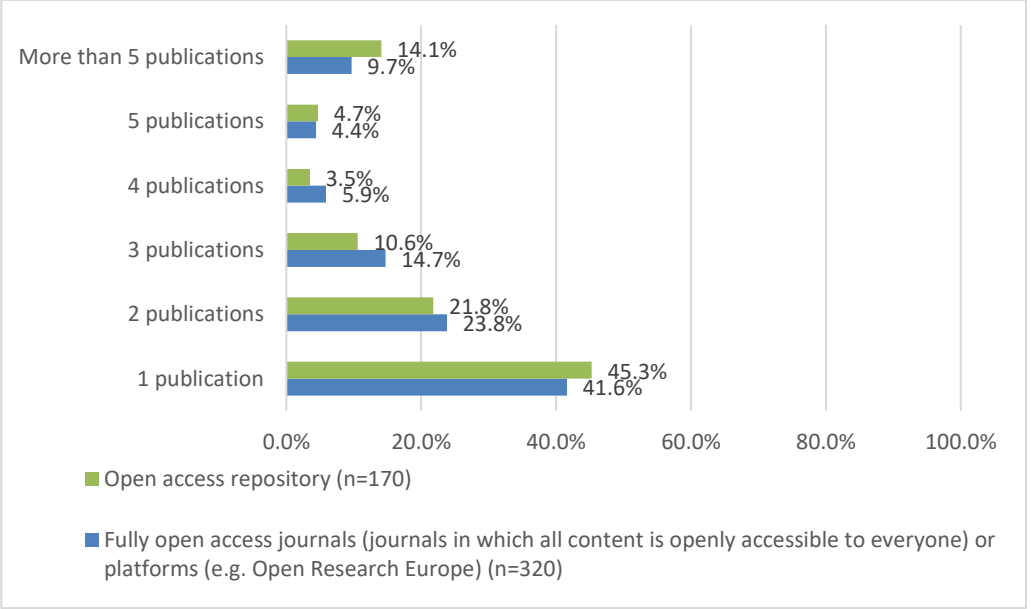
| | SPR countries | | Non-SPR countries | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| 1 publication | 37 | 23.3% | 106 | 31.8% |
| 2 publications | 40 | 25.2% | 72 | 21.6% |
| 3 publications | 16 | 10.1% | 49 | 14.7% |
| 0 publications | 25 | 15.7% | 42 | 12.6% |
| More than 5 publications | 23 | 14.5% | 33 | 9.9% |
| 4 publications | 11 | 6.9% | 16 | 4.8% |
| 5 publications | 7 | 4.4% | 15 | 4.5% |
| Total | 159 | 100% | 333 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Considering your non-Horizon funded scientific publications that you published in 2022, what number of them were published in Open Access via a journal, platform or repository?"*

## QUESTION 8: Out of your Open Access scientific publications published in 2022, how many were published in the following places?

When researchers were inquired about the number of their Open Access publications, with consideration for whether they were published in fully Open Access journals or Open Access repositories, the differences regarding the publishing venue were minor. For instance, among researchers who selected publishing one publication in Open Access, 45.3% selected Open Access repositories, and 41.6% fully Open Access journals. In total, the number of researchers who published in fully Open Access journals (320) exceeded those who published in Open Access repositories (170).

**Figure 59. Venues where the Open Access scientific publications were published**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Out of your Open Access scientific publications published in 2022, how many were published in the following places?"*

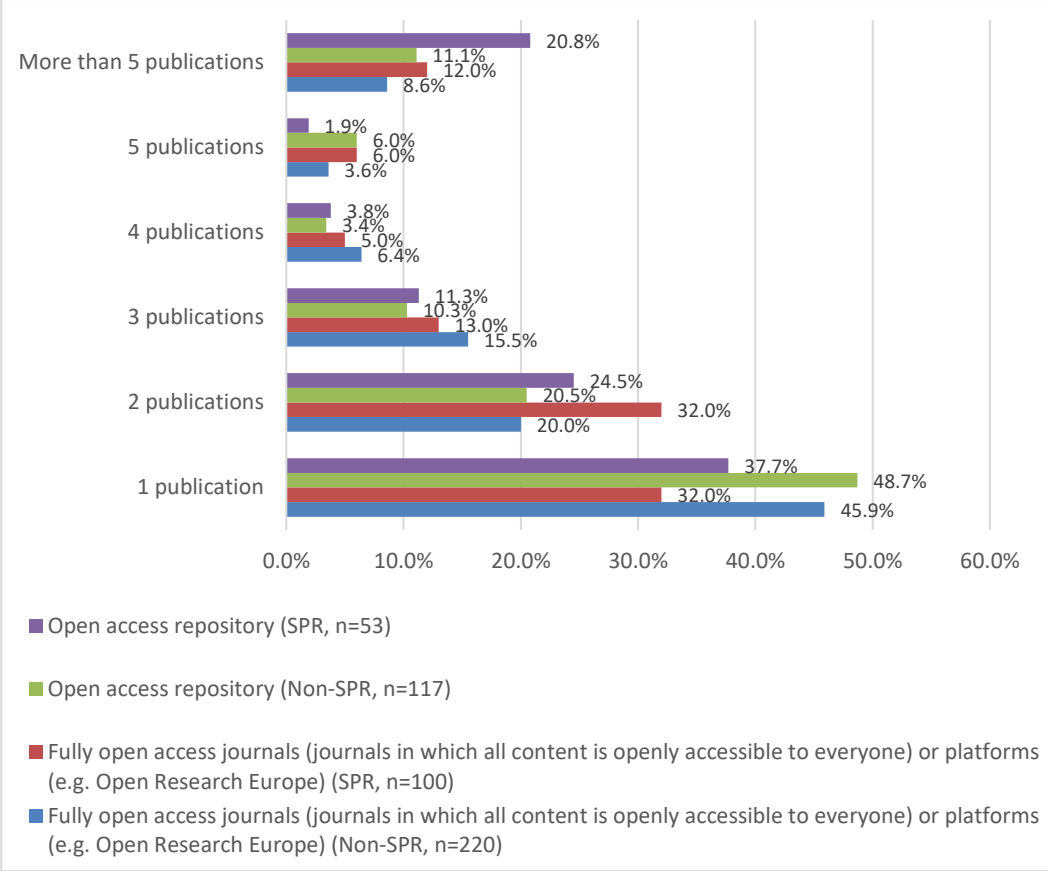
**Table 52. Venues where the Open Access scientific publications were published**

| | 1 | 2 | 3 | 4 | 5 | More than 5 | Total |
|---|---|---|---|---|---|---|---|
| Fully Open Access journals (journals in which all content is openly accessible to everyone) or platforms (e.g. Open Research Europe) | 133 (41.6%) | 76 (23.8%) | 47 (14.7%) | 19 (5.9%) | 14 (4.4%) | 31 (9.7%) | 320 |
| Open Access repository | 77 (45.3%) | 37 (21.8%) | 18 (10.6%) | 6 (3.5%) | 8 (4.7%) | 24 (14.1%) | 170 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Out of your Open Access scientific publications published in 2022, how many were published in the following places?"*

The venues where the researchers published their Open Access scientific publications in SPR and non-SPR countries follow the general trend and do not differ in terms of the SPR (overall, around 65% of researchers from SPR and non-SPR countries selected that they published in fully Open Access journals).

**Figure 60. Venues where the Open Access scientific publications were published (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Out of your Open Access scientific publications published in 2022, how many were published in the following places?"*

**Table 53. Venues where the Open Access scientific publications were published (SPR and non-SPR countries)**

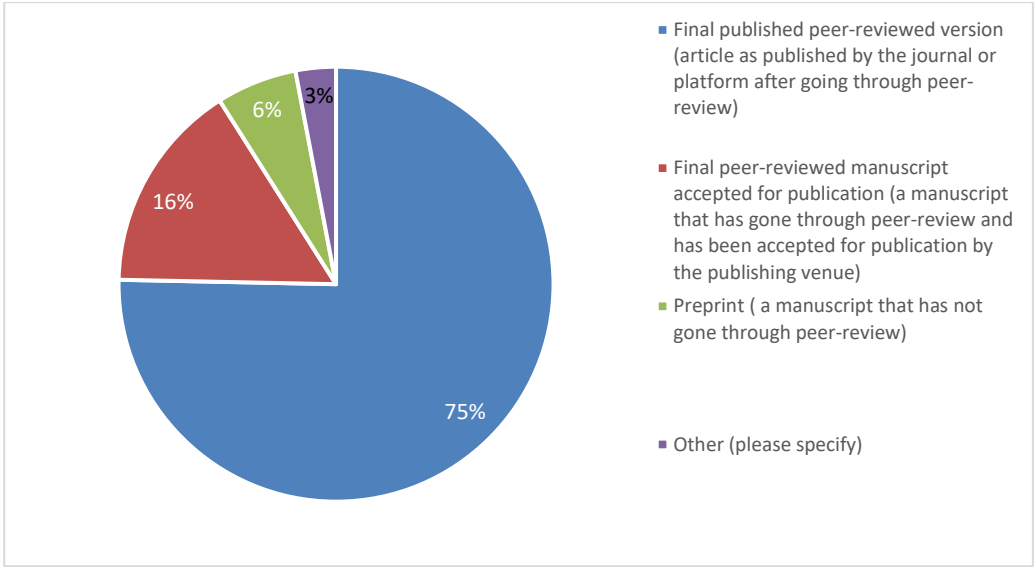
| | 1 | 2 | 3 | 4 | 5 | More than 5 | Total |
|---|---|---|---|---|---|---|---|
| SPR countries | | | | | | | |
| Fully Open Access journals (journals in which all content is openly accessible to everyone) or platforms (e.g. Open Research Europe) | 32 (32.0%) | 32 (32.0%) | 13 (13.0%) | 5 (5.0%) | 6 (6.0%) | 12 (12.0%) | 100 |
| Open Access repository | 20 (37.7%) | 13 (24.5%) | 6 (11.3%) | 2 (3.8%) | 1 (1.9%) | 11 (20.8%) | 53 |
| Non-SPR countries | | | | | | | |
| Fully Open Access journals (journals in which all content is openly accessible to everyone) or platforms (e.g. Open Research Europe) | 101 (45.9%) | 44 (20.0%) | 34 (15.5%) | 14 (6.4%) | 8 (3.6%) | 19 (8.6%) | 220 |
| Open Access repository | 57 (48.7%) | 24 (20.5%) | 12 (10.3%) | 4 (3.4%) | 7 (6.0%) | 13 (11.1%) | 117 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Out of your Open Access scientific publications published in 2022, how many were published in the following places?"*

## QUESTION 9: To which version of the publication did you provide Open Access?

Regarding the inquiry on publication versions, a significant majority of researchers (75.4%) provided Open Access to the final published peer-reviewed version. Furthermore, 15.7% of researchers provided Open Access to the final peer-reviewed manuscript accepted for publication, with only 3.0% choosing the preprint option. Among those who picked 'Other,' one researcher mentioned providing the first page of each contribution/article on their Academia.edu page.

**Figure 61. Version of publication to which Open Access was provided (n=314)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To which version of the publication did you provide Open Access?"*

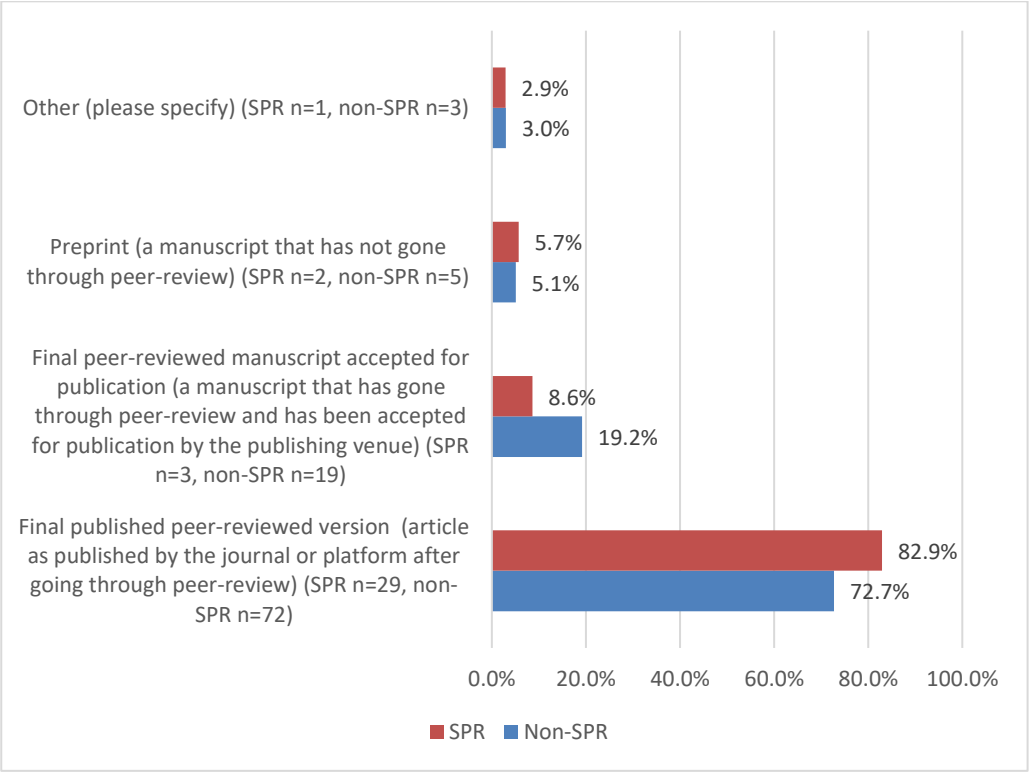
**Table 54. Version of the publication to which Open Access was provided (n=134)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| Final published peer-reviewed version (article as published by the journal or platform after going through peer-review) | 101 | 75.4% |
| Final peer-reviewed manuscript accepted for publication (a manuscript that has gone through peer-review and has been accepted for publication by the publishing venue) | 21 | 15.7% |
| Preprint (a manuscript that has not gone through peer-review) | 8 | 6.0% |
| Other (please specify) | 4 | 3.0% |
| Total | 134 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To which version of the publication did you provide Open Access?"*

The final published peer-reviewed version is the prevailing choice for publication in both country groups (82.9% for SPR countries and 72.7% for non-SPR countries). Notably, 5.7% of researchers from SPR countries provided Open Access to preprints, and 8.6% to the final peer-reviewed manuscript accepted for publication, while in non-SPR countries, 19.2% provided Open Access to the final peer-reviewed manuscript accepted for publication compared to 5.1% to preprints.

**Figure 62. Version of the publication to which Open Access was provided (SPR, n=35 and non-SPR countries, n=99)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To which version of the publication did you provide Open Access?"*

**Table 55. A version of the Open Access publication (SPR, n=35 and non-SPR countries, n=99)**

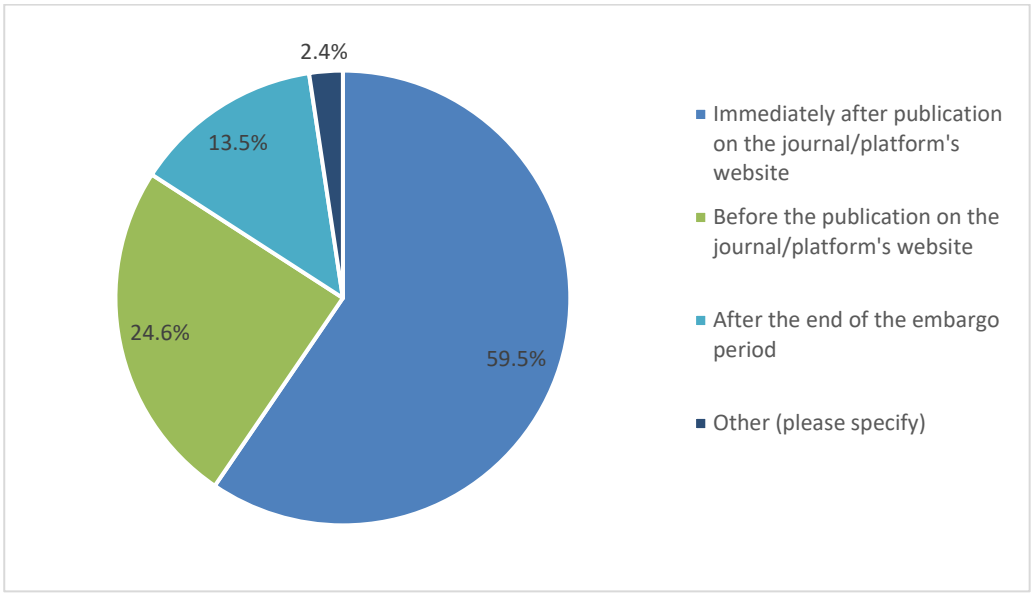
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Final published peer-reviewed version (article as published by the journal or platform after going through peer-review) | 29 | 82.9% | 72 | 72.7% |
| Final peer-reviewed manuscript accepted for publication (a manuscript that has gone through peer-review and has been accepted for publication by the publishing venue) | 3 | 8.6% | 19 | 19.2% |
| Preprint (a manuscript that has not gone through peer-review) | 2 | 5.7% | 5 | 5.1% |
| Other (please specify) | 1 | 2.9% | 3 | 3.0% |
| Total | 35 | 100% | 99 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To which version of the publication did you provide Open Access?"*

## QUESTION 10: When did you provide Open Access to the publication?

When researchers were inquired about the timing of their Open Access publication, more than half, specifically 59.5%, indicated that Open Access was provided right after their work was published on the journal or platform's website. A quarter (24.6%) of the researchers stated that Open Access was ensured prior to the formal publication on the journal or platform's website. Additionally, 13.5% mentioned that they made their work openly accessible after the conclusion of the embargo period.

**Figure 63. The time when a publication was made Open Access (n=126)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When did you provide Open Access to the publication?"*

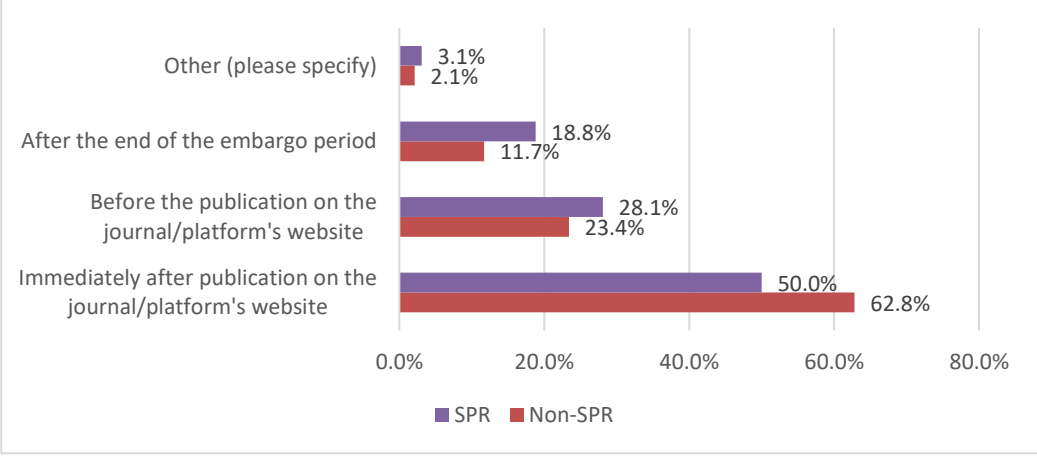
**Table 56. The time when a publication was made Open Access (n=126)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| Immediately after publication on the journal/platform's website | 75 | 59.5% |
| Before the publication on the journal/platform's website | 31 | 24.6% |
| After the end of the embargo period | 17 | 13.5% |
| Other (please specify) | 3 | 2.4% |
| Total | 126 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When did you provide Open Access to the publication?"*

A similar trend can be observed between SPR and non-SPR countries. In both country groups, the primary choice is to provide Open Access immediately after the publication (SPR 50.0%, non-SPR 62.8%). This is followed by providing Open Access before the official release on the journal/platform's website, with percentages of 28.1% and 23.4% for SPR and non-SPR, respectively. Lastly, there is a preference for providing Open Access after the end of the embargo period, with rates of 18.8% and 11.7% for SPR and non-SPR countries, respectively.

**Figure 64. The time when a publication was made Open Access (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When did you provide Open Access to the publication?"*

**Table 57. The time when a publication was made Open Access (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Immediately after publication on the journal/platform's website | 16 | 50.0% | 59 | 62.8% |
| Before the publication on the journal/platform's website | 9 | 28.1% | 22 | 23.4% |
| After the end of the embargo period | 6 | 18.8% | 11 | 11.7% |
| Other (please specify) | 1 | 3.1% | 2 | 2.1% |
| Total | 32 | 100% | 94 | 100% |

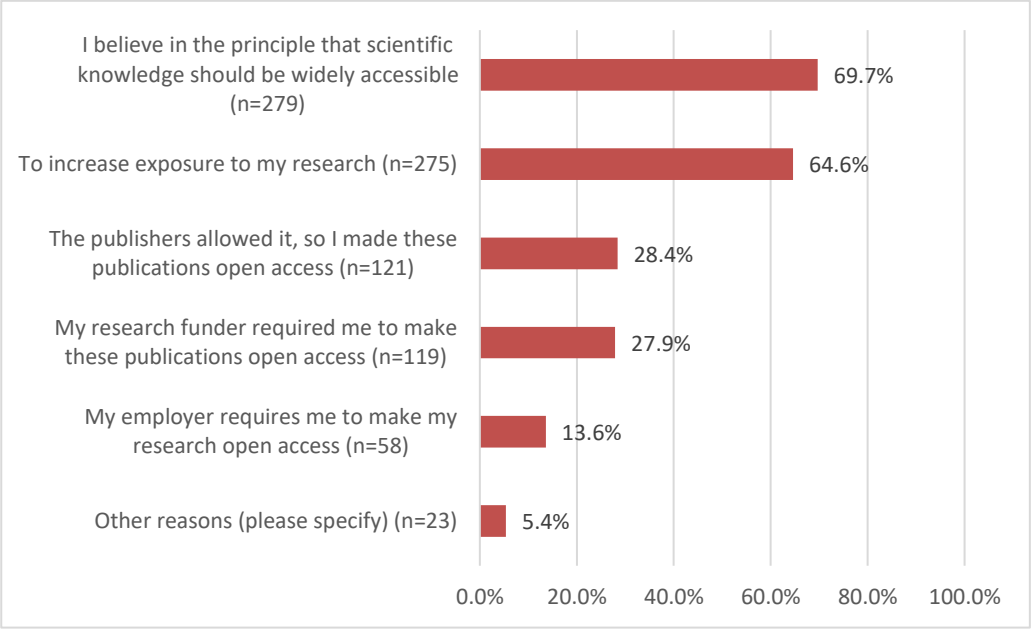
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When did you provide Open Access to the publication?"*

**QUESTION 11: Why did you make your non-Horizon funded publication(s) Open Access via a journal, platform or repository? (choose all that apply)**

Researchers primarily made their non-Horizon funded publications Open Access for two main reasons: first, a strong belief that scientific knowledge should be widely accessible (69.7%), and second, the desire for increased exposure to their research (64.6%). Approximately a third of researchers cited the permission granted by publishers as a motivating factor (28.4%), while another share mentioned complying with specific requirements from research funders (27.9%) as a reason for opting for Open Access.

Those who selected 'other' provided various reasons for making their publications Open Access. For instance, some mentioned that their university covered the fees, while others cited community-engaged research principles, emphasising the importance of Open Access. Factors such as positive reviews, fast approval processes, and the influence of the chosen journal were also indicated by these researchers. Additionally, researchers also mentioned the collaboration opportunities, APC waivers from institutes, invitations to contribute to special issues, faster publication timelines, and institutional agreements with publishers as the reasons to make their publication(s) Open Access.

**Figure 65. Reasons to make publications Open Access**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you make your non-Horizon funded publication(s) Open Access via a journal, platform or repository?"*

As the question allowed for multiple choices, the overall number of researchers is not specified. However, table below indicates the total count for each of the options.

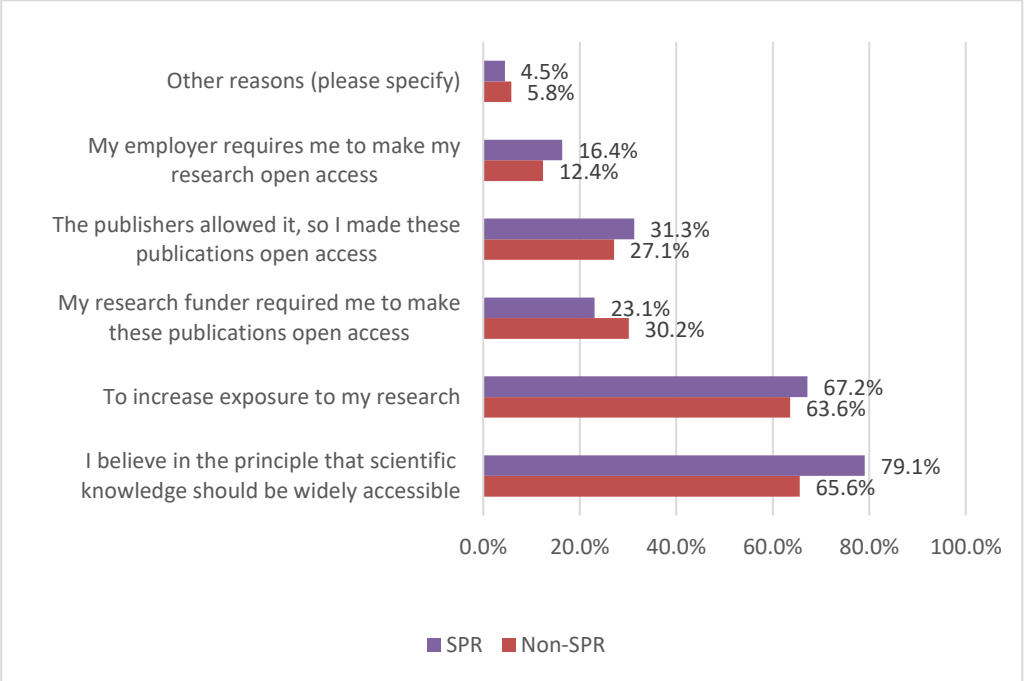
**Table 58. Reasons to make publications Open Access**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| I believe in the principle that scientific knowledge should be widely accessible | 297 | 69.7% |
| To increase exposure to my research | 275 | 64.6% |
| The publishers allowed it, so I made these publications Open Access | 121 | 28.4% |
| My research funder required me to make these publications Open Access | 119 | 27.9% |
| My employer requires me to make my research Open Access | 58 | 13.6% |
| Other reasons (please specify) | 23 | 5.4% |
| Total | 425 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you make your non-Horizon funded publication(s) Open Access via a journal, platform or repository?"*

The reasons for making publications Open Access show slight variations across country groups, namely SPR and non-SPR countries. In SPR countries, the predominant motivation is a belief in the principle that scientific knowledge should be widely accessible (79.1%), as well as the motivation to increase exposure to their research (67.2%). Similarly, non-SPR researchers find both this principle and the goal of increasing exposure to their research to be nearly equally important, at 65.6% and 63.6%, respectively. Other reasons to make the publications Open Access included the requirement from the research funder to make the publications Open Access (23.1% researchers from SPR and 30.2% from non-SPR countries), the fact that the publishers allow Open Access (31.3% from SPR and 27.1% from non-SPR), as well as the requirement from the employer to make the research Open Access (16.4% from SPR and 12.4% from non-SPR).

**Figure 66. Reasons to make publications Open Access (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you make your non-Horizon funded publication(s) Open Access via a journal, platform or repository?"*

**Table 59. Reasons to make publications Open Access (SPR and non-SPR countries)**

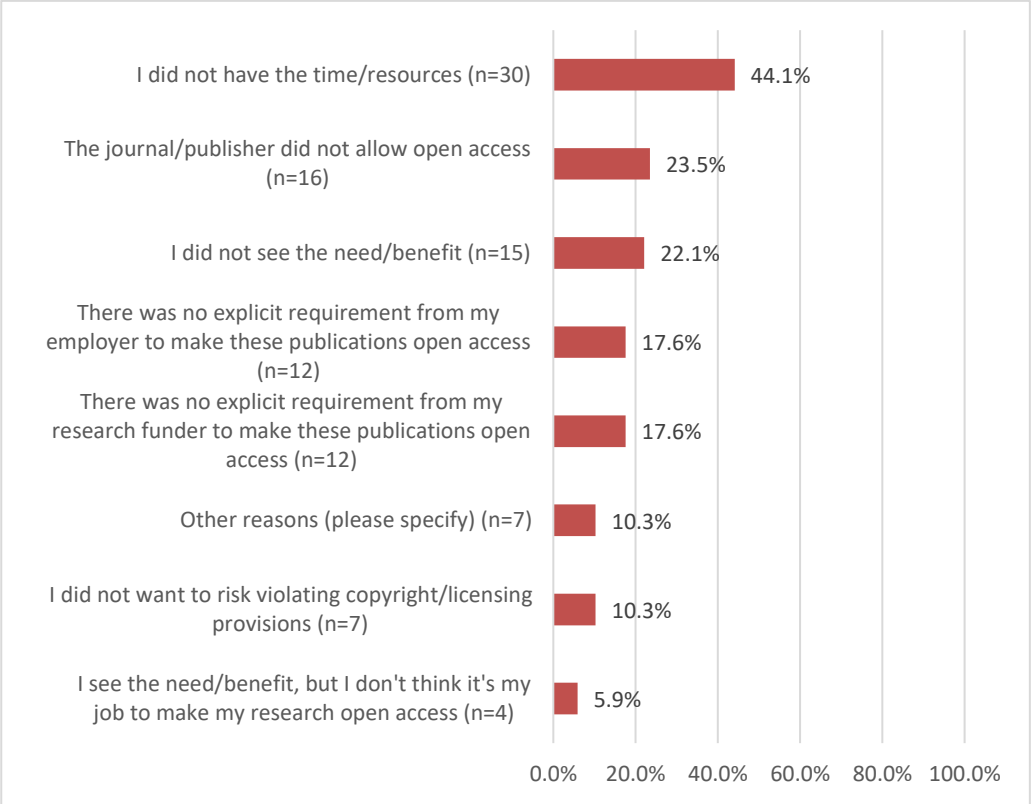
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| I believe in the principle that scientific knowledge should be widely accessible | 106 | 79.1% | 191 | 65.6% |
| To increase exposure to my research | 90 | 67.2% | 185 | 63.6% |
| My research funder required me to make these publications Open Access | 31 | 23.1% | 88 | 30.2% |
| The publishers allowed it, so I made these publications Open Access | 42 | 31.3% | 79 | 27.1% |
| My employer requires me to make my research Open Access | 22 | 16.4% | 36 | 12.4% |
| Other reasons (please specify) | 6 | 4.5% | 17 | 5.8% |
| Total | 134 | 100% | 291 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you make your non-Horizon funded publication(s) Open Access via a journal, platform or repository?"*

### QUESTION 12: Why did you NOT make any of your non-Horizon-funded publications Open Access? (choose all that apply)

In analysing researchers' responses regarding the reasons for not making their non-Horizon-funded publications Open Access, a predominant factor was the constraint of time and resources cited by 44.1% of researchers. Another hindrance mentioned by 23.5% of researchers was the restriction imposed by journals or publishers that did not permit Open Access. Interestingly, a considerable proportion (22.1%) acknowledged not perceiving the need or benefit of making their publications Open Access. Additionally, 17.6% highlighted the absence of explicit requirements from both research funders and employers to publish in an open access format. Notably, 10.3% expressed concerns about violating copyright or licensing provisions, while a similar percentage indicated other unspecified reasons. Interestingly, a small fraction (5.9%) recognised the importance of Open Access but did not consider it their responsibility to undertake this initiative. While 10.3% of researchers indicated other reasons for not choosing Open Access publishing, researchers also mentioned that financial factors were a prominent reason. They highlighted a lack of funds, high prices, and overall costs associated with Open Access publishing. Some mentioned that there was no specific funding allocated for Open Access, and others emphasised the high expenses related to open access publications. Additionally, one researcher indicated that they "do not prefer gold Open Access in general".

**Figure 67. Reasons NOT to make publications Open Access**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why did you NOT make any of your non-Horizon-funded publications Open Access?"*

As the question allowed for multiple choices, the overall number of researchers is not specified. However, Table 60 indicates the total count for each of the options.

**Table 60. Reasons NOT to make publications Open Access**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| I did not have the time/resources | 30 | 44.1% |
| The journal/publisher did not allow Open Access | 16 | 23.5% |
| I did not see the need/benefit | 15 | 22.1% |
| There was no explicit requirement from my research funder to make these publications Open Access | 12 | 17.6% |
| There was no explicit requirement from my employer to make these publications Open Access | 12 | 17.6% |
| I did not want to risk violating copyright/licensing provisions | 7 | 10.3% |
| Other reasons (please specify) | 7 | 10.3% |
| I see the need/benefit, but I don't think it's my job to make my research Open Access | 4 | 5.9% |
| Total | 67 | 100% |

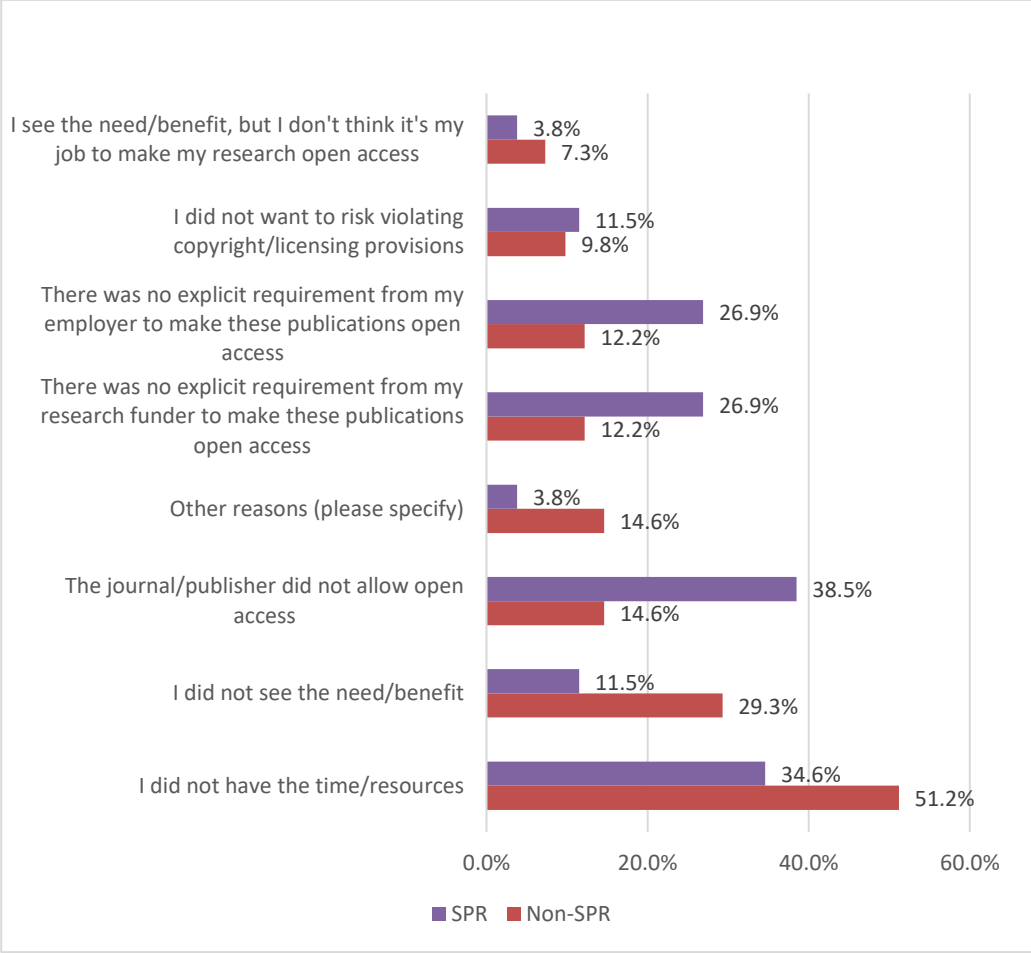
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why did you NOT make any of your non-Horizon-funded publications Open Access?"*

The reasons why researchers did not make their publications Open Access vary significantly between SPR and non-SPR countries. In SPR countries, the primary obstacles include journals or

publishers not permitting Open Access (38.5%), a lack of time/resources (34.6%), and no explicit requirements from the research funder (26.9%) or employer (26.9%). Additionally, concerns about not seeing benefits (11.5%) and the risk of violating copyright/licensing provisions (11.5%) were also mentioned.

On the other hand, for researchers in non-SPR countries, the main hurdle is the lack of time/resources (51.2%), followed by not seeing the benefit (29.3%). Other reasons include the journal not allowing Open Access (14.6%), as well as the absence of explicit requirements from the research funder (12.2%) or employer (12.2%). Notably, the importance of time/resources as a barrier is more pronounced for non-SPR country researchers, whereas for SPR countries, the key concern lies in journals or publishers not allowing Open Access.

**Figure 68. Reasons NOT to make publications Open Access (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you NOT make any of your non-Horizon-funded publications Open Access?"*

**Table 61. Reasons NOT to make publications Open Access (SPR and non-SPR countries)**

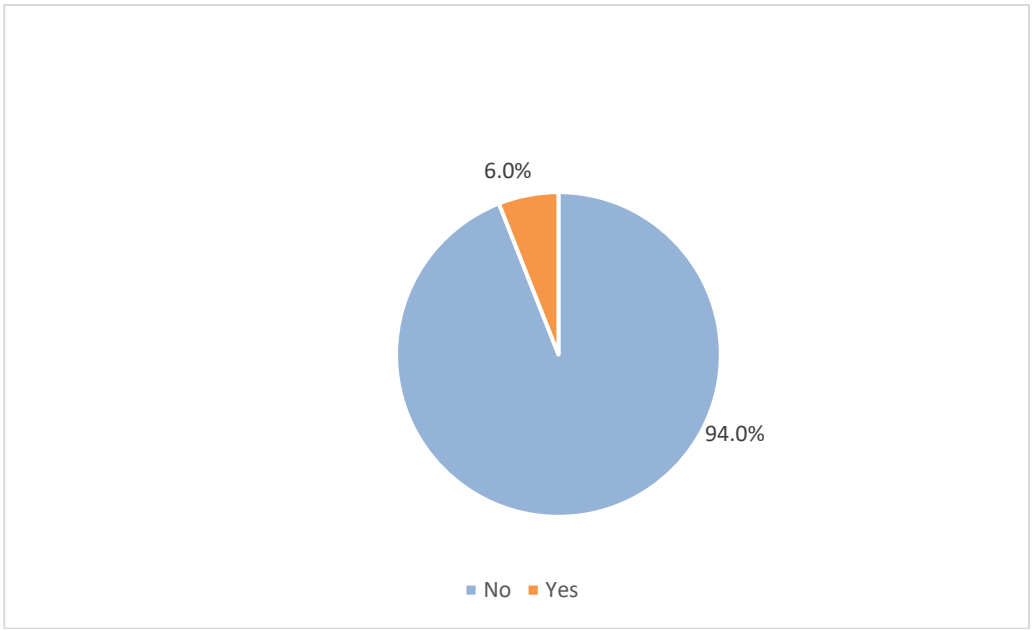
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| I did not have the time/resources | 9 | 34.6% | 21 | 51.2% |
| I did not see the need/benefit | 3 | 11.5% | 12 | 29.3% |
| The journal/publisher did not allow Open Access | 10 | 38.5% | 6 | 14.6% |
| Other reasons (please specify) | 1 | 3.8% | 6 | 14.6% |
| There was no explicit requirement from my research funder to make these publications Open Access | 7 | 26.9% | 5 | 12.2% |
| There was no explicit requirement from my employer to make these publications Open Access | 7 | 26.9% | 5 | 12.2% |
| I did not want to risk violating copyright/licensing provisions | 3 | 11.5% | 4 | 9.8% |
| I see the need/benefit, but I don't think it's my job to make my research Open Access | 1 | 3.8% | 3 | 7.3% |
| Total | 26 | 100% | 41 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Why did you NOT make any of your non-Horizon-funded publications Open Access?"*

### QUESTION 13: When publishing your publications in 2022, did you (i.e. individually or with your institution's help) attempt to negotiate any provisions related to publication access and reuse rights with the publisher?

Researchers were queried about their efforts to negotiate provisions related to publication access and reuse rights, and an overwhelming majority, specifically 94.0% of researchers, indicated that they did not attempt to negotiate such provisions with the publisher.

**Figure 69. Researchers' attempt to negotiate any provisions related to publication access and reuse rights with the publisher, for their publications in 2022 (n=435)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When publishing your publications in 2022, did you (i.e. individually or with your institution's help) attempt to negotiate any provisions related to publication access and reuse rights with the publisher?"*

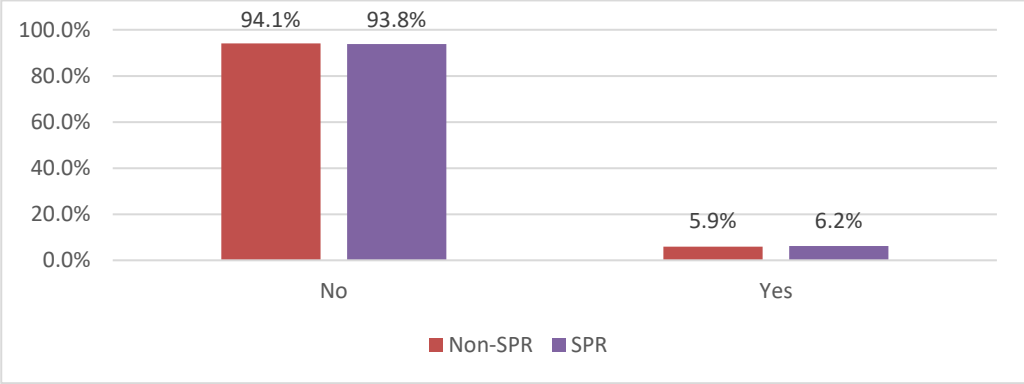
**Table 62. Researchers' attempt to negotiate any provisions related to publication access and reuse rights with the publisher, for their publications in 2022 (n=435)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| I did not have the time/resources | 409 | 94.0% |
| The journal/publisher did not allow Open Access | 26 | 6.0% |
| I did not see the need/benefit | 435 | 100% |

*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "When publishing your publications in 2022, did you (i.e. individually or with your institution's help) attempt to negotiate any provisions related to publication access and reuse rights with the publisher?"*

When it comes to negotiating provisions related to publication access and reuse rights, there is no discernible difference between SPR and non-SPR countries. Both groups show a similar pattern, with 93.8% of researchers from SPR countries and 94.1% from non-SPR countries indicating that they did not engage in negotiations in this regard.

**Figure 70. Researchers' attempt to negotiate any provisions related to publication access and reuse rights with the publisher, for their publications in 2022 (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When publishing your publications in 2022, did you (i.e. individually or with your institution's help) attempt to negotiate any provisions related to publication access and reuse rights with the publisher?"*

**Table 63. Researchers' attempt to negotiate any provisions related to publication access and reuse rights with the publisher, for their publications in 2022 (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| No | 136 | 93.8% | 273 | 94.1% |
| Yes | 9 | 6.2% | 17 | 5.9% |
| Total | 145 | 100% | 290 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "When publishing your publications in 2022, did you (i.e. individually or with your institution's help) attempt to negotiate any provisions related to publication access and reuse rights with the publisher?"*

### QUESTION 14: Which provisions did you attempt to negotiate with the publisher when publishing your publications in 2022? Please provide some details.

Table below presents the provisions that researchers attempted to negotiate with the publisher, when publishing their publications in 2022.

**Table 64. The provisions that researchers attempted to negotiate with the publisher (n=25)**

| Open Access and publication fees | Institutional collaboration and support | Intellectual property rights | Content sharing and permissions |
|---|---|---|---|
| • Negotiating publication fees and reductions. | • Collaborations with institutions for Open Access.<br>• University agreements and support for Open Access.<br>• Embargo negotiations. Open Access agreements with universities. | • Retaining intellectual property rights.<br>• Assignment of own intellectual property rights. | • The decision not to share datasets.<br>• Negotiating for Open Access to specific types of content (e.g. commentary).<br>• Obtaining permissions for publication in specific contexts. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Which provisions did you attempt to negotiate with the publisher when publishing your publications in 2022?"*

### QUESTION 15: Were the negotiations successful (i.e. you obtained the rights you wanted) or not?

Regarding the outcome of negotiations, an open-ended question was posed, and the summarised results are provided in Table 65. Of the researchers, 54.2% reported successful negotiations, 37.5**% reported unsuccessful negotiations, and the remaining 8.3% (n=2) mentioned that their negotiations were partially successful.**

**Table 65. Degree of success in negotiations with the publisher (n=25)**

| Status of negotiations | Count | Share of responses, % (total) |
|---|---|---|
| Successful Negotiations ("Yes") | 14 | 54.2% |
| Partially Successful Negotiations | 2 | 8.3% |
| Unsuccessful Negotiations ("No") | 9 | 37.5% |
| Total | 25 | 100% |

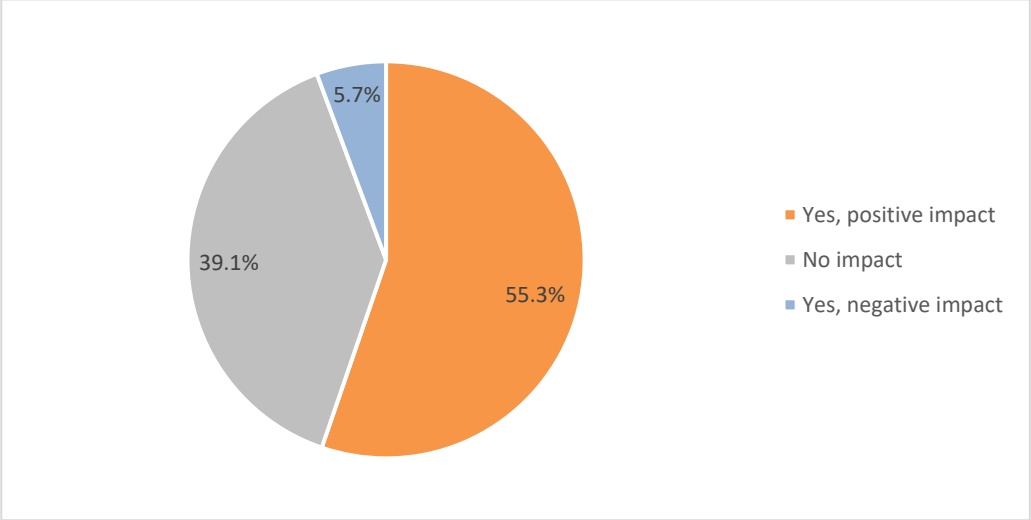
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Were the negotiations successful (i.e. you obtained the rights you wanted) or not?"*

### QUESTION 16: Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?

"Transformative agreement" is an umbrella term describing agreements negotiated between institutions and publishers in which former subscription expenditures are repurposed to support Open Access publishing. These agreements are based on a centrally negotiated procedure.

Transformative agreements have varying impacts on researchers concerning their ability to access and reuse scientific articles. Among researchers, 55.3% noted a positive impact, 39.1% reported no discernible impact, and 5.7% experienced a negative impact.

**Figure 71. The impact of transformative agreements on researchers' ability to access and reuse scientific articles (n=476)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?"*

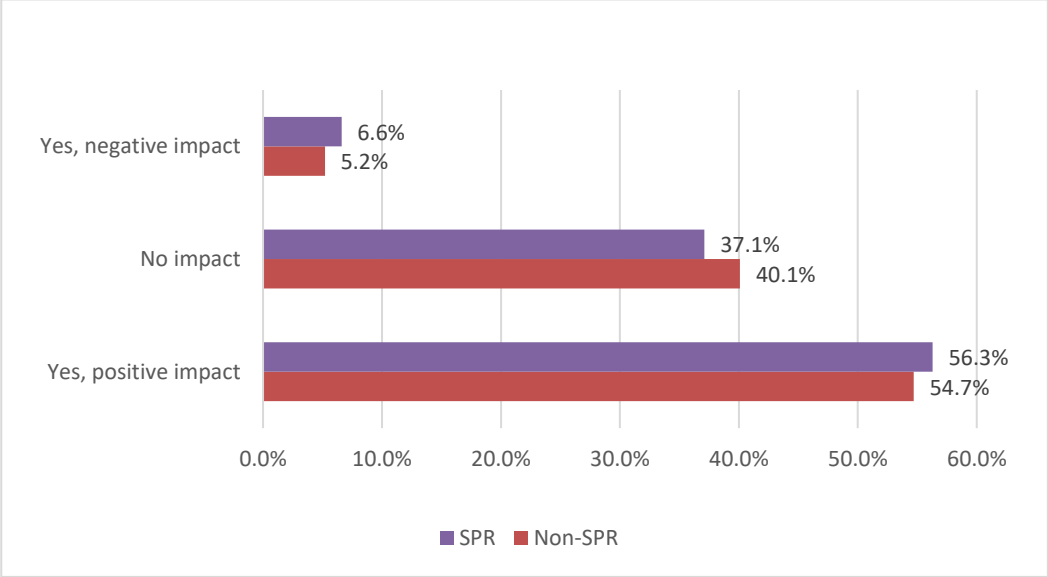
**Table 66. The impact of transformative agreements on researchers' ability to access and reuse scientific articles (n=476)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| Yes, positive impact | 263 | 55.3% |
| No impact | 186 | 39.1% |
| Yes, negative impact | 27 | 5.7% |
| Total | 476 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?"*

Concerning the impact of transformative agreements in distinct country groups, researchers from both SPR and non-SPR countries reported predominantly positive effects (56.3% and 54.7%, respectively). Additionally, a large proportion noted no impact (37.1% and 40.1%). **There was also a minority, comprising 6.6% from SPR countries and 5.2% from non-SPR countries, who experienced a negative impact.**

**Figure 72. The impact of transformative agreements impacting on researchers' ability to access and reuse scientific articles (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?"*

**Table 67. The impact of transformative agreements on researchers' ability to access and reuse scientific articles (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Yes, positive impact | 94 | 56.3% | 169 | 54.7% |
| No impact | 62 | 37.1% | 124 | 40.1% |
| Yes, negative impact | 11 | 6.6% | 16 | 5.2% |
| Total | 167 | 100% | 309 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Do you think that transformative agreements have had an impact on your ability to access and reuse scientific articles?"*

## QUESTION 17: Could you provide details on transformative agreements' positive or negative impact on your ability to access and reuse scientific articles?

Researchers were asked to further elaborate on the positive and negative impacts of transformative agreements on their ability to access and reuse scientific articles. Table 68 outlines the specific impacts mentioned researchers (n=124). The table is categorised into four sections: 1) positive impact on access and reuse, 2) positive impact on collaborations and global accessibility, 3) mixed or partial impact, and 4) negative or limited impact.

**Table 68. Impacts of transformative agreements mentioned by researchers (n=124)**

| |
|---|
| **Positive Impact on Access and Reuse** |
| • Researchers highlighted the significant role of transformative agreements in enhancing their ability to publish Open Access without incurring costs, simplifying the publication process, and broadening access to scientific literature. These agreements have been pivotal in increasing the availability of scientific articles, with institutions forming crucial partnerships with publishers to facilitate this access. The reduction in publication costs and the simplification of journal selection were frequently mentioned benefits, underscoring transformative agreements as a positive force in the academic publishing landscape. |
| **Positive impact on Collaboration and Global Accessibility** |
| • The facilitation of global research collaboration and the sharing of scientific knowledge across borders were noted as key advantages of transformative agreements. Respondents appreciated the ease of sharing resources with international colleagues. This was enabled by broader and Open Access content. These agreements were seen as instrumental in breaking down barriers to information exchange, thereby fostering a more collaborative and accessible global research environment. |
| **Mixed or Partial Impact** |
| • Some responses indicated a mixed or partial impact of transformative agreements, pointing out variability in their effectiveness. While some researchers benefited from increased Open Access availability, others faced challenges when articles were outside their institution's subscriptions. The mixed experiences highlight the complexity of the publishing ecosystem and suggest that while transformative agreements offer significant benefits, their impact can vary widely among researchers and institutions. |
| **Negative or Limited Impact** |
| • A subset of responses voiced concerns over the challenges and limitations associated with transformative agreements, including difficulties in accessing certain scientific articles and the potential misallocation of funds towards high publishing costs. The critique centered on the economic implications of these agreements and their sometimes limited effectiveness in ensuring access to essential research materials. These insights suggest that while transformative agreements aim to improve access and reuse of scientific articles, there are areas where their impact remains constrained or negative. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Could you provide details on transformative agreements' positive or negative impact on your ability to access and reuse scientific articles?"*

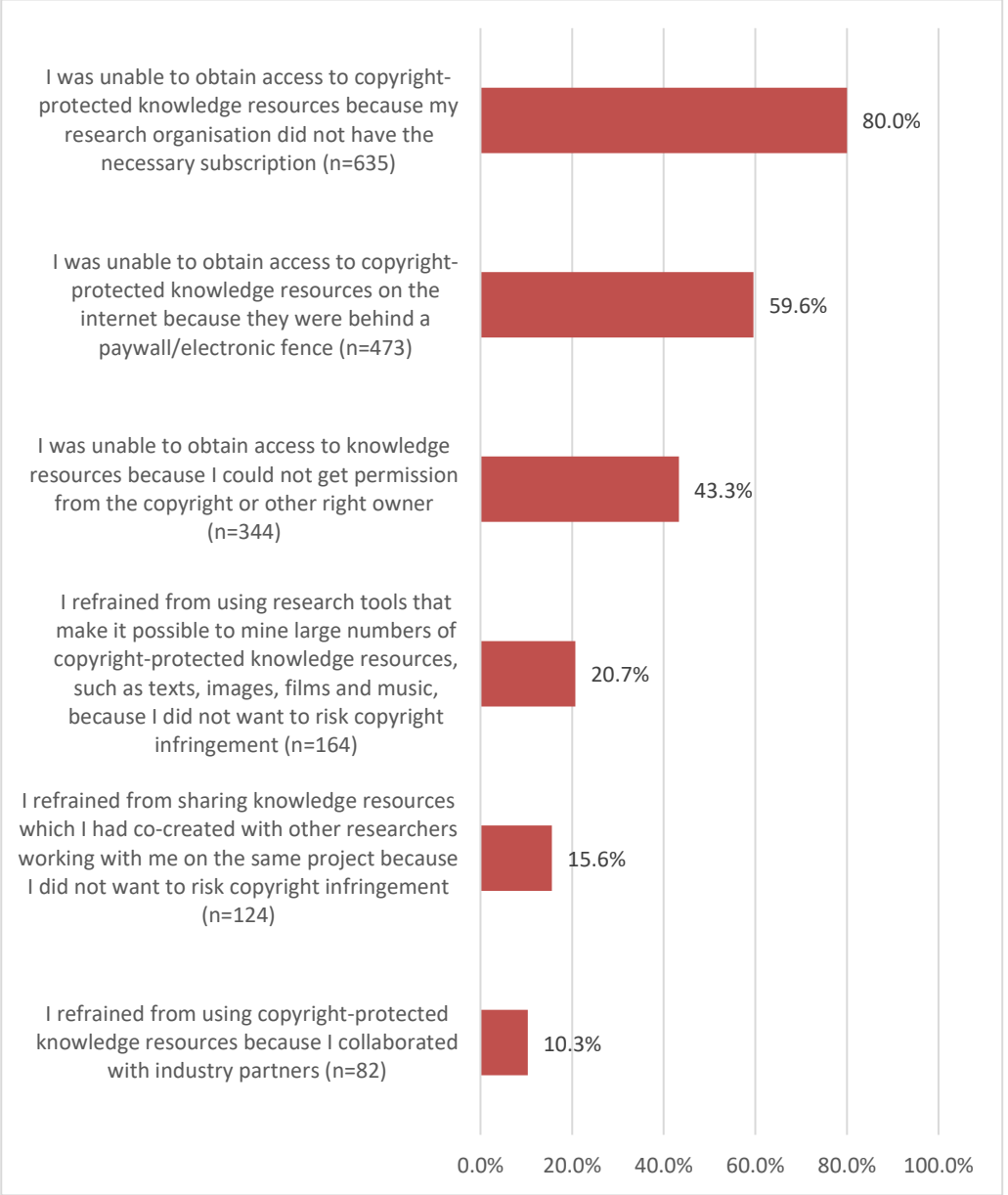
## QUESTION 18: Overall, have you ever faced one of the following situations in your career? (choose all that apply)

Figure 73 and Table 69 below illustrate various situations researchers encounter in their careers. The study presented six situations, allowing researchers to choose multiple options.

The most prevalent situation, chosen by 80.0% of researchers, was researchers being unable to access copyright-protected knowledge resources due to a lack of subscription by their research organisation. Another common scenario, selected by 59.6% of researchers, involved the inability to access copyright-protected knowledge resources on the internet because they were behind a paywall or electronic fence.

Additionally, 43.3% of researchers indicated facing a situation where they could not obtain access to knowledge resources because they were unable to secure permission from the copyright or other right owner. To be more specific, 20.7% of researchers had refrained from using research tools allowing them to mine large numbers of copyright-protected knowledge resources, and 15.6% had refrained from sharing co-created knowledge resources because they did not want to risk copyright infringement; 10.3% did not use copyright-protected knowledge resources due to their collaboration with industry.

**Figure 73. Situations faced by researchers as regards access and reuse of knowledge resources**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Overall, have you ever faced one of the following situations in your career?"*

As the question allowed for multiple choices, the overall number of surveyed researchers is not specified. However, Table 69 indicates the total count for each of the options.

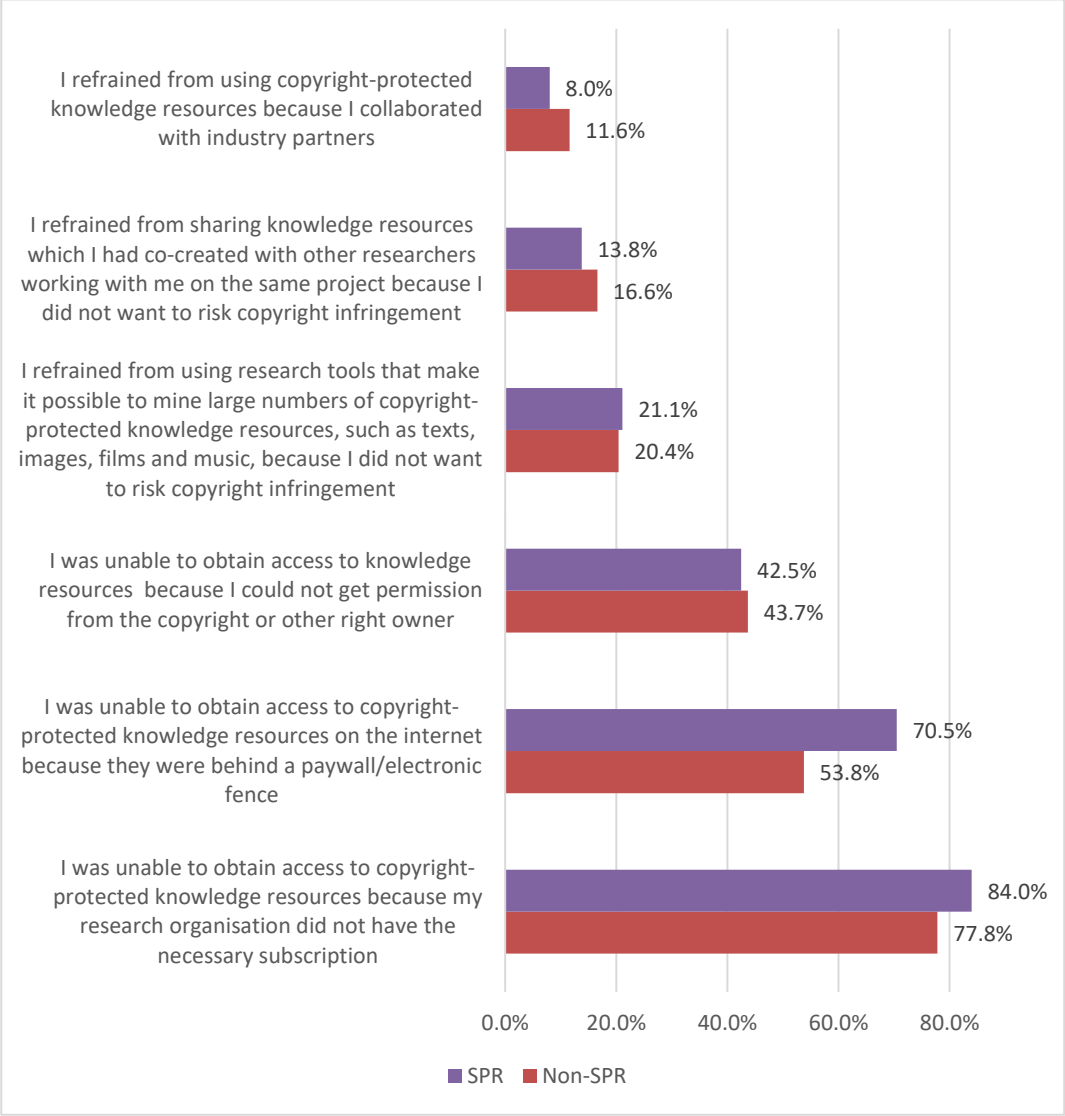
**Table 69. Situations faced by researchers as regards access and reuse of knowledge resources**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| I was unable to obtain access to copyright-protected knowledge resources because my research organisation did not have the necessary subscription | 635 | 80.0% |
| I was unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall/electronic fence | 473 | 59.6% |
| I was unable to obtain access to knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music, webpages and (social media) posts, social media and online platform data, and other data collections) because I could not get permission from the copyright or other right owner | 344 | 43.3% |
| I refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films and music, because I did not want to risk copyright infringement | 164 | 20.7% |
| I refrained from sharing knowledge resources which I had co-created with other researchers working with me on the same project because I did not want to risk copyright infringement | 124 | 15.6% |
| I refrained from using copyright-protected knowledge resources because I collaborated with industry partners | 82 | 10.3% |
| Total | 794 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Overall, have you ever faced one of the following situations in your career?"*

The patterns in situations encountered in researchers' careers show similarities between SPR and non-SPR countries. In both SPR and non-SPR contexts, the most prevalent situation is the inability to access copyright-protected knowledge resources due to a lack of necessary subscriptions by the research organisation (84.0% and 77.8%, respectively). Following this, researchers commonly faced the challenge of being unable to access copyright-protected knowledge resources on the internet because they were behind a paywall or electronic fence (70.5% and 53.8%). Another shared situation was the difficulty in obtaining access to knowledge resources due to the inability to secure permission from the copyright or other right owner (42.5% and 43.7%, respectively). Situations where researchers refrained from using or sharing data, copyright-protected resources, or research tools, were less frequently reported in both SPR and non-SPR countries.

**Figure 74. Situations faced by researchers as regards access and reuse of knowledge resources (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Overall, have you ever faced one of the following situations in your career?"*

**Table 70. Situations faced by researchers as regards access and reuse of knowledge resources (SPR and non-SPR countries)**

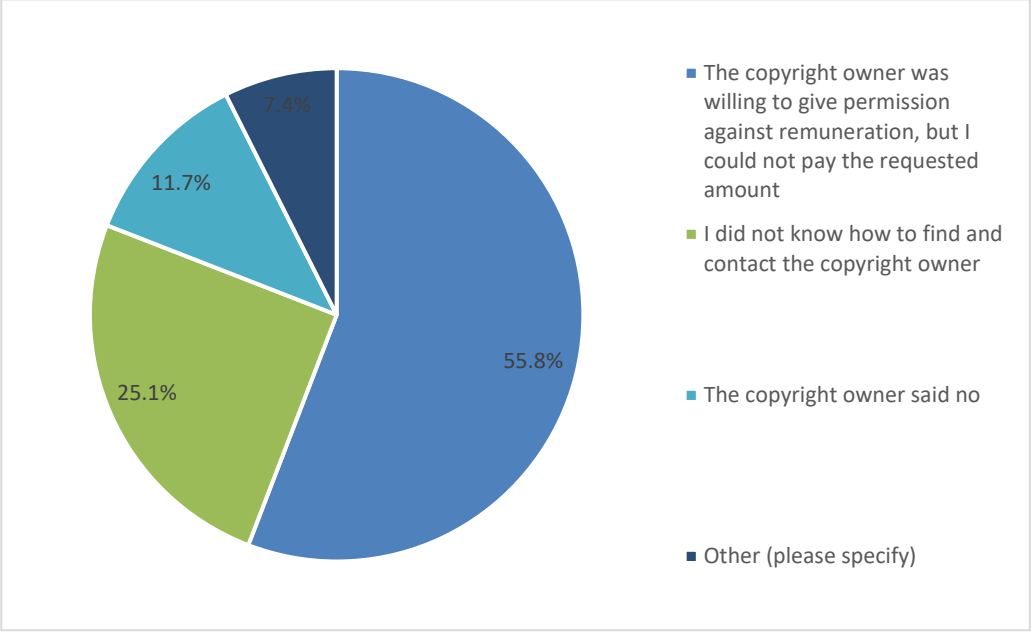
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| I was unable to obtain access to copyright-protected knowledge resources because my research organisation did not have the necessary subscription | 231 | 84.0% | 404 | 77.8% |
| I was unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall/electronic fence | 194 | 70.5% | 279 | 53.8% |
| I was unable to obtain access to knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music, webpages and (social media) posts, social media and online platform data, and other data collections) because I could not get permission from the copyright or other right owner | 117 | 42.5% | 227 | 43.7% |
| I refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films, and music, because I did not want to risk copyright infringement | 58 | 21.1% | 106 | 20.4% |
| I refrained from sharing knowledge resources which I had co-created with other researchers working with me on the same project because I did not want to risk copyright infringement | 38 | 13.8% | 86 | 16.6% |
| I refrained from using copyright-protected knowledge resources because I collaborated with industry partners | 22 | 8.0% | 60 | 11.6% |
| Total | 275 | 100% | 519 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Overall, have you ever faced one of the following situations in your career?"*

## QUESTION 19: Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?

When researchers were questioned about why they could not obtain permission to access knowledge resources from the copyright or other right owner, a large share (55.8%) explained that while the copyright owner was willing to grant permission, they were unable to afford the requested payment. Additionally, 25.1% of researchers stated that they were not aware of how to find and contact the copyright owner, and 11.7% mentioned that the copyright owner explicitly denied permission. According to those who selected 'Other', copyright owners frequently did not respond to requests, leading to difficulties in obtaining necessary permissions. Some authors were unwilling to share privately communicated results or deemed the process too complicated and time-consuming, especially if it involved potential fees. Additional concerns voiced were, instances where universities lacked the necessary licences, copyright owners demanded remuneration that was considered too expensive, or access was denied due to confidentiality concerns.

**Figure 75. Reasons for NOT getting permission to obtain access to knowledge resources from the copyright or other right owner (n=283)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?"*

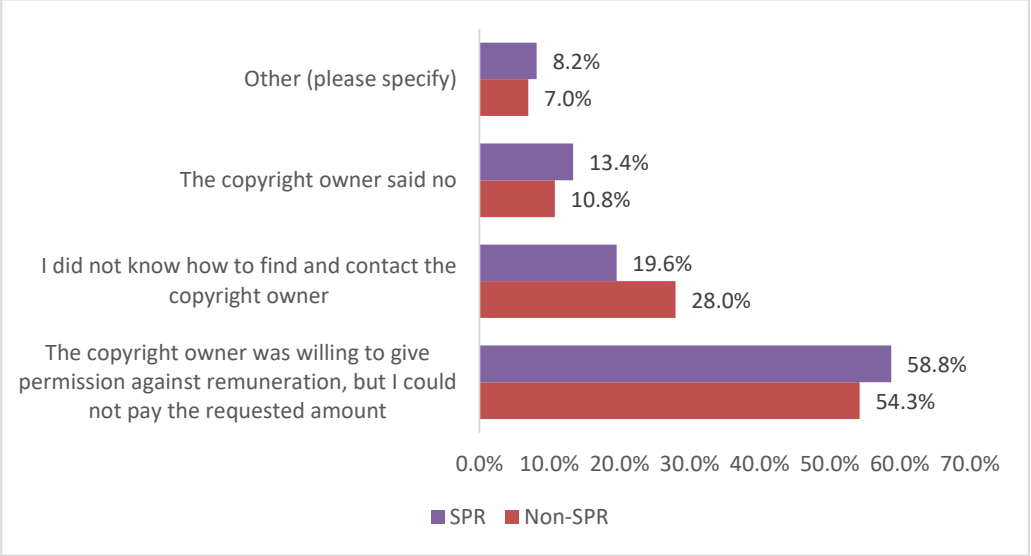
**Table 71. Reasons for NOT getting permission to obtain access to knowledge resources from the copyright or other right owner (n=283)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| The copyright owner was willing to give permission against remuneration, but I could not pay the requested amount | 158 | 55.8% |
| I did not know how to find and contact the copyright owner | 71 | 25.1% |
| The copyright owner said no | 33 | 11.7% |
| Other (please specify) | 21 | 7.4% |
| Total | 283 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?"*

The reasons for not obtaining permission to access knowledge resources are consistent between SPR and non-SPR countries, with similar trends observed in the overall responses. The majority of researchers, both in SPR (58.8%) and non-SPR (54.3%) countries, cited financial constraints as the primary hindrance, indicating an inability to pay the requested amount. Additionally, a proportion of researchers from both SPR countries (13.4%) and non-SPR countries (10.8%) reported that the copyright owner explicitly refused permission.

**Figure 76. Reasons for NOT getting permission to obtain access to knowledge resources from the copyright or other right owner (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?"*

**Table 72. Reasons for NOT getting permission to obtain access to knowledge resources from the copyright or other right owner (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| The copyright owner was willing to give permission against remuneration, but I could not pay the requested amount | 57 | 58.8% | 101 | 54.3% |
| I did not know how to find and contact the copyright owner | 19 | 19.6% | 52 | 28.0% |
| The copyright owner said no | 13 | 13.4% | 20 | 10.8% |
| Other (please specify) | 8 | 8.2% | 13 | 7.0% |
| Total | 97 | 100% | 186 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Why could you not get permission to obtain access to knowledge resources from the copyright or other right owner?"*

## QUESTION 20: What happened when you faced these situations? Please provide some details if possible.

The list of situations researchers encountered when they could not access knowledge resources is presented in Table 73. The results are categorised into five sections: 1) utilising alternative sources or contacting authors directly (including the use of illegal sources), 2) accessing resources through the library, 3) seeking assistance from colleagues or collaborators, 4) pursuing authorisation or paying for access, and 5) ultimately giving up or skipping.

**Table 73. Researchers' reaction when they could not obtain access to knowledge resources from the copyright or other right owner (n=376)**

| Used other sources or contacted authors directly | Accessed through library | Asked colleagues or collaborators | Sought authorisation or paid for access | Gave up or skipped |
|---|---|---|---|---|
| • Looked for alternative sources. Contacted authors directly.<br>• Used ResearchGate or other alternative platforms.<br>• Used Sci-Hub or similar methods.<br>• Accessed resources through illegal means.<br>• Relied on industry-related information. | • Sought help from the University Library. | • Asked friends, colleagues, or institutions with access. | • Asked for payment or authorisation. Paid fees for access. | • Gave up on accessing certain publications. Skipped papers or resources due to lack of access. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What happened when you faced these situations? Please provide some details if possible".*

### QUESTION 21: Apart from the situations described in the previous question, have there been any challenges that you have faced/are facing currently due to the current copyright legislation? Please give examples of such cases.

Researchers were questioned about any additional challenges they encountered due to copyright legislation, and their responses were categorised into five parts: 1) access and cost issues, 2) Open Access and publishing, 3) permissions and reuse, 4) institutional and legal complexity, and 5) teaching and knowledge transfer.

**Table 74. Challenges faced by researchers due to copyright legislation (n=232)**

| Access and cost issues | Open Access and publishing | Permissions and reuse | Institutional and legal complexity | Teaching and knowledge transfer |
|---|---|---|---|---|
| • The cost of accessing journal papers/articles for micro-SMEs is prohibitively high.<br>• Accessing old publications without paying fees is challenging.<br>• Difficulty accessing papers that do not belong to the subscribed group.<br>• Limited access to papers due to the annual budget for Open Access running out; budget constraints toward the end of the year.<br>• Uncertainty about accessing paywalled journal or conference papers, especially when working from home.<br>• Challenges with Open Access fees of prestigious journals. | • Concerns about the unlimited embargo for publications without a fee.<br>• Difficulty in engaging stakeholders and sharing research due to copyright concerns and industrial partners' reluctance to publicise case studies and reports. | • Cumbersome process for reusing figures and visual materials from previous works.<br>• Delays and high fees for including copyrighted materials in books.<br>• Challenges in reusing illustrations/graphs for review papers or book chapters.<br>• Difficulty in reusing published illustrations and photos for non-profit scientific publications.<br>• Uncertainty about fair use (the right to use a copyrighted work under certain conditions without permission of the copyright owner) and the risk of copyright infringement.<br>• Difficulty in making databases Open Access due to uncertainty about copyright legislation.<br>• Concerns about copyright infringement when circulating teaching materials among students. | • Lack of clarity and transparency in copyright legislation, especially for junior scholars.<br>• Non-Disclosure Agreements (NDAs) slowing progress and complicating knowledge transfer.<br>• Challenges in coordinating access to copyrighted data with different requirements.<br>• Balancing the line between using materials within academic affiliations and industry research.<br>• Legal uncertainties and administrative overhead associated with copyright, both restricted and Open Access. | • Difficulty sharing materials for teaching, including posting electronic articles in e-learning environments.<br>• Challenges in sharing knowledge resources co-created with other researchers. |

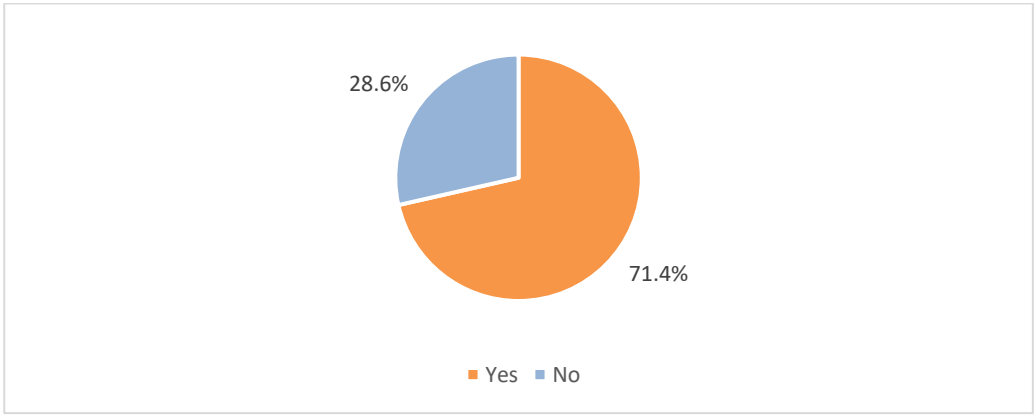
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Apart from the situations described in the previous question, have there been any challenges that you have faced/are facing currently due to the current copyright legislation?"*

## Institutional Open Access/Open Science policies

### QUESTION 22: Does your organisation/institution have an Open Access/Open Science policy?

The survey findings show that a significant majority of researchers (71.4%), indicated that their respective organisations or institutions have an established Open Access or Open Science policy. However, it is noteworthy that 28.6% of researchers reported that their organisations or institutions currently lack such a policy.

**Figure 77. Presence of an Open Access/Open Science policy in researchers' organisations/institutions (n=767)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Does your organisation/institution have an Open Access/Open Science policy?"*

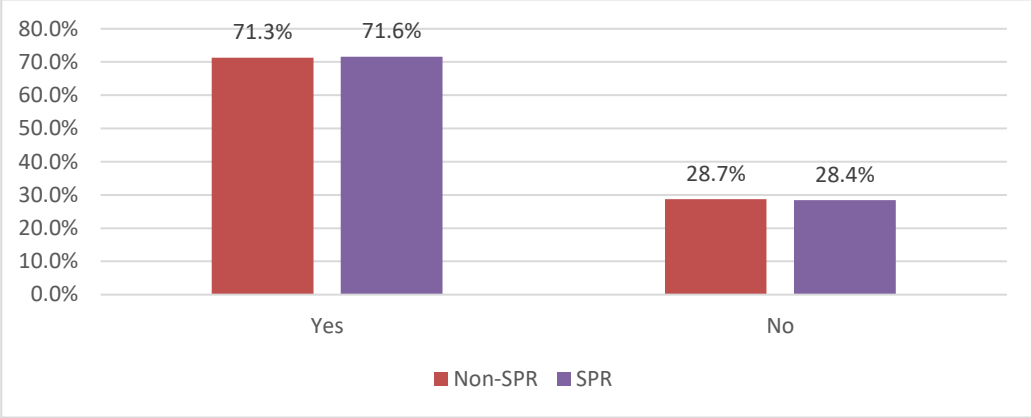
**Table 75. Presence of an Open Access/Open Science policy in researchers' organisations/institutions (n=767)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| Yes | 548 | 71.4% |
| No | 219 | 28.6% |
| Total | 767 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Does your organisation/institution have an Open Access/Open Science policy?"*

The presence of an Open Access/Open Science policy within organisations does not vary between SPR and non-SPR countries.

**Figure 78. Presence of an Open Access/Open Science policy in researchers' organisations/institutions (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Does your organisation/institution have an Open Access/Open Science policy?"*

**Table 76. Presence of an Open Access/Open Science policy in researchers' organisations/institutions (SPR and non-SPR countries)**

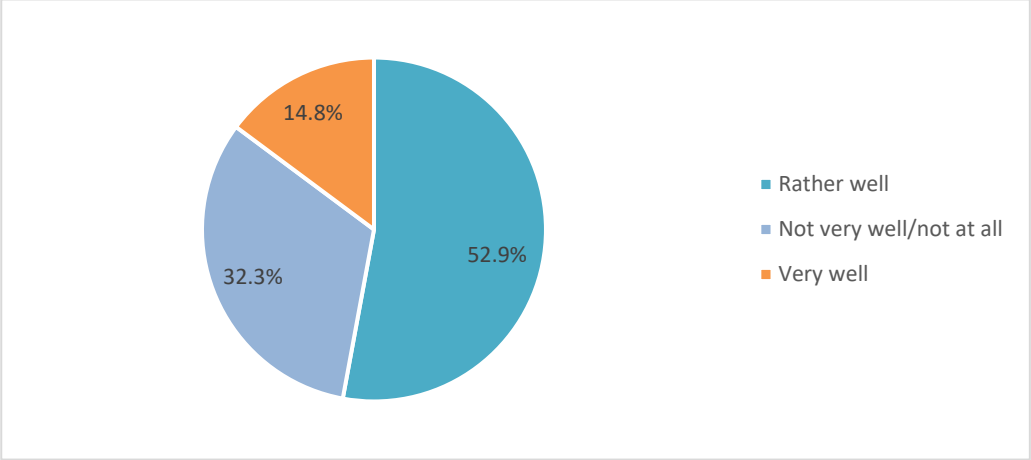
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Yes | 187 | 71.6% | 361 | 71.3% |
| No | 74 | 28.4% | 145 | 28.7% |
| Total | 261 | 100% | 506 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Does your organisation/institution have an Open Access/Open Science policy?"*

### QUESTION 23: How well do you know your organisation's/institution's Open Access/Open Science policy?

When researchers were asked about their familiarity with their organisation's Open Access/Open Science policy, nearly half of them indicated a solid understanding. Specifically, 52.9% stated that they know the policy rather well, and an additional 14.8% claimed to know it very well. However, a large share, accounting for 32.3%, mentioned that they do not know the policy.

**Figure 79. Researchers' knowledge of their organisation's Open Access/Open Science policy (n=533)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "How well do you know your organisation's/institution's Open Access/Open Science policy?"*

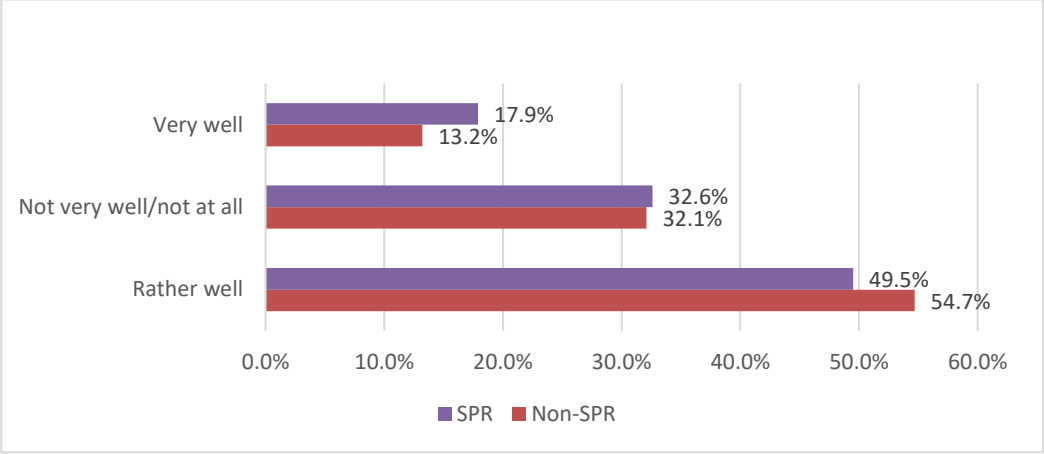
**Table 77. Researchers 'knowledge of their organisation's Open Access/Open Science' policy (n=533)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| Rather well | 282 | 52.9% |
| Not very well/not at all | 172 | 32.3% |
| Very well | 79 | 14.8% |
| Total | 533 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "How well do you know your organisation's/institution's Open Access/Open Science policy?"*

There is no significant difference between SPR and non-SPR countries as regards the acquaintance of researchers with their organisations' Open Access or Open Science policies. However, there are slight differences in the level of knowledge. In SPR countries, a higher proportion of researchers (17.9%) reported knowing the policy very well compared to non-SPR countries (13.2%). Conversely, the category of knowing the policy rather well is slightly more prevalent among non-SPR countries, with 54.7%, compared to 49.5% in SPR countries.

**Figure 80. researchers' knowledge of their organisation's Open Access/Open Science policy (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "How well do you know your organisation's/institution's Open Access/Open Science policy?"*

**Table 78. Researchers' knowledge of their organisation's Open Access/Open Science policy (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Rather well | 91 | 49.5% | 191 | 54.7% |
| Not very well/not at all | 60 | 32.6% | 112 | 32.1% |
| Very well | 33 | 17.9% | 46 | 13.2% |
| Total | 184 | 100% | 349 | 100% |

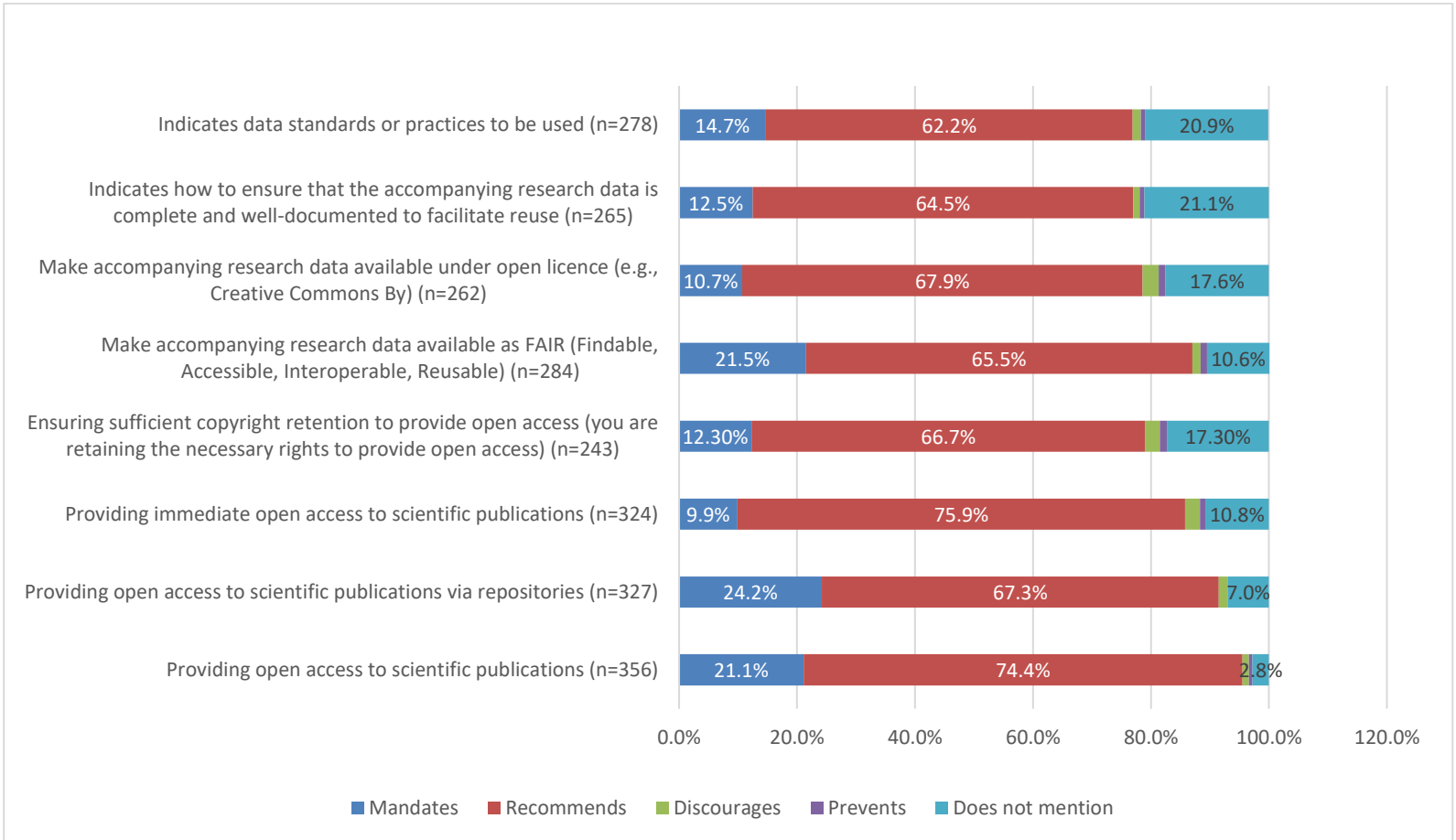
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "How well do you know your organisation's/institution's Open Access/Open Science policy?"*

### QUESTION 24: To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?

Regarding the institution's approach to mandating, recommending, discouraging, or preventing specific provisions, it is evident that organisations primarily opt for recommendations rather than mandates or do not mention if provisions are mandatory, recommended, discouraged or prevented. The same trends go for SPR and non-SPR countries (which can be seen in the tables below, which are separated from those countries' groups). However, there are three provisions where organisations mandate at a rate exceeding 20%: making accompanying research data available as FAIR (21.5%), providing Open Access to scientific publications (21.1%), and providing Open Access to scientific publications via repositories (24.2%).

Conversely, two provisions stand out where institutions do not mention them for a substantial percentage: indicating the data standards or practices to be used (20.9%) and indicating how to ensure that the accompanying research data are complete and well-documented to facilitate reuse (21.1%).

**Figure 81. Open Access provisions in institutional policies**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

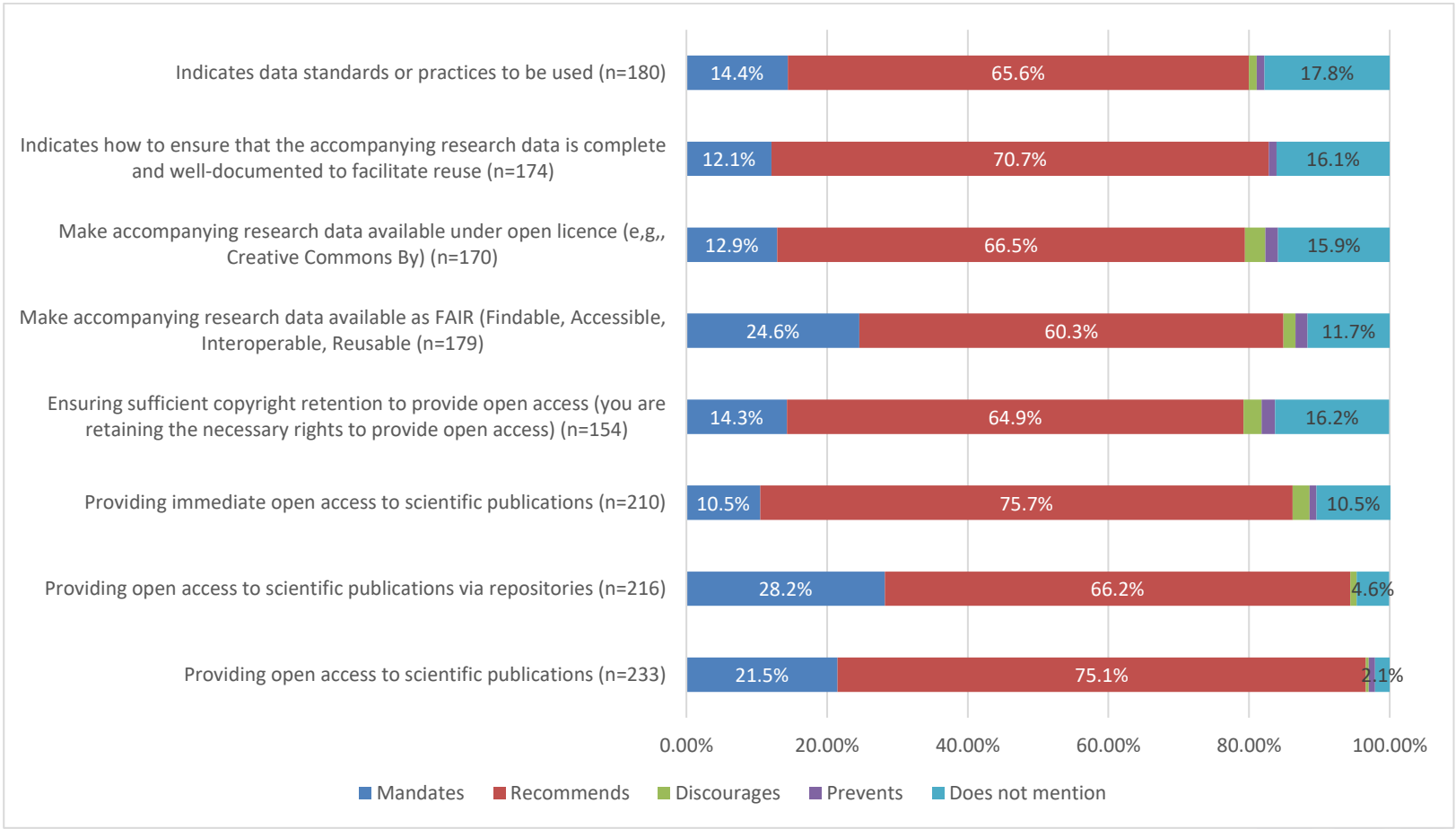
As the question allowed for multiple choices, the overall number of researchers is not specified. However, Table 79 indicates the total count for each of the options.

**Table 79. Open Access provisions in institutional policies**

| | Mandates | Recommends | Discourages | Prevents | Does not mention | Total |
|---|---|---|---|---|---|---|
| Providing Open Access to scientific publications | 75 (21.1%) | 265 (74.4%) | 4 (1.1%) | 2 (0.6%) | 10 (2.8%) | 356 |
| Providing Open Access to scientific publications via repositories | 79 (24.2%) | 220 (67.3%) | 5 (1.5%) | 0 (0.0%) | 23 (7.0%) | 327 |
| Providing immediate Open Access to scientific publications | 32 (9.9%) | 246 (75.9%) | 8 (2.5%) | 3 (0.9%) | 35 (10.8%) | 324 |
| Ensuring sufficient copyright retention to provide Open Access (you are retaining the necessary rights to provide Open Access) | 30 (12.3%) | 162 (66.7%) | 6 (2.5%) | 3 (1.2%) | 42 (17.3%) | 243 |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) | 61 (21.5%) | 186 (65.5%) | 4 (1.4%) | 3 (1.1%) | 30 (10.6%) | 284 |
| Make accompanying research data available under open licence (e.g. Creative Commons By) | 28 (10.7%) | 178 (67.9%) | 7 (2.7%) | 3 (1.1%) | 46 (17.6%) | 262 |
| Indicates how to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 33 (12.5%) | 171 (64.5%) | 3 (1.1%) | 2 (0.8%) | 56 (21.1%) | 265 |
| Indicates data standards or practices to be used | 41 (14.7%) | 173 (62.2%) | 4 (1.4%) | 2 (0.7%) | 58 (20.9%) | 278 |

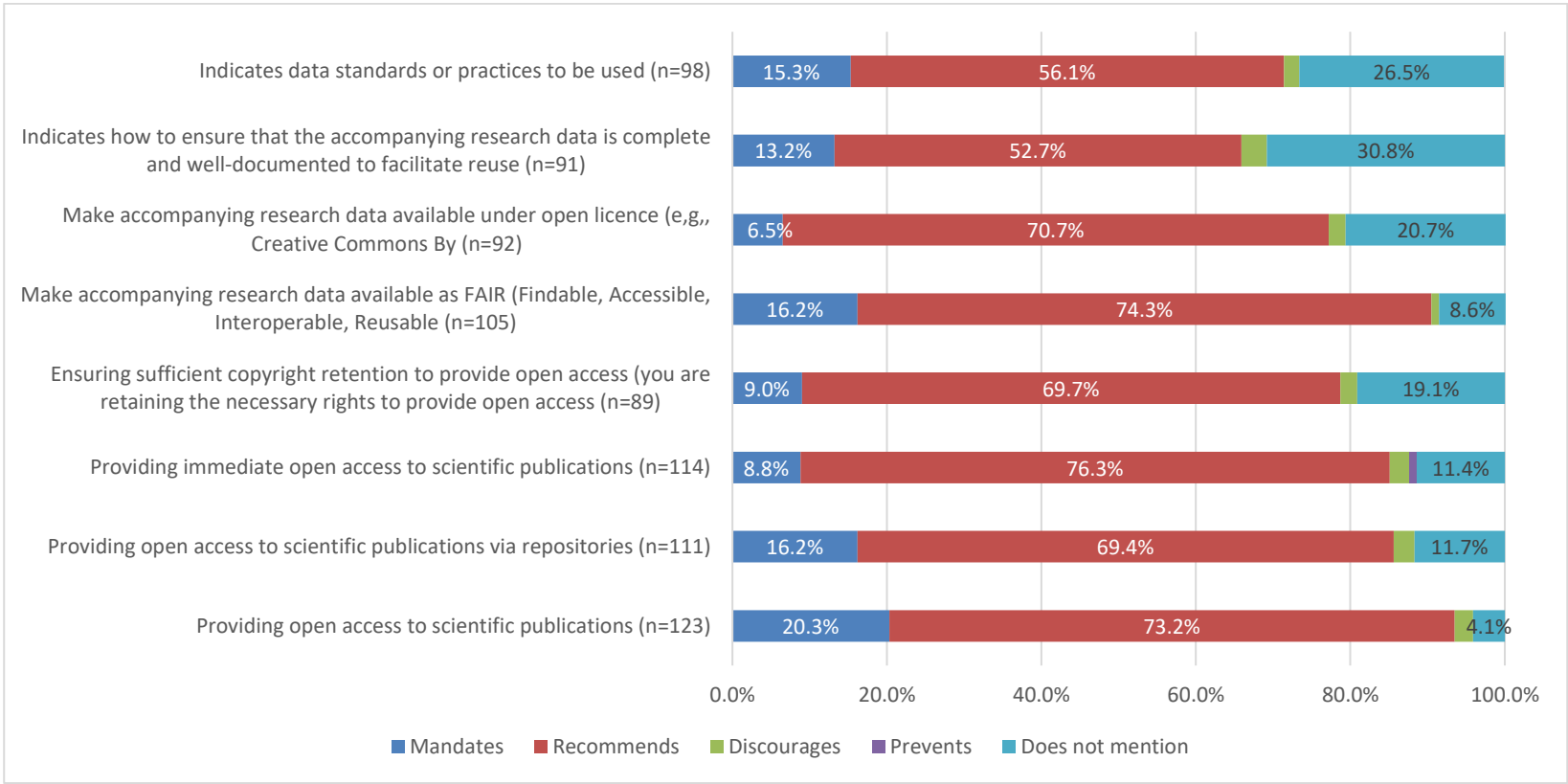
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

**Figure 82. Open Access provisions in institutional policies (non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

**Figure 83. Open Access provisions in institutional policies (SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

**Table 80. Open Access provisions in institutional policies (SPR countries)**

| SPR | Mandates | Recommends | Discourages | Prevents | Does not mention | Total |
|---|---|---|---|---|---|---|
| Providing Open Access to scientific publications | 25 (20.3%) | 90 (73.2%) | 3 (2.4%) | 0 (0.0%) | 5 (4.1%) | 123 |
| Providing Open Access to scientific publications via repositories | 18 (16.2%) | 77 (69.4%) | 3 (2.7%) | 0 (0.0%) | 13 (11.7%) | 111 |
| Providing immediate Open Access to scientific publications | 10 (8.8%) | 87 (76.3%) | 3 (2.6%) | 1 (0.9%) | 13 (11.4%) | 114 |
| Ensuring sufficient copyright retention to provide Open Access (you are retaining the necessary rights to provide Open Access) | 8 (9.0%) | 62 (69.7%) | 2 (2.2%) | 0 (0.0%) | 17 (19.1%) | 89 |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) | 17 (16.2%) | 78 (74.3%) | 1 (1.0%) | 0 (0.0%) | 9 (8.6%) | 105 |
| Make accompanying research data available under open licence (e.g. Creative Commons By) | 6 (6.5%) | 65 (70.7%) | 2 (2.2%) | 0 (0.0%) | 19 (20.7%) | 92 |
| Indicates how to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 12 (13.2%) | 48 (52.7%) | 3 (3.3%) | 0 (0.0%) | 28 (30.8%) | 91 |
| Indicates data standards or practices to be used | 15 (15.3%) | 55 (56.1%) | 2 (2.0%) | 0 (0.0%) | 26 (26.5%) | 98 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

**Table 81. Open Access provisions in institutional policies (non-SPR countries)**

| Non-SPR | Mandates | Recommends | Discourages | Prevents | Does not mention | Total |
|---|---|---|---|---|---|---|
| Providing Open Access to scientific publications | 50 (21.5%) | 175 (75.1%) | 1 (0.4%) | 2 (0.9%) | 5 (2.1%) | 233 |
| Providing Open Access to scientific publications via repositories | 61 (28.2%) | 143 (66.2%) | 2 (0.9%) | 0 (0.0%) | 10 (4.6%) | 216 |
| Providing immediate Open Access to scientific publications | 22 (10.5%) | 159 (75.7%) | 5 (2.4%) | 2 (1.0%) | 22 (10.5%) | 210 |
| Ensuring sufficient copyright retention to provide Open Access (you are retaining the necessary rights to provide Open Access) | 22 (14.3%) | 100 (64.9%) | 4 (2.6%) | 3 (1.9%) | 25 (16.2%) | 154 |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) | 44 (24.6%) | 108 (60.3%) | 3 (1.7%) | 3 (1.7%) | 21 (11.7%) | 179 |
| Make accompanying research data available under open licence (e.g. Creative Commons By) | 22 (12.9%) | 113 (66.5%) | 5 (2.9%) | 3 (1.8%) | 27 (15.9%) | 170 |
| Indicates how to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 21 (12.1%) | 123 (70.7%) | 0 (0.0%) | 2 (1.1%) | 28 (16.1%) | 174 |
| Indicates data standards or practices to be used | 26 (14.4%) | 118 (65.6%) | 2 (1.1%) | 2 (1.1%) | 32 (17.8%) | 180 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access policy mandate, recommend, discourage or prevent any of the following provisions?"*

## Your perceptions about potential changes to the copyright legislation

**QUESTION 25: Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)?**

It is interesting to note that researchers evaluated all five suggested changes to copyright legislation with a median ranking of 8, indicating that, for most researchers, all potential changes are perceived as equally important in terms of potential implementation.

As the question allowed for multiple choices, the overall number of researchers is not specified. However, the tables below (Tables 45, 46 and 47) indicate the total count for each of the options.

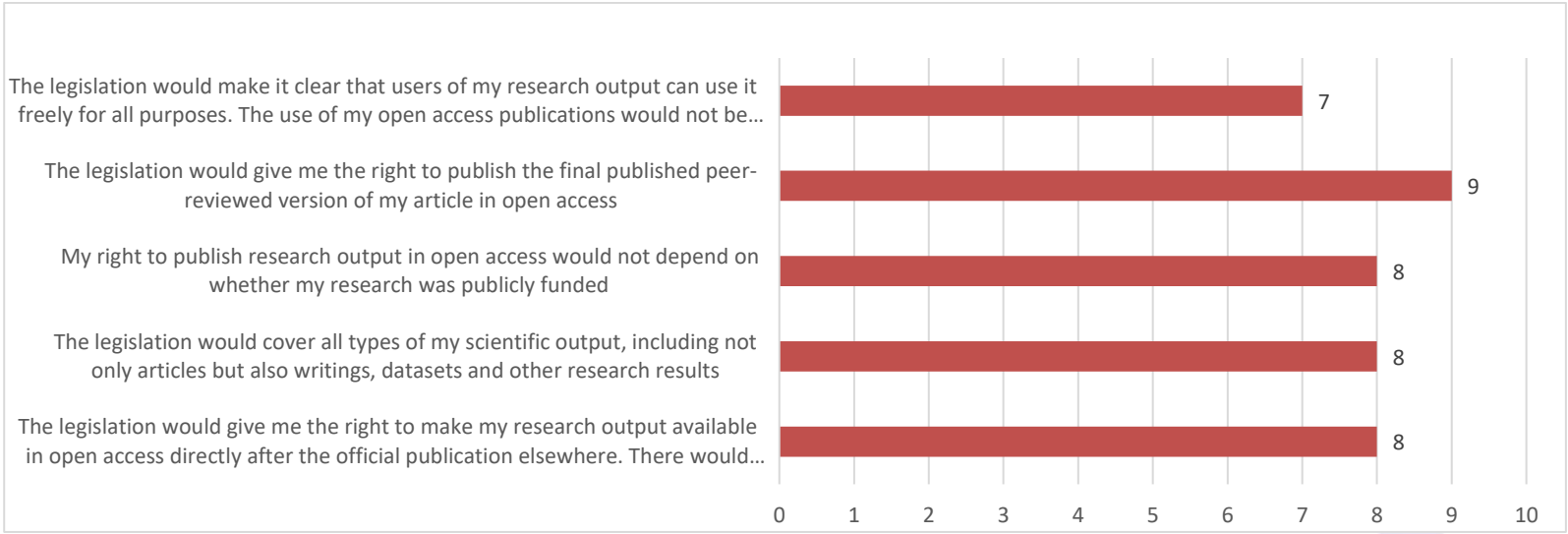
**Table 82. Researchers' perceptions about potential changes to the copyright legislation**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Median | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The legislation would give me the right to make my research output available in Open Access directly after the official publication elsewhere. There would be no embargo period that obliges me to wait for 6 months or longer | 32 (3.6%) | 16 (1.8%) | 25 (2.8%) | 18 (2.0%) | 75 (8.5%) | 51 (5.8%) | 75 (8.5%) | 178 (20.2%) | 131 (14.9%) | 279 (31.7%) | 8 | 880 |
| The legislation would cover all types of my scientific output, including not only articles but also writings, datasets and other research results | 35 (4.0%) | 19 (2.2%) | 33 (3.8%) | 27 (3.1%) | 90 (10.3%) | 59 (6.7%) | 91 (10.4%) | 176 (20.1%) | 138 (15.8%) | 207 (23.7%) | 8 | 875 |
| My right to publish research output in Open Access would not depend on whether my research was publicly funded | 49 (5.6%) | 19 (2.2%) | 23 (2.6%) | 21 (2.4%) | 89 (10.1%) | 56 (6.4%) | 87 (9.9%) | 150 (17.1%) | 127 (14.5%) | 256 (29.2%) | 8 | 877 |
| The legislation would give me the right to publish the final published peer-reviewed version of my article in Open Access | 24 (2.7%) | 15 (1.7%) | 14 (1.6%) | 15 (1.7%) | 65 (7.4%) | 44 (5.0%) | 90 (10.2%) | 145 (16.5%) | 160 (18.2%) | 307 (34.9%) | 8 | 879 |
| The legislation would make it clear that users of my research output can use it freely for all purposes. The use of my Open Access publications would not be limited to non-commercial use | 71 (8.2%) | 39 (4.5%) | 45 (5.2%) | 38 (4.4%) | 115 (13.2%) | 75 (8.6%) | 92 (10.6%) | 124 (14.3%) | 103 (11.9%) | 167 (19.2%) | 8 | 869 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)?"*

In both SPR and non-SPR countries, both country groups rated the potential changes to copyright legislation similarly. The highest median ranking was for the proposed change stating that legislation would give the right to publish the final published peer-reviewed version of an article in Open Access (median – 9). On the other hand, the proposed change that legislation would make it clear that users of the research output can use it freely for all purposes had a median ranking of 7. Overall, all proposed changes received high median rankings, indicating that researchers favour the implementation of these provisions in their respective countries.

**Figure 84. Researchers' perceptions about potential changes to the copyright legislation (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)?"*

**Table 83. Researchers' perceptions about potential changes to the copyright legislation (SPR countries)**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Median | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The legislation would give me the right to make my research output available in Open Access directly after the official publication elsewhere. There would be no embargo period that obliges me to wait for 6 months or longer | 12 (4.0%) | 8 (2.7%) | 9 (3.0%) | 7 (2.3%) | 23 (7.7%) | 13 (4.3%) | 24 (8.0%) | 56 (18.7%) | 50 (16.7%) | 97 (32.4%) | 8 | 299 |
| The legislation would cover all types of my scientific output, including not only articles but also writings, datasets and other research results | 12 (4.1%) | 8 (2.7%) | 17 (5.7%) | 9 (3.0%) | 27 (9.1%) | 19 (6.4%) | 21 (7.1%) | 64 (21.6%) | 43 (14.5%) | 76 (25.7%) | 8 | 296 |
| My right to publish research output in Open Access would not depend on whether my research was publicly funded | 23 (7.7%) | 9 (3.0%) | 10 (3.4%) | 9 (3.0%) | 33 (11.1%) | 16 (5.4%) | 25 (8.4%) | 41 (13.8%) | 32 (10.8%) | 99 (33.3%) | 8 | 297 |
| The legislation would give me the right to publish the final published peer-reviewed version of my article in Open Access | 8 (2.7%) | 7 (2.3%) | 4 (1.3%) | 5 (1.7%) | 21 (7.0%) | 12 (4.0%) | 31 (10.4%) | 46 (15.4%) | 49 (16.4%) | 115 (38.6%) | 9 | 298 |
| The legislation would make it clear that users of my research output can use it freely for all purposes. The use of my Open Access publications would not be limited to non-commercial use | 28 (9.6%) | 18 (6.1%) | 21 (7.2%) | 14 (4.8%) | 39 (13.3%) | 24 (8.2%) | 25 (8.5%) | 32 (10.9%) | 35 (11.9%) | 57 (19.5%) | 7 | 293 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)?"*

**Table 84. Researchers' perceptions about potential changes to the copyright legislation (non-SPR)**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Median | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The legislation would give me the right to make my research output available in Open Access directly after the official publication elsewhere. There would be no embargo period that obliges me to wait for 6 months or longer | 20 (3.4%) | 8 (1.4%) | 16 (2.8%) | 11 (1.9%) | 52 (9.0%) | 38 (6.5%) | 51 (8.8%) | 122 (21.0%) | 81 (13.9%) | 182 (31.3%) | 8 | 581 |
| The legislation would cover all types of my scientific output, including not only articles but also writings, datasets and other research results | 23 (4.0%) | 11 (1.9%) | 16 (2.8%) | 18 (3.1%) | 63 (10.9%) | 40 (6.9%) | 70 (12.1%) | 112 (19.3%) | 95 (16.4%) | 131 (22.6%) | 8 | 579 |
| My right to publish research output in Open Access would not depend on whether my research was publicly funded | 26 (4.5%) | 10 (1.7%) | 13 (2.2%) | 12 (2.1%) | 56 (9.7%) | 40 (6.9%) | 62 (10.7%) | 109 (18.8%) | 95 (16.4%) | 157 (27.1%) | 8 | 580 |
| The legislation would give me the right to publish the final published peer-reviewed version of my article in Open Access | 16 (2.8%) | 8 (1.4%) | 10 (1.7%) | 10 (1.7%) | 44 (7.6%) | 32 (5.5%) | 59 (10.2%) | 99 (17.0%) | 111 (19.1%) | 192 (33.0%) | 9 | 581 |
| The legislation would make it clear that users of my research output can use it freely for all purposes. The use of my Open Access publications would not be limited to non-commercial use | 43 (7.5%) | 21 (3.6%) | 24 (4.2%) | 24 (4.2%) | 76 (13.2%) | 51 (8.9%) | 67 (11.6%) | 92 (16.0%) | 68 (11.8%) | 110 (19.1%) | 7 | 576 |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Assuming that any of these provisions are implemented in your country, how important would they be for you (1 = not important at all; 10 = very important)?"*

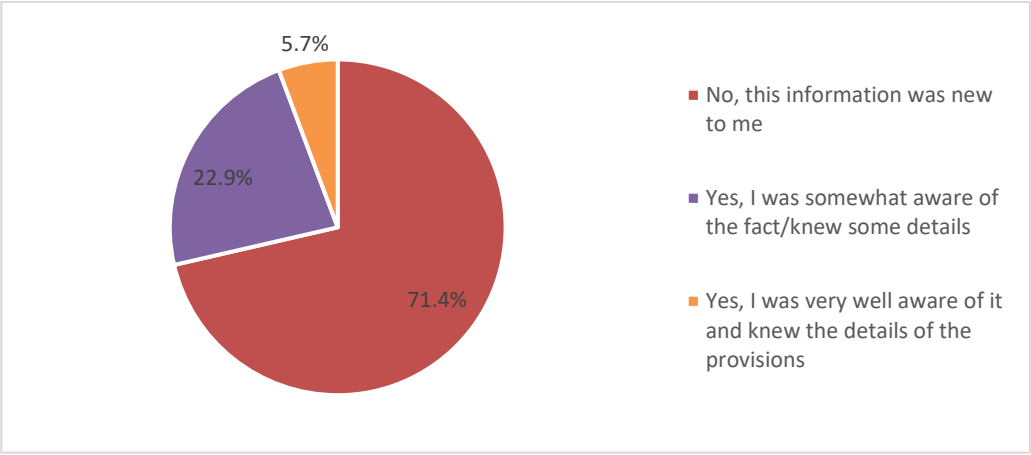
## Your experience with the Secondary Publication Right

The questions in this Section 1.4 were administered only to researchers from countries with the SPR legislation.

### QUESTION 26: Before this information, were you aware that Germany had introduced the Secondary Publication Right (SPR) legislation?

Table 85 presents insights into researchers' awareness of Germany's Secondary Publication Right (SPR) legislation (only those who selected Germany as the country of their organisation in question 4 received this question). Notably, the majority of researchers (71.4%) indicated that this information was entirely new to them. In contrast, a noteworthy 22.9% reported some level of prior awareness, indicating they possessed some knowledge or familiarity with Germany's SPR legislations before participating in the survey. A smaller percentage (5.7%) claimed to be very well aware of the legislation.

**Figure 85. Researchers' awareness of the SPR legislation in Germany (n=105)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Before this information, were you aware that Germany had introduced the Secondary Publication Right (SPR) legislation?"*

**Table 85. Researchers' awareness of the SPR legislation in Germany**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| No, this information was new to me | 75 | 71.4% |
| Yes, I was somewhat aware of the fact/knew some details | 24 | 22.9% |
| Yes, I was very well aware of it and knew the details of the provisions | 6 | 5.7% |
| Total | 105 | 100% |

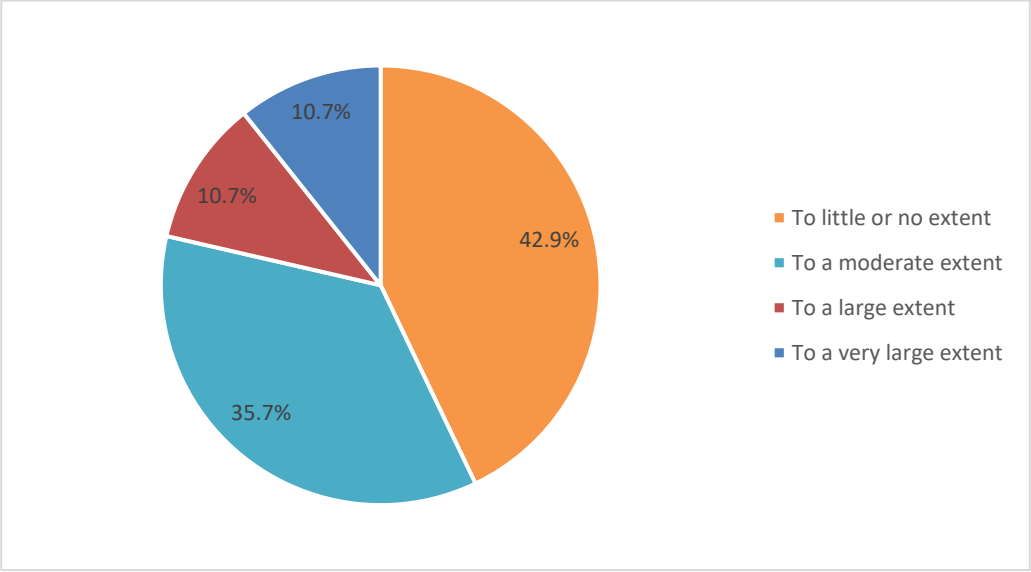
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Before this information, were you aware that Germany had introduced the Secondary Publication Right (SPR) legislation?"*

### QUESTION 27: To what extent do the Secondary Publication Right (SPR) provisions in Germany impact the way you publish, access, disseminate and enable others to reuse your research?

Figure 86 depicts researchers' perceptions of how the Secondary Publication Right (SPR) provisions in Germany impact their research-related activities, including publishing, access,

dissemination, and enabling reuse. The majority of researchers (42.9%) expressed that the SPR provisions have a limited or negligible impact, suggesting that they perceive the influence of these regulations to be minimal in their research practices. A large share of researchers (35.7%) reported a moderate extent of impact, indicating that they acknowledge a discernible but not overwhelming influence on their publishing and research-related activities. Furthermore, 10.7% of researchers indicated that the SPR provisions have a substantial impact, either to a large or very large extent, on the way they publish, access, disseminate, and facilitate others' reuse of their research.

**Figure 86. The impact of German SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=28)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Germany impact the way you publish, access, disseminate and enable others to reuse your research?"*

**Table 86. The impact of German SPR provisions on the ability of researcher to publish, access, disseminate and enable others to reuse their research (n=28)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| To little or no extent | 12 | 42.9% |
| To a moderate extent | 10 | 35.7% |
| To a large extent | 3 | 10.7% |
| To a very large extent | 3 | 10.7% |
| Total | 28 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, The question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Germany impact the way you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 28: Could you give any examples, positive or negative, of how the provisions in Germany impacted how you publish, access, disseminate and enable others to reuse your research?

Table 87 compiles concrete examples of how researchers in Germany are affected by the SPR provisions, influencing their practices in publishing, accessing, disseminating, and facilitating the reuse of their research. Responses have been categorised into five specific themes.

**Table 87. Examples of the impact of the SPR provisions in Germany (n=8)**

| Topic | Examples |
|---|---|
| Open Access opportunities | • Germany's provisions allow for Open Access even if copyright agreements were signed otherwise. This is seen as a positive aspect, providing a way to publish Open Access without a budget for Article Processing Charges (APC). |
| Preprints | • There are efforts to make closed access publications available as author-accepted manuscripts for the research community. |
| Archiving publications | • Some institutions in Germany have publication databases for archiving and distributing publications. However, there are opinions suggesting that the impact of such archives might be low. |
| Embargo period | • There are concerns about the one-year embargo period and the lack of a central repository for publications, which affects the impact of self-archiving rights. |
| Responsibility for Open Access | • There is a perspective that the responsibility for making work publicly available after the embargo period should rest with the publisher rather than the author. |

*Source: Compiled by the study team using data from the researchers' survey, The question in the survey was "Could you give any examples, positive or negative, of how the provisions in Germany impacted how you publish, access, disseminate and enable others to reuse your research?"*

**QUESTION 29: Are any additional publication access and reuse provisions needed in Germany? Please give some examples.**

Table below summarises viewpoints on supplementary regulations that might be needed related to the access and reuse of publications in Germany. Responses are organised into seven distinct categories: 1) advocacy for diamond Open Access, 2) Open Access mandate for publicly funded research, 3) Access to industry standards, 4) Reducing embargo duration, 5) Inclusion of conference proceedings, 6) Open Access compliance and manuscript versions, and 7) Challenges with research software.

**Table 88. The need for additional SPR provisions in Germany (n=20)**

**Inclusion of Diverse Publication Types**:

- Respondents suggested extending access and reuse provisions to include conference proceedings and other types of publications that do not fit into the traditional model of periodical publication. This is especially relevant for fields where conference proceedings are a primary source of scholarly communication.

**Open Access to Industry Standards**:

- There is a call for making industry standards, such as those related to technical design rules and grid connection codes, openly accessible. This proposed change would reduce barriers for researchers and practitioners in fields where such standards are crucial for work and innovation.

**Redefining Financial Models for Open Access**:

- Concerns were raised about the financial aspects of publishing, particularly the high costs associated with Open Access publication fees and the impact of these costs on the choice of publication venues. Suggestions included the development of more publicly funded journals to facilitate diamond Open Access, thereby reducing reliance on traditional publishing models that can be financially prohibitive.

**Legislative and Policy Reforms**:

- Respondents expressed a desire for legislative changes to reduce embargo periods and to adjust the rights balance between publishers and authors. This includes a critique of the current reliance on impact factors and the call for measures to ensure that publicly funded research is freely available.

**Data and Research Output Accessibility**:

A few responses highlighted the importance of making not just publications but also raw data and metadata more accessible. This includes suggestions for mandatory data deposit policies and the inclusion of research software as a critical component of research outputs that need Open Access provisions.

**Critical Views on Current Publishing Practices**:

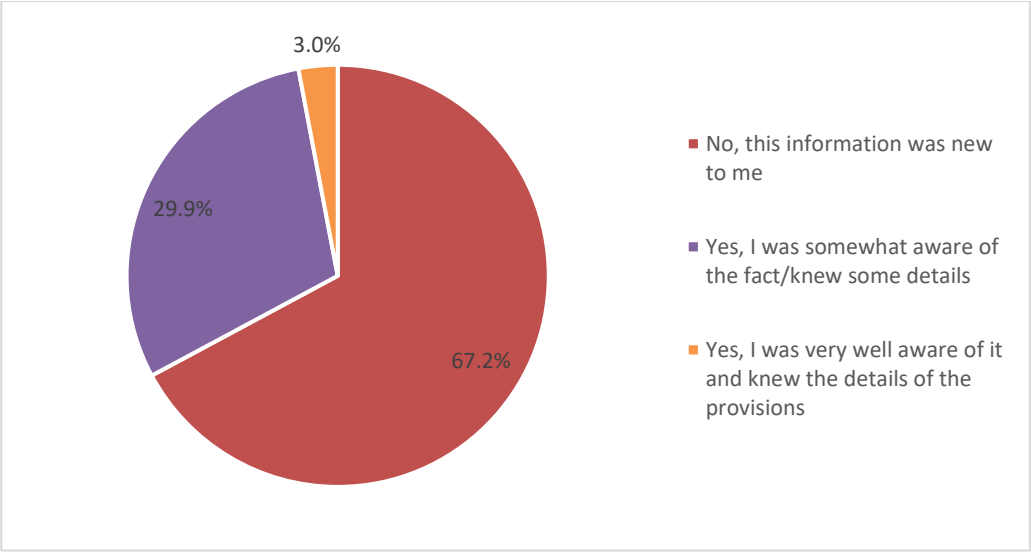
There were critical perspectives on the role of publishers in the digital age, where the physical printing of journals has become obsolete, and the majority of the publication process is handled by the research community. The critique centers on the disproportionate profits made by publishers at the expense of the academic community and calls for a shift towards more equitable models of scientific communication.

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Are any additional publication access and reuse provisions needed in Germany?"*

## QUESTION 30: Before this information, were you aware that France had introduced the Secondary Publication Right (SPR) legislation?

Figure 87 insights into researchers' awareness of France's Secondary Publication Right (SPR) legislation (only those who selected France as the country of their organisation in question 4 received this question). The majority of researchers (67.2%) indicated that they were not aware of France's SPR legislation before receiving specific information, expressing that this knowledge was entirely new to them. On the other hand, 29.9% of researchers reported some level of prior awareness, signifying that they had some knowledge or familiarity with France's SPR legislation before participating in the survey. Additionally, a smaller percentage (3.0%) asserted being very well aware of the legislation and claimed to know the details of its provisions before the survey.

**Figure 87. Researchers' awareness of the SPR legislation in France (n=67)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Before this information, were you aware that France had introduced the Secondary Publication Right (SPR) legislation?"*

**Table 89. Researchers' awareness of the SPR legislation in France**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| No, this information was new to me | 45 | 67.2% |
| Yes, I was somewhat aware of the fact/knew some details | 20 | 29.9% |
| Yes, I was very well aware of it and knew the details of the provisions | 2 | 3.0% |
| Total | 67 | 100% |

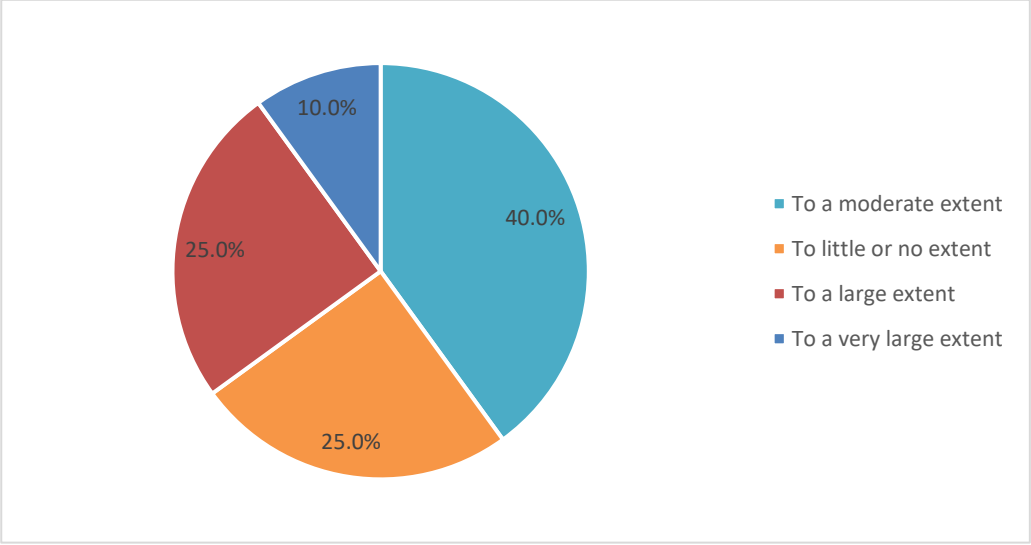
*Source: Compiled by the study team using data from the researchers' survey, The question in the survey was, "Before this information, were you aware that France had introduced the Secondary Publication Right (SPR) legislation?"*

## QUESTION 31: To what extent do the Secondary Publication Right (SPR) provisions in France impact the way you publish, access, disseminate and enable others to reuse your research?

Table 90 illustrates researchers' perspectives on the impact of the Secondary Publication Right (SPR) provisions in France on their research-related activities, encompassing

publishing, access, dissemination, and enabling others to reuse their research. A quarter of researchers (25.0%) indicated that the SPR provisions in France have little or no impact on their research practices, suggesting that they perceive the influence of these regulations to be minimal. A larger segment of researchers (40.0%) reported a moderate extent of impact, indicating a discernible but not overwhelming influence on their publishing and research-related activities. Additionally, another quarter of researchers (25.0%) stated that the SPR provisions have a substantial impact, either to a large or very large extent, on the way they publish, access, disseminate, and facilitate others' reuse of their research. A smaller percentage (10.0%) expressed that the impact is very large, emphasising the pronounced influence of France's SPR provisions on their research practices.

**Figure 88. The impact of French SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=20)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in France impact the way you publish, access, disseminate and enable others to reuse your research?"*

**Table 90. The impact of French SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=20)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| To little or no extent | 8 | 40.0% |
| To a moderate extent | 5 | 25.0% |
| To a large extent | 5 | 25.0% |
| To a very large extent | 2 | 10.0% |
| Total | 20 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in France impact the way you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 32: Could you give any examples, positive or negative, of how the provisions in France impacted how you publish, access, disseminate and enable others to reuse your research?

Table 91 consolidates 6 responses on the impact of the provisions on researchers in France. The responses have been classified into four distinct themes—Efficient archiving system,

facilitated resource discovery, international accessibility of articles, challenges with embargo periods, and conference proceedings and special issues—based on pertinent examples.

**Table 91. Examples of the impact of the SPR provisions in France (n=6)**

| Topic | Examples |
|---|---|
| Enhanced Accessibility and Dissemination | • Researchers reported positive impacts, such as the availability of articles in HAL (Hyper Articles en Ligne), which are readable by international colleagues, indicating an improvement in global accessibility.<br>• The establishment of efficient archiving systems within institutions has been praised for enhancing the dissemination and accessibility of research papers to a broad audience. |
| Restrictions and Limitations | • The embargo period and Author's Accepted Manuscript (AAM) restrictions were cited as significant impediments to the timely dissemination of research, highlighting a critical area where provisions negatively impact the research lifecycle.<br>• A specific concern was raised about the scope of provisions not adequately covering the unique publication dynamics in fields like computer science, where conferences and "special issues" play a pivotal role in advancing the state of the art. These forms of publication, occurring less frequently than twice a year, fall outside the intended support of current policies, suggesting a gap in the provisions' applicability to all research outputs. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Could you give any examples, positive or negative, of how the provisions in France impacted how you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 33: Are any additional publication access and reuse provisions needed in France? Please give some examples.

In response to the question about the necessary additional provisions for publication access and reuse in France, 7 researchers provided answers.

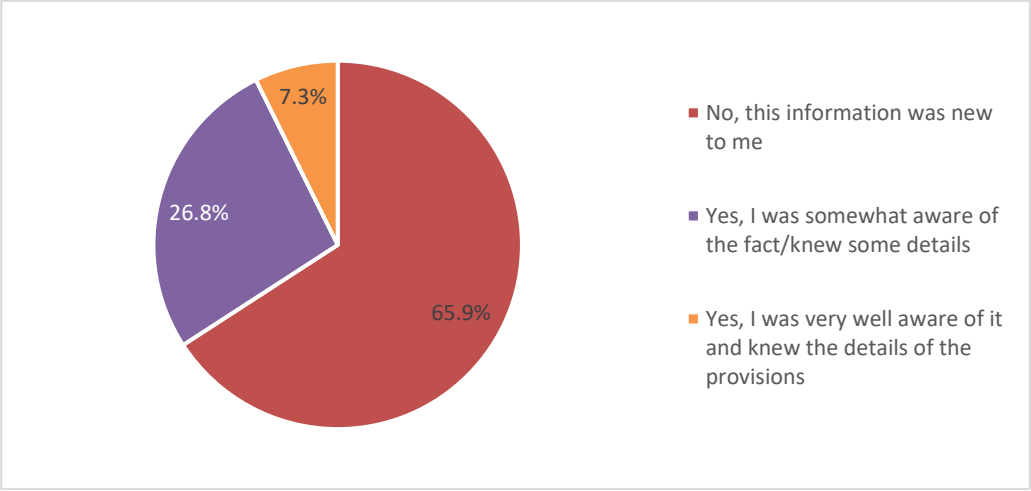
The researchers' input did not provide suggestions for additional provisions. Instead they noted that their institutions require that articles be deposited in the national repository HAL[1760].

### QUESTION 34: Before this information, were you aware that the Netherlands had introduced the Secondary Publication Right (SPR) legislation?

Figure 89 provides insights into researchers' awareness of the Netherlands' Secondary Publication Right (SPR) legislation (only those who selected the Netherlands as the country of their organisation in question 4 received this question). A significant majority of researchers (65.9%) indicated that they were not aware of the Netherlands' SPR legislations before receiving specific information, signifying that this knowledge was entirely new to them. On the other hand, 26.8% of researchers reported some level of prior awareness, indicating that they possessed some knowledge or familiarity with the Netherlands' SPR legislations before participating in the survey. Additionally, a smaller percentage (7.3%) asserted being very well aware of the legislation and claimed to know the details of its provisions before the survey.

1760 https://about.hal.science/en/

**Figure 89. Researchers' awareness of the SPR legislation in the Netherlands (n=41)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Before this information, were you aware that the Netherlands had introduced the Secondary Publication Right (SPR) legislation?"*

**Table 92. Researchers' awareness of the SPR legislation in the Netherlands (n=41)**

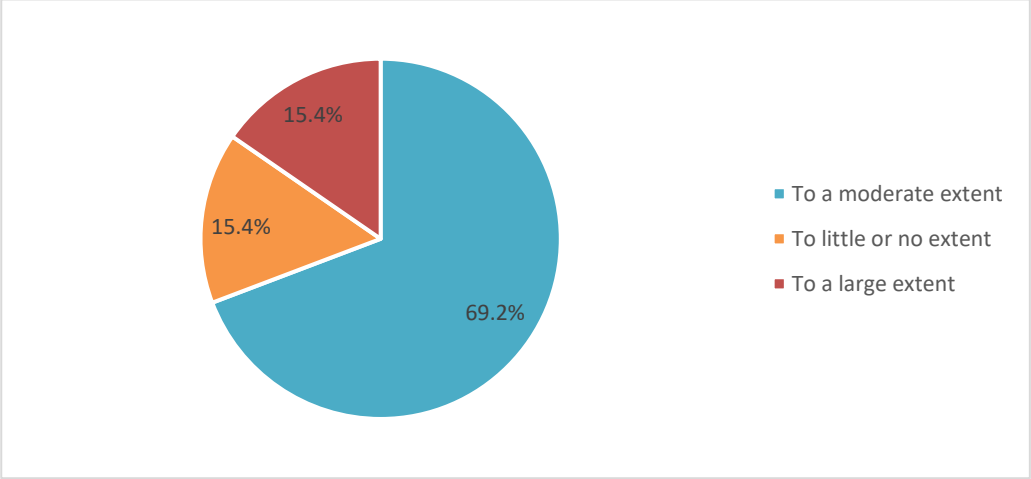
| | Count (total) | Share of responses, % (total) |
|---|---|---|
| No, this information was new to me | 27 | 65.9% |
| Yes, I was somewhat aware of the fact/knew some details | 11 | 26.8% |
| Yes, I was very well aware of it and knew the details of the provisions | 3 | 7.3% |
| Total | 41 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Before this information, were you aware that the Netherlands had introduced the Secondary Publication Right (SPR) legislation?"*

### QUESTION 35: To what extent do the Secondary Publication Right (SPR) provisions in the Netherlands impact the way you publish, access, disseminate and enable others to reuse your research?

Figure 90 presents researchers' perspectives on the impact of the Secondary Publication Right (SPR) provisions in the Netherlands on their research-related activities, encompassing publishing, access, dissemination, and enabling others to reuse their research. A relatively small proportion of researchers (15.4%) indicated that the SPR provisions in the Netherlands has little or no impact on their research practices, suggesting a perception of minimal influence from these regulations. In contrast, a substantial majority of researchers (69.2%) reported a moderate extent of impact, signifying a discernible but not overwhelming influence on their publishing and research-related activities. Additionally, another 15.4% of researchers stated that the SPR provisions have a substantial impact, specifically to a large extent. The distribution of responses in Table 93 provides insights into the varying degrees to which researchers perceive the influence of the Netherlands' SPR provisions on their research-related activities.

**Figure 90. The impact of the Dutch SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=13)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in the Netherlands impact the way you publish, access, disseminate and enable others to reuse your research?"*

**Table 93. The impact of Dutch SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=13)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| To a moderate extent | 9 | 69.2% |
| To little or no extent | 2 | 15.4% |
| To a large extent | 2 | 15.4% |
| Total | 13 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in the Netherlands impact the way you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 36: Could you give any examples, positive or negative, of how the provisions in the Netherlands impacted how you publish, access, disseminate and enable others to reuse your research?

Table 94 consolidates collective experiences, illustrating the impact of the provisions on researchers in the Netherlands. These experiences influence their approaches to publishing, accessing, disseminating, and promoting the reuse of their research. The responses have been categorised into four specific themes, drawing on pertinent examples: enhanced visibility through institutional repositories, libraries facilitating access, preference for open access journals, and public disclosure of research results.

**Table 94. Examples of the impact of the SPR provisions in the Netherlands (n=4)**

| Topic | Examples |
|---|---|
| Enhanced visibility through institutional repository | • The ability to publish post-print versions in the Pure institutional repository has increased the availability of research soon after publication. |
| Libraries facilitating access | • Libraries play a role in providing research outputs after an embargo, contributing to increased visibility.<br>Example: Access to research is facilitated by libraries, supporting broader dissemination. |
| Preference for Open Access journals | • Researchers actively choose journals that allow Open Access.<br>Example: Open Access preferences align with the commitment to making research openly available. |
| Public disclosure of research results | • Research conducted for the Dutch government, particularly on discovering new alien species, involves a delayed but comprehensive public disclosure of data.<br>Example: Political considerations may influence the timing of data release, but there is a commitment to eventual public access. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Could you give any examples, positive or negative, of how the provisions in the Netherlands impacted how you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 37: Are any additional publication access and reuse provisions needed in the Netherlands? Please give some examples.

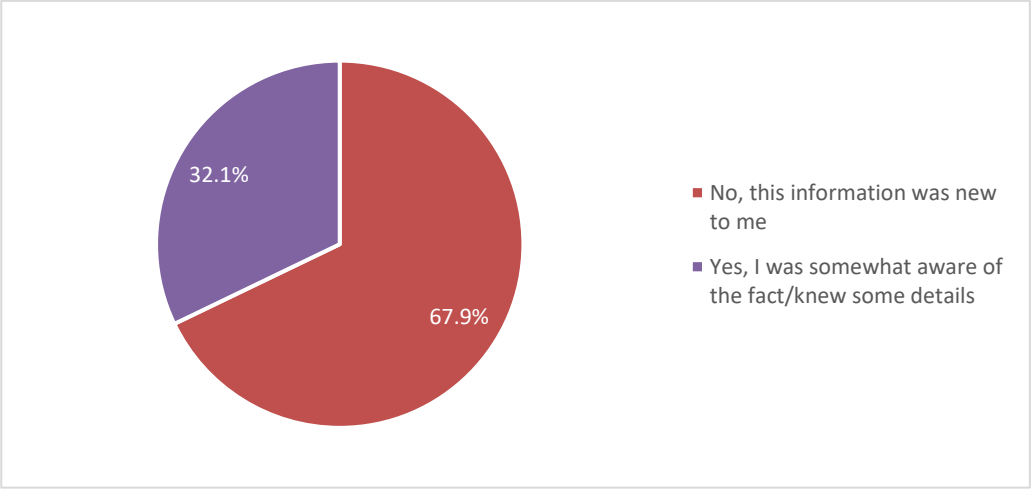
In response to the question about the necessary additional provisions for publication access and reuse in Netherlands, 58 researchers provided answers.

The researchers' input did not provide suggestions for additional provisions. Instead, they highlighted uncertainties around sharing paywalled publications on platforms like ResearchGate (i.e. it is still not clear how publishers might react if research is made available through this platform). Moreover, researchers pointed out the need for clearer definitions and guidelines regarding embargo periods, specifically what constitutes a 'reasonable period' and possibly, a shortening of the embargo period.

### QUESTION 38: Before this information, were you aware that Austria had introduced the Secondary Publication Right (SPR) legislation?

Figure 91 provides insights into researchers' awareness of Austria's Secondary Publication Right (SPR) legislation (only those who selected Austria as the country of their organisation in question 4 received this question). The majority of researchers (67.9%) indicated that they were not aware of Austria's SPR legislation before receiving specific information, revealing that this knowledge was entirely new to them. On the other hand, 32.1% of researchers reported some level of prior awareness, signifying that they possessed some knowledge or familiarity with Austria's SPR legislations before participating in the survey. Notably, no researchers claimed to be very well aware of the legislation.

**Figure 91. Researchers' awareness of the SPR legislation in Austria (n=28)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Before this information, were you aware that Austria had introduced the Secondary Publication Right (SPR) legislation?"*

**Table 95. Researchers' awareness of the SPR legislation in Austria (n=28)**

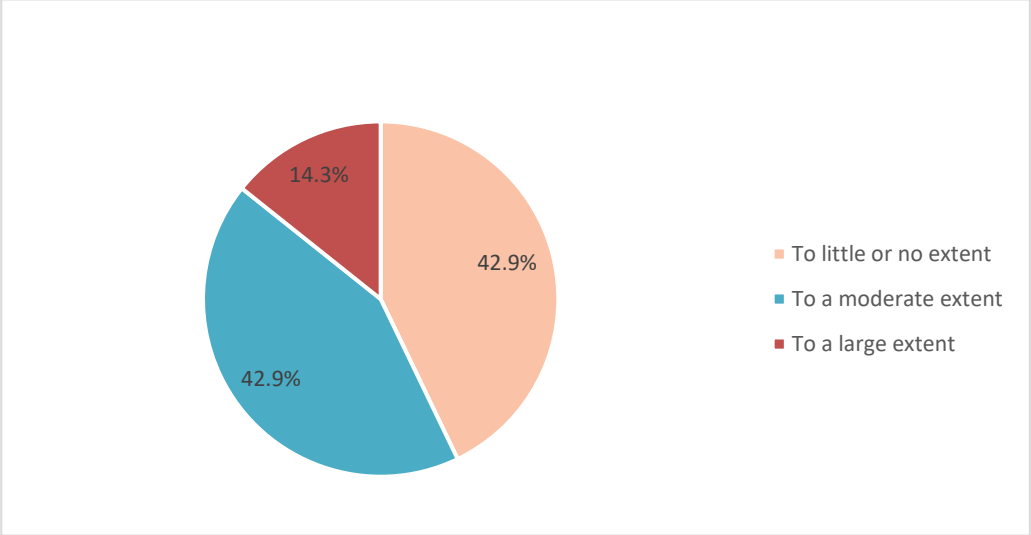
| | Count (total) | Share of responses, % (total) |
|---|---|---|
| No, this information was new to me | 19 | 67.9% |
| Yes, I was somewhat aware of the fact/knew some details | 9 | 32.1% |
| Total | 28 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, The question in the survey was, "Before this information, were you aware that Austria had introduced the Secondary Publication Right (SPR) legislation?"*

### QUESTION 39: To what extent do the Secondary Publication Right (SPR) provisions in Austria impact the way you publish, access, disseminate and enable others to reuse your research?

Figure 92 outlines researchers' perspectives on the impact of the Secondary Publication Right (SPR) provisions in Austria on their research-related activities, including publishing, accessing, disseminating, and facilitating others to reuse their research. Nearly half of the researchers (42.9%) conveyed that the SPR provisions in Austria exerted little to no impact on their research practices, while an equal percentage (42.9%) reported a moderate extent of influence on their publishing and research-related activities. Furthermore, a smaller percentage (14.3%) expressed that the SPR provisions have a substantial impact, specifically to a large extent.

**Figure 92. The impact of the Austrian SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=7)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Austria impact the way you publish, access, disseminate and enable others to reuse your research?"*

**Table 96. The ability of the Austrian SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=7)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| To little or no extent | 3 | 42.9% |
| To a moderate extent | 3 | 42.9% |
| To a large extent | 1 | 14.3% |
| Total | 7 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, The question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Austria impact the way you publish, access, disseminate and enable others to reuse your research?"*

### QUESTION 40: Could you give any examples, positive or negative, of how the provisions in Austria impacted how you publish, access, disseminate and enable others to reuse your research?

In response to the question on how the provisions' impact on researchers in Austria 2 researchers provided answers.

Researchers' input did not provide examples on the provisions' impact. Instead, they discussed their preference for publishing work as preprints and suggested language inclusivity by recommending the reformulation of the phrase such as "created by him" to "created by her/him" to accommodate gender neutrality in documentation or publication contexts.

**QUESTION 41:** Are any additional publication access and reuse provisions needed in Austria? Please give some examples.

Table 97**,** presented below, compiles summarised perspectives on additional regulations that might be needed concerning publication access and reuse in Austria.

**Table 97.The need for additional SPR provisions in Austria (n=3)**

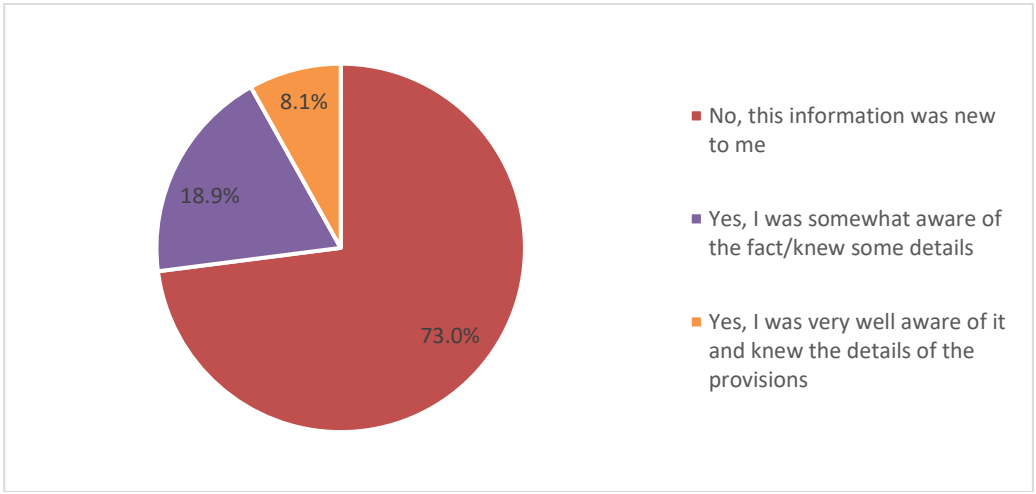
| The responses for this answer |
| --- |
| AI needs to be controlled; willingness to grant access to one's own work to all people, however not to machines. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Are any additional publication access and reuse provisions needed in Austria?"*

## QUESTION 42: Before this information, were you aware that Belgium had introduced the Secondary Publication Right (SPR) legislation?

Figure 93 provides insights into researchers' awareness of Belgium's Secondary Publication Right (SPR) legislations (only those who selected Belgium as the country of their organisation in question 4 received this question). A significant majority of researchers (73.0%) indicated that they were not aware of Belgium's SPR legislation, signifying that this information was entirely new to them. On the other hand, 18.9% of researchers reported some level of prior awareness, indicating that they had some knowledge or familiarity with Belgium's SPR legislation before participating in the survey. Additionally, a smaller percentage (8.1%) claimed to be very well aware of the legislation and asserted knowledge of its details before the survey.

**Figure 93. Researchers' awareness of the SPR legislation in Belgium (n=37)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Before this information, were you aware that Belgium had introduced the Secondary Publication Right (SPR) legislation?"*

**Table 98. Researchers' awareness of the SPR legislation in Belgium (n=37)**

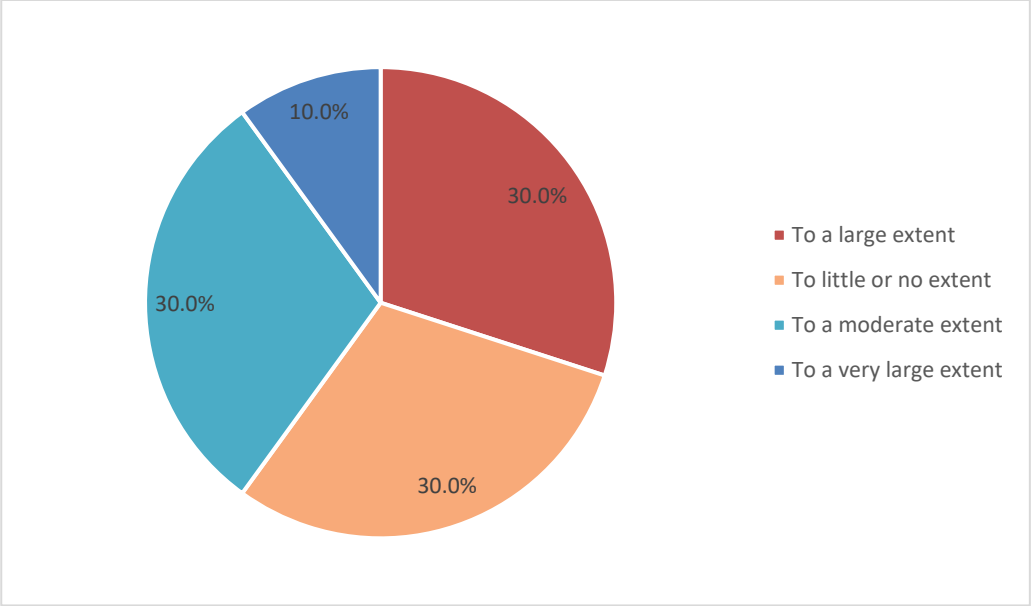
| | Count (total) | Share of responses, % (total) |
|---|---|---|
| No, this information was new to me | 27 | 73.0% |
| Yes, I was somewhat aware of the fact/knew some details | 7 | 18.9% |
| Yes, I was very well aware of it and knew the details of the provisions | 3 | 8.1% |
| Total | 37 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Before this information, were you aware that Belgium had introduced the Secondary Publication Right (SPR) legislation?"*

### QUESTION 43: To what extent do the Secondary Publication Right (SPR) provisions in Belgium impact the way you publish, access, disseminate and enable others to reuse your research?

Figure 94 depicts researchers' perspectives on the impact of the Secondary Publication Right (SPR) provisions in Belgium on their research-related activities, encompassing publishing, access, dissemination, and enabling others to reuse their research. The distribution of responses indicates a balanced representation of varying degrees of impact. Specifically, 30.0% of researchers conveyed that the SPR provisions in Belgium have little or no impact on their research practices, suggesting a perception of minimal influence from these regulations. Another 30.0% reported a moderate extent of impact, reflecting a discernible but not overwhelming influence on their publishing and research-related activities. Furthermore, an additional 30.0% of researchers expressed that the SPR provisions have a substantial impact, specifically to a large extent. Finally, 10.0% of researchers noted that the impact is very large, highlighting a subset of researchers who perceive a significant influence on their research-related activities.

**Figure 94. The impact of Belgian SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=10)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Belgium impact the way you publish, access, disseminate and enable others to reuse your research?"*

**Table 99. The impact of Belgian SPR provisions on the ability of researchers to publish, access, disseminate and enable others to reuse their research (n=10)**

| | Count (total) | Share of responses, % (total) |
|---|---|---|
| To a large extent | 3 | 30.0% |
| To little or no extent | 3 | 30.0% |
| To a moderate extent | 3 | 30.0% |
| To a very large extent | 1 | 10.0% |
| Total | 10 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do the Secondary Publication Right (SPR) provisions in Belgium impact the way you publish, access, disseminate and enable others to reuse your research?"*

## QUESTION 44: Could you give any examples, positive or negative, of how the provisions in Belgium impacted how you publish, access, disseminate and enable others to reuse your research?

Table 100 summarises the only response received regarding the impact of SPR provisions on researchers in Belgium. This response sheds light on how these provisions influence various aspects of research practices, encompassing publishing, accessing, disseminating, and facilitating research reuse. The researcher highlighted that the SPR allows for Open Access after a six-month embargo period for the final peer-reviewed manuscript accepted for publication. However, they noted limitations, emphasising the inability to comply with the more stringent Horizon Europe rule of immediate Open Access. Furthermore, the application of SPR is confined to cases where at least 50.0% of the research results are funded from public sources. The specific details of this response are provided in the table for reference.

**Table 100. Examples of the impact of the SPR provisions in Belgium (n=1)**

| The responses to this answer |
|---|
| It allows sharing Open Access after an embargo period of 6 months the accepted version BUT it does not the stricter Horizon Europe rule to be complied with: immediate Open Access ALSO it is limited to cases where at least 50% of the results are funded from public sources. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Could you give any examples, positive or negative, of how the provisions in Belgium impacted how you publish, access, disseminate and enable others to reuse your research?"*

## QUESTION 45: Are any additional publication access and reuse provisions needed in Belgium? Please give some examples.

Table 101 provides a concise overview of the only response received on additional provisions that might be needed related to publication access and reuse in Belgium. The researcher expressed the view that it would be preferable for these regulations to apply universally, not solely in cases where at least 50% of the research is publicly funded. Additionally, the researcher advocated for immediate Open Access and suggested that sharing the published version would simplify implementation. The specific details of this response are detailed in the table for reference.

**Table 101.The need for additional SPR provisions in Belgium (n=10)**

| The response to this answer |
|---|
| Yes - it would be better to have additional publication access and reuse provisions for all cases (not only applicable when at least 50% is publicly funded) and immediate. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Are any additional publication access and reuse provisions needed in Belgium? Please give some examples."*

# Data and digital legislation

## Status and introduction

The segment of the researchers' survey focusing on data and digital legislation garnered 900 responses. This encompasses 896 (99.6%) complete responses and 4 (0.4%) partial responses. This signifies that the researcher either completed the entire set of questions related to data and digital legislation or omitted only one question within the data and digital legislation section.

**Table 102. Overview of responses received to the researchers' survey (part on data and digital legislation) (n=900)**

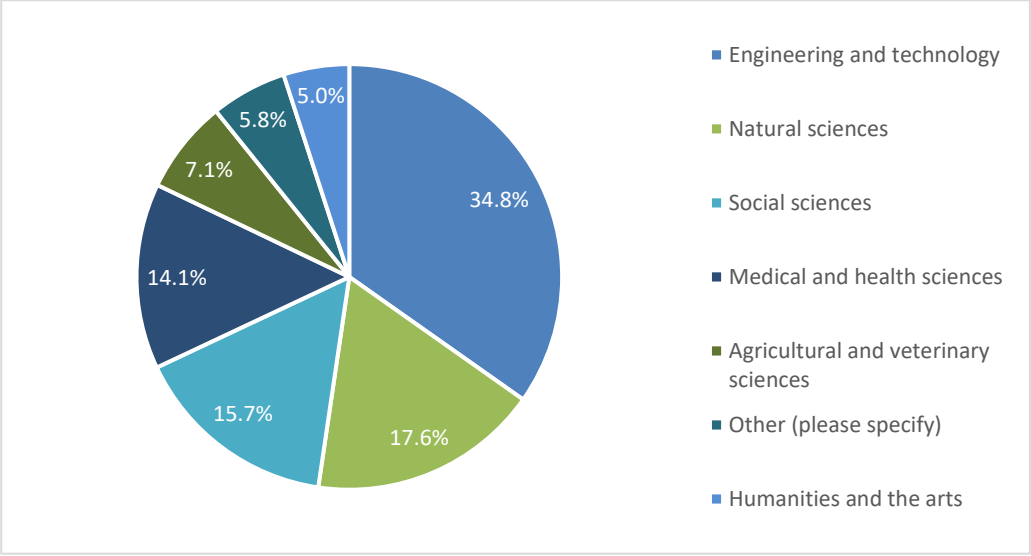
| | Count (total) | Share of responses, % (total) (total) | Count (SPR) |
|---|---|---|---|
| Complete | 896 | 99.6% | 299 |
| Partial | 4 | 0.4% | 1 |
| Total | 900 | 100% | 300 |

*Source: Compiled by the study team using data from the researchers' survey.*

### QUESTION 1: What is the core scientific discipline or area of your research?

Figure 95 presents the results concerning the main scientific discipline and research field. It is clear that, similar to the copyright section, a substantial percentage of researchers were affiliated with Engineering and technology (34.8%), succeeded by Natural sciences (17.6%), Social sciences (15.7%), and Medical and health sciences (14.1%). Among researchers specifying a discipline outside the predefined categories, diverse responses were noted, with the predominant focus on the environment (e.g. environment, sustainable built environments, food and the environment, environmental study beekeepers).

**Figure 95. Researchers' core scientific discipline or area of research (n=900)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 103. Researchers' core scientific discipline or area of research (n=900)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Engineering and technology | 313 | 34.8% |
| Natural sciences | 158 | 17.6% |
| Social sciences | 141 | 15.7% |
| Medical and health sciences | 127 | 14.1% |
| Agricultural and veterinary sciences | 64 | 7.1% |
| Other (please specify) | 52 | 5.8% |
| Humanities and the arts | 45 | 5.0% |
| Total | 900 | 100% |

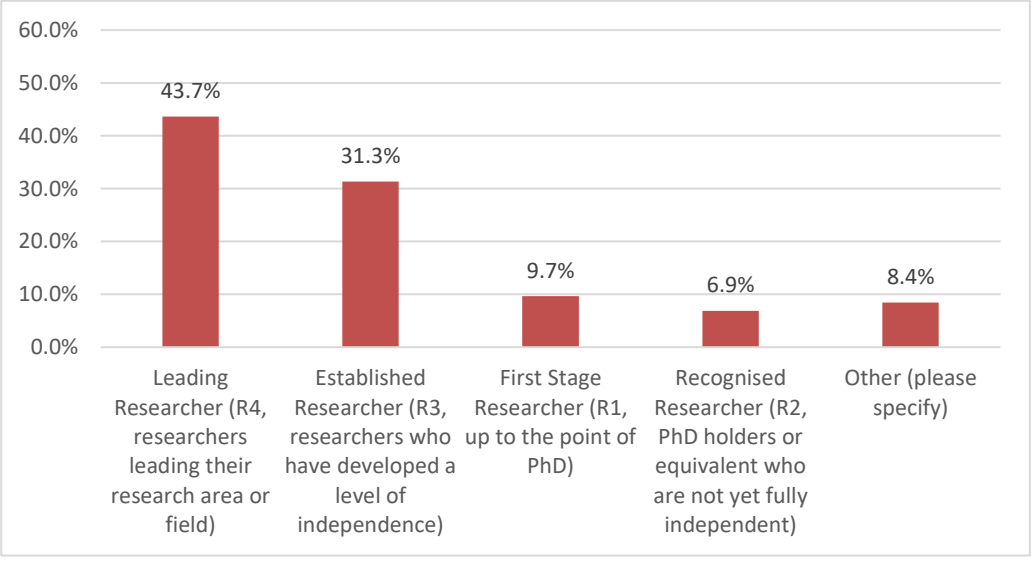
*Source: Compiled by the study team using data from the researchers' survey.*

## QUESTION 2: How would you describe your current career stage as a researcher?

Researchers were asked to indicate their current career stage as a researcher. Out of the options, there were 4 different stages presented: Leading Researcher (R4, researchers leading their research area or field), Established Researcher (R3. Researchers who have developed a level of independence), Recognised Researcher (R2, PhD holders or equivalent who are not yet fully independent), and First Stage Researcher (R1, up to the point of PhD).

The survey predominantly attracted Leading or Established Researchers (43.7% and 31.3% respectively). Additional researchers identified themselves as First Stage Researchers (9.7%) and Recognised Researchers (6.9%), while 8.4% opted for the 'other' category. The 'other' category encompasses a diverse range of roles including administration, business development, executive positions (e.g. CEO, Director), project and research management, engineering, legal and financial expertise.

**Figure 96. The current career stage of surveyed researchers (n=900)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 104. The current career stage of surveyed researchers (n=900)**

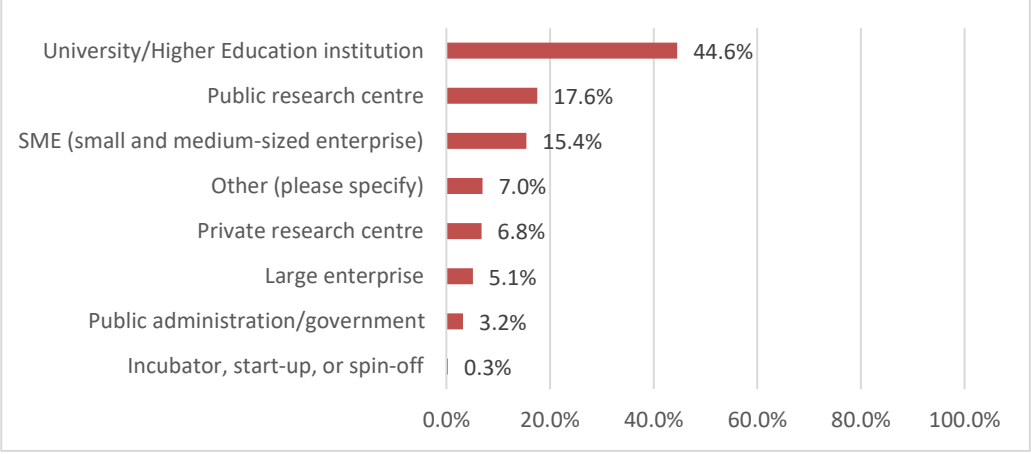
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Leading Researcher (R4, researchers leading their research area or field) | 393 | 43.7% |
| Established Researcher (R3, researchers who have developed a level of independence) | 282 | 31.3% |
| First Stage Researcher (R1, up to the point of PhD) | 87 | 9.7% |
| Recognised Researcher (R2, PhD holders or equivalent who are not yet fully independent) | 62 | 6.9% |
| Other (please specify) | 76 | 8.4% |
| Total | 900 | 100% |

*Source: Compiled by the study team using data from the researchers' survey.*

## QUESTION 3: What is the type of your organisation?

Figure 97 below illustrates the researchers' organisational affiliations. The majority of researchers are affiliated with University/Higher Education institutions (44.6%). A smaller proportion is associated with public research centres (17%), SMEs (15%), and private research centres (7.0%). Additionally, 6.8% of researchers chose the 'other' option for their organisation type. Among those who selected 'Other', they mostly specified working at NGOs, while others mentioned various foundations and charities.

**Figure 97. The organisational affiliations of the researchers (n=900)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 105. The organisational affiliations of the researchers (n=900)**

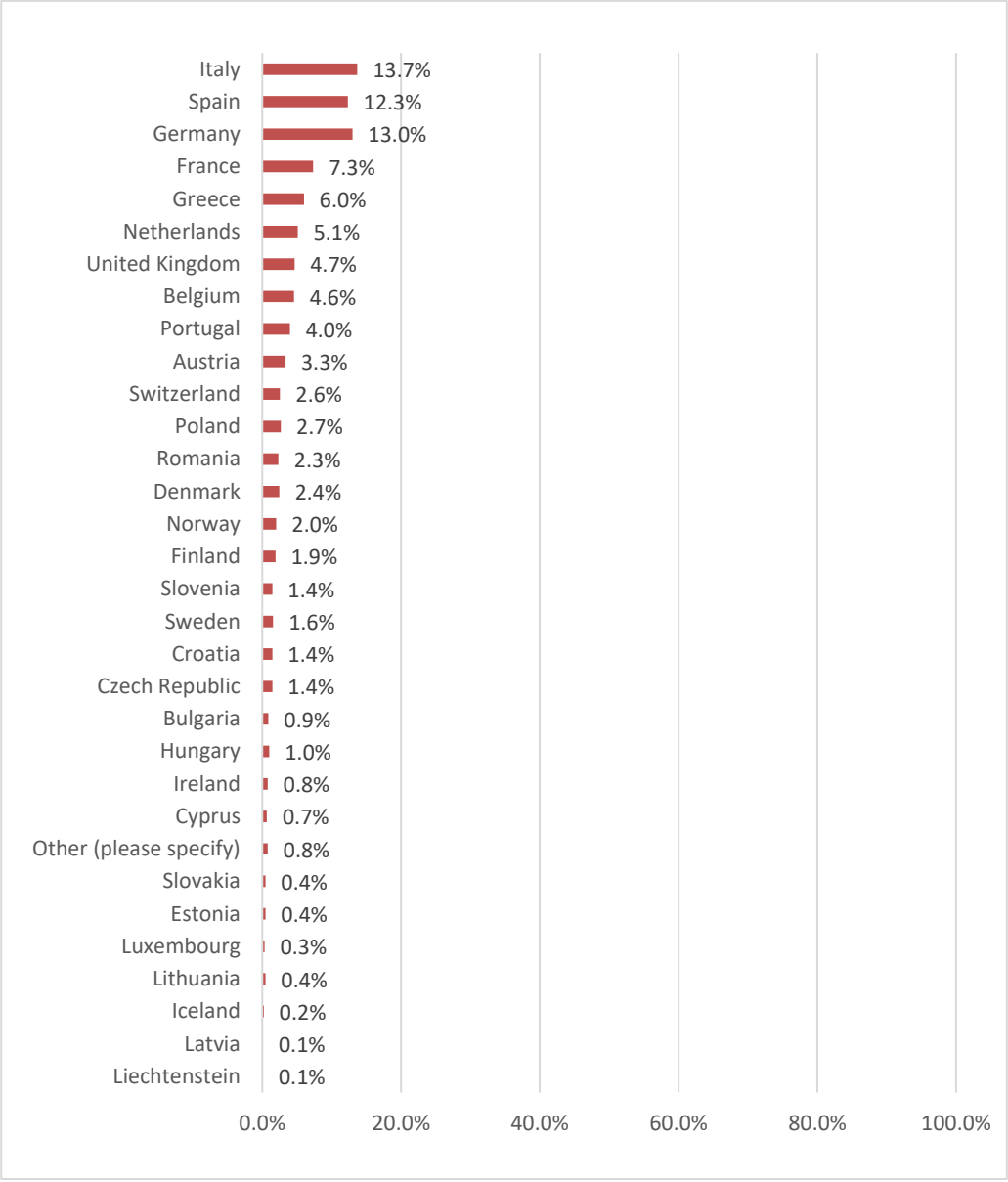
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| University/Higher Education institution | 401 | 44.6% |
| Public research centre | 158 | 17.6% |
| SME (small and medium-sized enterprise) | 139 | 15.4% |
| Private research centre | 63 | 7.0% |
| Other (please specify) | 61 | 6.8% |
| Large enterprise | 46 | 5.1% |
| Public administration/government | 29 | 3.2% |
| Incubator, start-up, or spin-off | 3 | 0.3% |
| Total | 900 | 100% |

*Source: Compiled by the study team using data from the researchers' survey.*

## QUESTION 4: What is the country of your organisation?

Regarding the nations where researchers are employed, Figure 98 below illustrates the distribution of responses. Countries with more than 5% of researchers comprise Italy (13.7%), Spain (12.3%), Germany (13%), France (7.3%), Greece (6.0%), and the Netherlands (5.1%). This aligns with expectations, as these are the nations where the majority of researchers were approached for survey participation.

**Figure 98. Country of researchers' organisations (n=900)**




*Source: Compiled by the study team using data from the researchers' survey.*

**Table 106. Country of researchers' organisations (n=900)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Liechtenstein | 1 | 0.1% |
| Latvia | 1 | 0.1% |
| Iceland | 2 | 0.2% |
| Lithuania | 4 | 0.4% |
| Luxembourg | 3 | 0.3% |
| Estonia | 4 | 0.4% |
| Slovakia | 4 | 0.4% |
| Other (please specify) | 7 | 0.8% |
| Cyprus | 6 | 0.7% |
| Ireland | 7 | 0.8% |
| Hungary | 9 | 1.0% |
| Bulgaria | 8 | 0.9% |
| Czechia | 13 | 1.4% |
| Croatia | 13 | 1.4% |
| Sweden | 14 | 1.6% |
| Slovenia | 13 | 1.4% |
| Finland | 17 | 1.9% |
| Norway | 18 | 2.0% |
| Denmark | 22 | 2.4% |
| Romania | 21 | 2.3% |
| Poland | 24 | 2.7% |
| Switzerland | 23 | 2.6% |
| Austria | 30 | 3.3% |
| Portugal | 36 | 4.0% |
| Belgium | 41 | 4.6% |
| United Kingdom | 42 | 4.7% |
| Netherlands | 46 | 5.1% |
| Greece | 54 | 6.0% |
| France | 66 | 7.3% |
| Germany | 117 | 13.0% |
| Spain | 111 | 12.3% |
| Italy | 123 | 13.7% |
| Total | 900 | 100% |

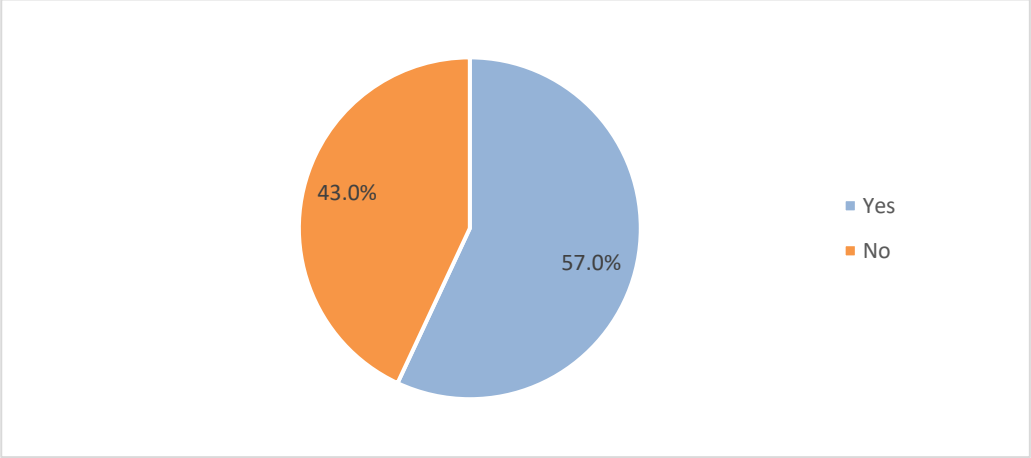
*Source: Compiled by the study team using data from the researchers' survey.*

## Accessing and reusing research data

### QUESTION 46: Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?

The survey results indicate that a large share of researchers (57.0%) actively engaged in research projects over the past year that made use of data produced by third parties outside of their own institutions. However, it is notable that 43.0% of researchers reported not participating in projects utilising external data during the same period.

**Figure 99. Engagement in a research project in the past year that made use of data produced by a third party (n=834)**




*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?"*

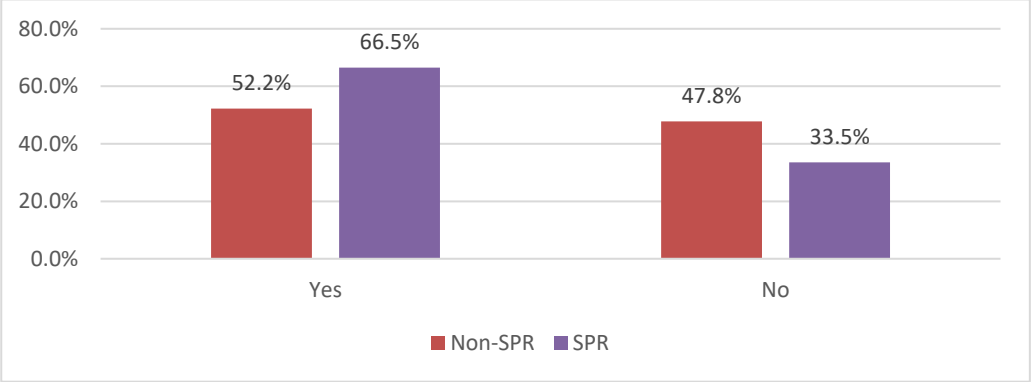
**Table 107. Engagement in a research project in the past year that made use of data produced by a third party (n=834)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes | 475 | 57.0% |
| No | 359 | 43.0% |
| Total | 834 | 100% |

*Source: Compiled by the study team using data from researchers' survey, the question in the survey was "Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?"*

In the past year, 66.5% of researchers from SPR countries participated in research projects using data from external sources, while 33.5% did not engage in such projects. In contrast, researchers from non-SPR countries reported lower engagement, with 52.2% affirming their involvement in research projects incorporating third-party data and 47.8% indicating no such engagement.

**Figure 100. Engagement in a research project in the past year that made use of data produced by a third party (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?"*

**Table 108. Engagement in a research project in the past year that made use of data produced by a third party (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Yes | 185 | 66.5% | 290 | 52.2% |
| No | 93 | 33.5% | 266 | 47.8% |
| Total | 278 | 100% | 556 | 100% |

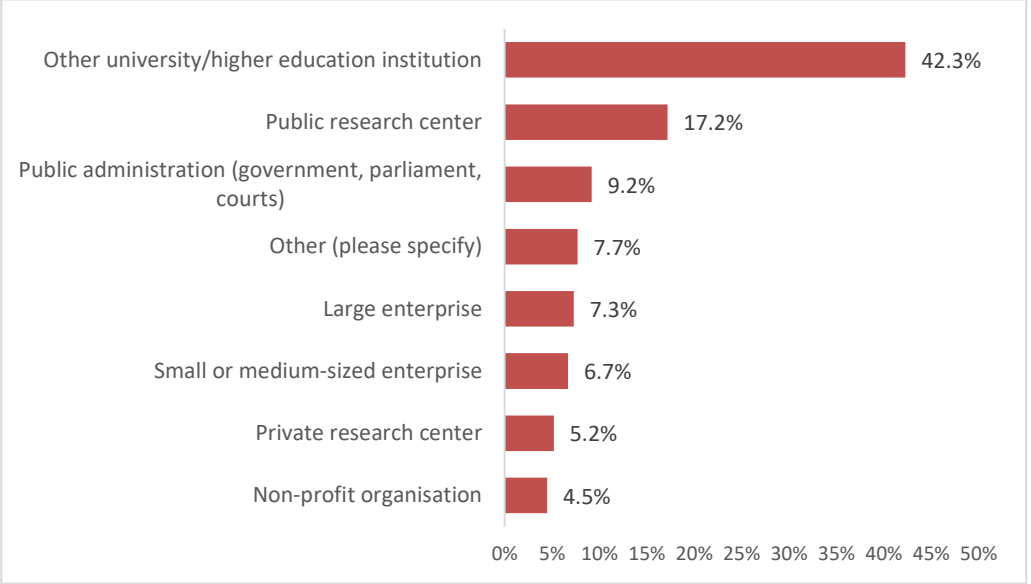
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Have you engaged in a research project in the past year that made use of data produced by a third party outside of your own institution?"*

### QUESTION 47: Who produced/generated the respective research data?

The majority of researchers (42.3%) cited other universities or higher education institutions as the origin of their research data. Public research centres also played a role, contributing to 17.2% of responses. Notably, public administration entities, including government, parliament, and courts, were identified as sources by 9.2% of researchers, while non-profit organisations, were mentioned as sources of data by 4.5% of respondents. Large enterprises, small or medium-sized enterprises, and private research centres collectively accounted for 19.2% of responses, showcasing a multifaceted ecosystem of data production involving both academic and non-academic entities.

Researchers who selected 'Other' (7.7% of respondents) mentioned various sources for generating research data, including data from international or intergovernmental institutions like the European Union (EU) and WHO, as well as hospitals, private for-profit companies, consortia under H2020 projects, multiple sources such as Eurostat, OECDStat, and World Bank WDIs, newspapers, a mix of organisations like standard development organisations, industrial partners, consortia of private and public institutes, Earth observation data like Sentinel data.

**Figure 101. The type of institution producing/generating the data used by researchers (n=466)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Who produced/generated the respective research data?"*

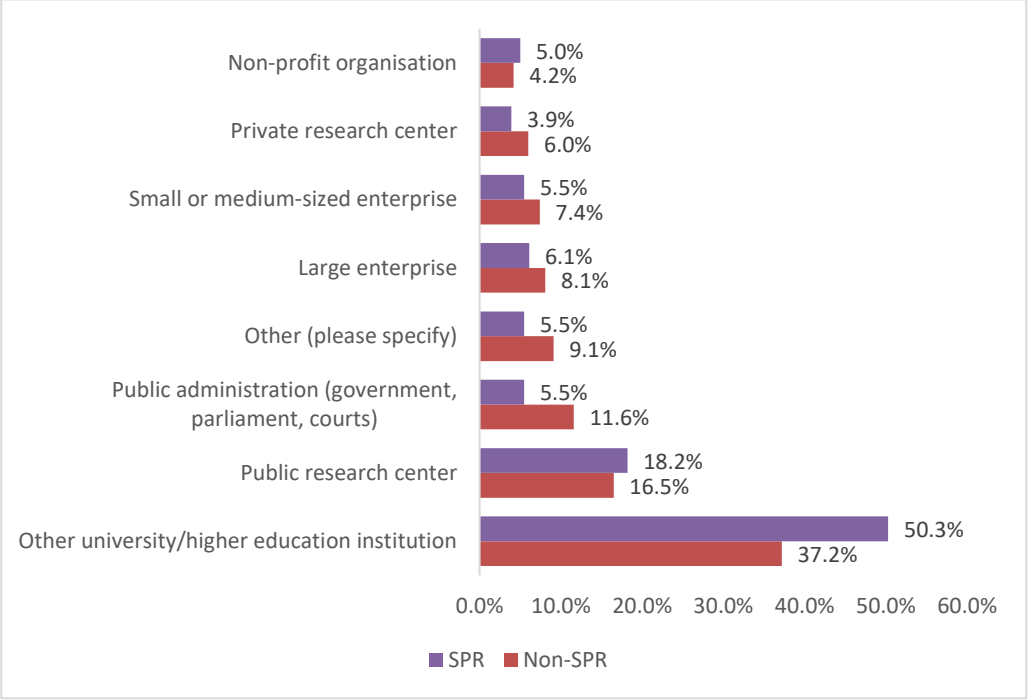
**Table 109. The type of institution producing/generating the data used by researchers (n=466)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Other university/higher education institution | 197 | 42.3% |
| Public research centre | 80 | 17.2% |
| Public administration (government, parliament, courts) | 43 | 9.2% |
| Other (please specify) | 36 | 7.7% |
| Large enterprise | 34 | 7.3% |
| Small or medium-sized enterprise | 31 | 6.7% |
| Private research centre | 24 | 5.2% |
| Non-profit organisation | 21 | 4.5% |
| Total | 466 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Who produced/generated the respective research data?"*

In SPR countries, the majority of researchers (50.3%) identified other universities or higher education institutions as the primary producers of research data, while in non-SPR countries, this percentage was slightly lower at 37.2%. In SPR countries, 18.2% of researchers selected public research centres, compared to 16.5% in non-SPR countries. Notably, in SPR countries 5.5% of researchers, and in non-SPR countries 11.6% of researchers identified public administration entities as the primary producer of research data. Other categories, including large enterprises, small or medium-sized enterprises, private research centres, and non-profit organisations were also sources of data in SPR and non-SPR countries, to a varying degree.

**Figure 102. The type of institution producing/generating the data used by researchers (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Who produced/generated the respective research data?"*

**Table 110. The type of institution producing/generating the data used by researchers (SPR and non-SPR countries)**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Other university/higher education institution | 91 | 50.3% | 106 | 37.2% |
| Public research centre | 33 | 18.2% | 47 | 16.5% |
| Public administration (government, parliament, courts) | 10 | 5.5% | 33 | 11.6% |
| Other (please specify) | 10 | 5.5% | 26 | 9.1% |
| Large enterprise | 11 | 6.1% | 23 | 8.1% |
| Small or medium-sized enterprise | 10 | 5.5% | 21 | 7.4% |
| Private research centre | 7 | 3.9% | 17 | 6.0% |
| Non-profit organisation | 9 | 5.0% | 12 | 4.2% |
| Total | 181 | 100% | 285 | 100% |

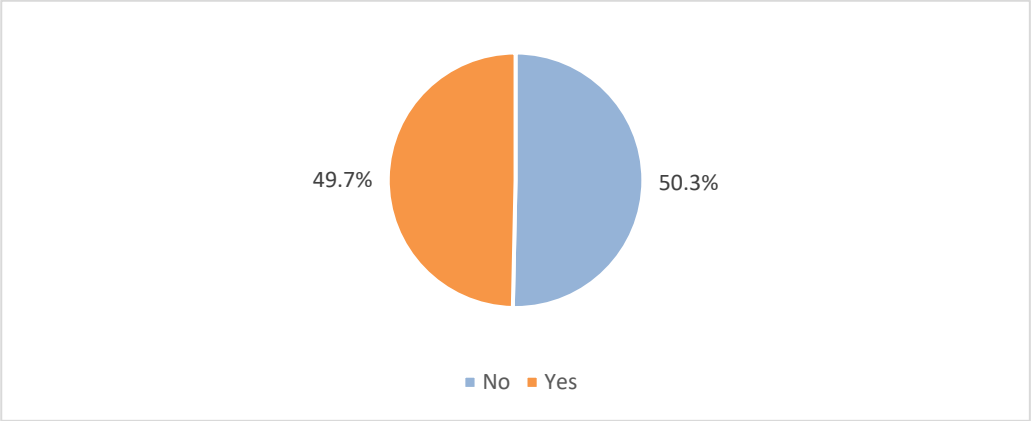
*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Who produced/generated the respective research data?"*

## QUESTION 48: Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?

The survey indicated a nearly equal distribution of responses regarding the imposition of restrictions or conditions on researchers for utilising external data. Approximately half of the researchers, accounting for 49.7%, reported encountering specific restrictions or conditions

associated with the use of the data. Conversely, an almost identical proportion, at 50.3%, indicated that they faced no such limitations.

**Figure 103. Researchers facing specific restrictions or conditions imposed in order to be able to use the data (n=443)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?"*

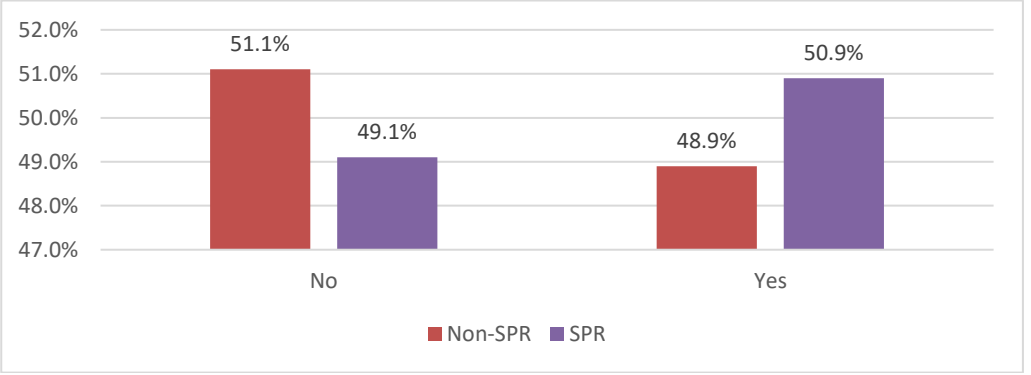
**Table 111. Researchers facing specific restrictions or conditions imposed in order to be able to use the data (n=443)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 223 | 50.3% |
| Yes | 220 | 49.7% |
| Total | 443 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?"*

In SPR countries, 50.9% of researchers encountered specific restrictions or conditions on data usage, while 49.1% did not. Conversely, in non-SPR countries, 48.9% reported facing restrictions, and 51.1% did not. These results suggest a relatively balanced distribution in both groups.

**Figure 104. Researchers facing specific restrictions or conditions imposed in order to be able to use the data (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?"*

**Table 112. Researchers facing specific restrictions or conditions imposed in order to be able to use the data (SPR and non-SPR countries)**

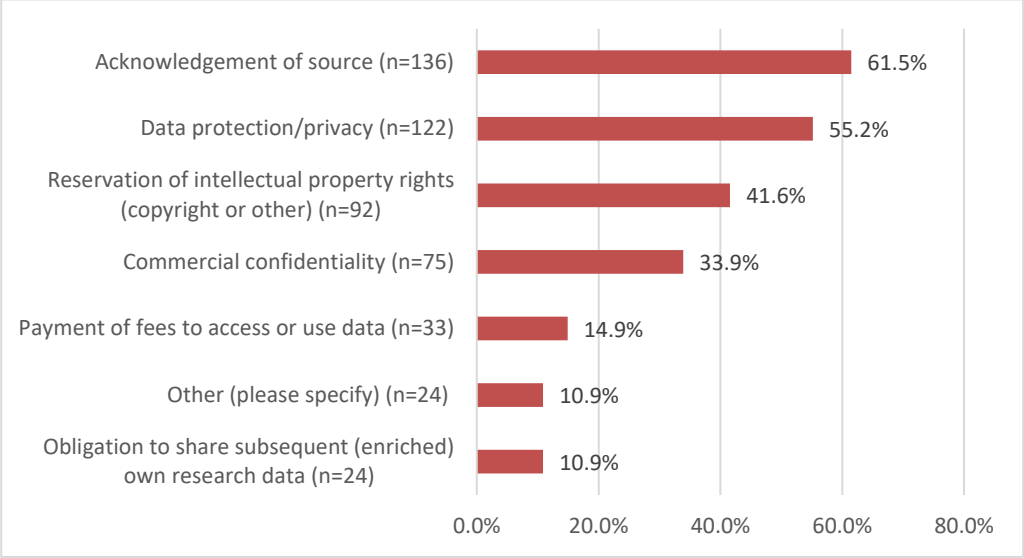
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses,% (total) | Count (total) | Share of responses,% (total) |
| No | 86 | 49.1% | 137 | 51.1% |
| Yes | 89 | 50.9% | 131 | 48.9% |
| Total | 175 | 100% | 268 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Were there any specific restrictions or conditions imposed on you in order for you to be able to use the data?"*

### QUESTION 49: What type of restrictions or conditions did you encounter with respect to the use of the data? (choose all that apply)

The survey reveals several key findings regarding the types of restrictions or conditions researchers encountered concerning the use of data. Notably, a significant majority of researchers (61.5%) reported encountering requirements for acknowledging the data source, emphasising the importance placed on proper attribution in research endeavours. Data protection and privacy considerations emerged as another prominent concern, with 55.2% of researchers facing restrictions in this domain. Intellectual property rights reservations, including copyright or other forms, were reported by 41.6% of researchers, highlighting the need for researchers to navigate legal frameworks governing the use of data. Commercial confidentiality requirements were noted by 33.9% of researchers, underscoring the prevalence of restrictions aimed at safeguarding proprietary information. Moreover, 14.9% of researchers reported having to pay fees for accessing or using data, illustrating a financial aspect associated with data utilisation. A noteworthy finding is the obligation to share subsequent enriched research data, reported by 10.9% of researchers. Additionally, 10.9% mentioned other specific conditions not covered by the predefined categories, highlighting the diverse range of challenges researchers face in navigating data usage restrictions. For instance, many researchers mentioned co-authorship. Additionally, ethical approval, use for non-commercial purposes only, bureaucracy, an obligation not to give away the data to other persons, restrictions to re-publish data and permission to use only a small amount of data were also noted.

**Figure 105. Type of restrictions or conditions encountered with respect to the use of the data**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What type of restrictions or conditions did you encounter with respect to the use of the data?"*

As the question allowed for multiple choices, the overall number of researchers is not specified. However, Table 113 indicates the total count for each of the options.

**Table 113. Type of restrictions or conditions encountered with respect to the use of the data**

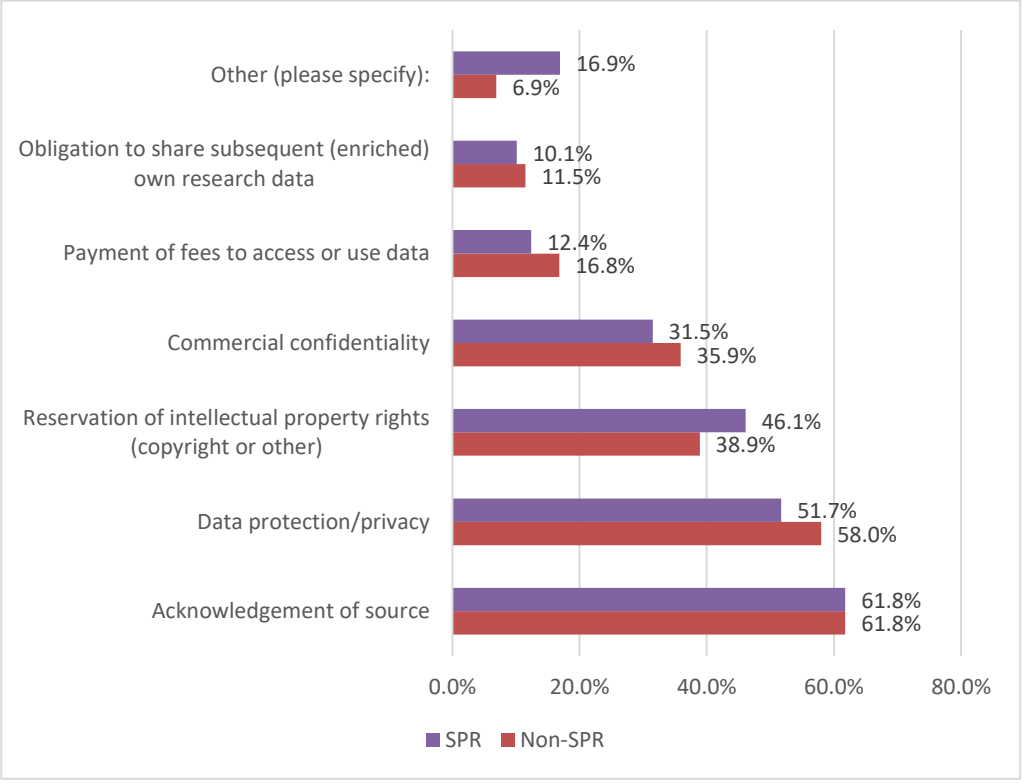
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Acknowledgement of source | 136 | 61.5% |
| Data protection/privacy | 122 | 55.2% |
| Reservation of intellectual property rights (copyright or other) | 92 | 41.6% |
| Commercial confidentiality | 75 | 33.9% |
| Payment of fees to access or use data | 33 | 14.9% |
| Obligation to share subsequent (enriched) own research data | 24 | 10.9% |
| Other (please specify) | 18 | 10.9% |
| Total | 220 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What type of restrictions or conditions did you encounter with respect to the use of the data?"*

The survey results, disaggregated between SPR and non-SPR countries, provide an overview of the varied restrictions or conditions encountered by researchers in data utilisation. Notably, the acknowledgement of the data source emerged as a universal practice, with an equal share of 61.8% in both SPR and non-SPR countries, underscoring the global consensus on the importance of proper attribution in research. While both groups grappled with data protection and privacy concerns, non-SPR countries showed a slightly higher emphasis at 58.0% compared to 51.7% in SPR countries. Intellectual property rights reservations were slightly more pronounced in SPR countries at 46.1%, in contrast to 38.9% in non-SPR countries, suggesting a possible slightly heightened focus on legal frameworks governing data use in the former. Commercial

confidentiality requirements were slightly more prevalent in non-SPR countries (35.9%) compared to SPR countries (31.5%).

**Figure 106. Type of restrictions or conditions encountered with respect to the use of the data (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What type of restrictions or conditions did you encounter with respect to the use of the data?"*

**Table 114. Type of restrictions or conditions encountered with respect to the use of the data**

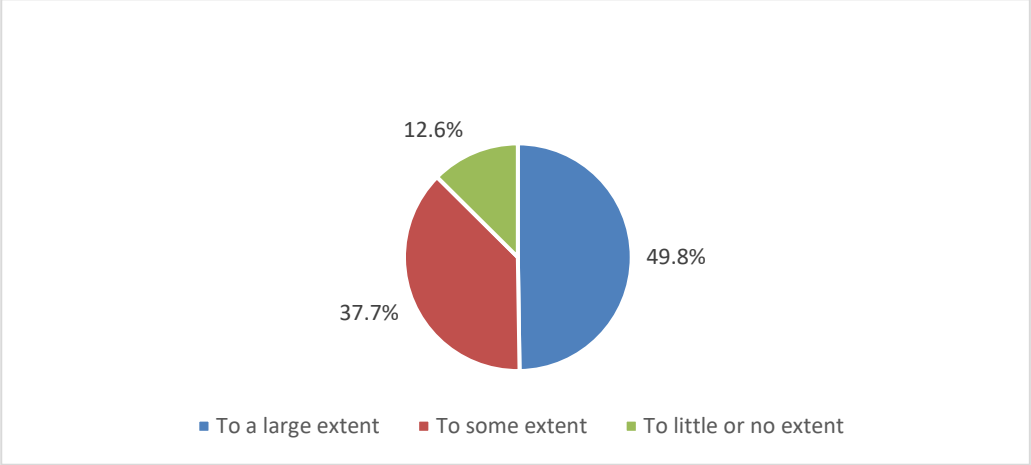
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Acknowledgement of source | 55 | 61.8% | 81 | 61.8% |
| Data protection/privacy | 46 | 51.7% | 76 | 58.0% |
| Reservation of intellectual property rights (copyright or other) | 41 | 46.1% | 51 | 38.9% |
| Commercial confidentiality | 28 | 31.5% | 47 | 35.9% |
| Other (please specify) | 15 | 16.9% | 22 | 16.8% |
| Payment of fees to access or use data | 11 | 12.4% | 15 | 11.5% |
| Obligation to share subsequent (enriched) own research data | 9 | 10.1% | 9 | 6.9% |
| Total | 89 | 100% | 131 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What type of restrictions or conditions did you encounter with respect to the use of the data?"*

**QUESTION 50: To what extent do you think that the data access restrictions were reasonable/legitimate?**

The survey showed diverse opinions among researchers regarding the legitimacy of data access restrictions. Nearly half (49.8%) considered the restrictions to be largely reasonable, while 37.7% acknowledged their legitimacy to some extent. However, a smaller group (12.6%) felt that the restrictions were reasonable to little or no extent. These highlight varying perspectives within the research community on the appropriateness of constraints associated with accessing external data.

**Figure 107. The extent to which the data access restrictions were considered reasonable/legitimate by researchers (n=207)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do you think that the data access restrictions were reasonable/legitimate?"*

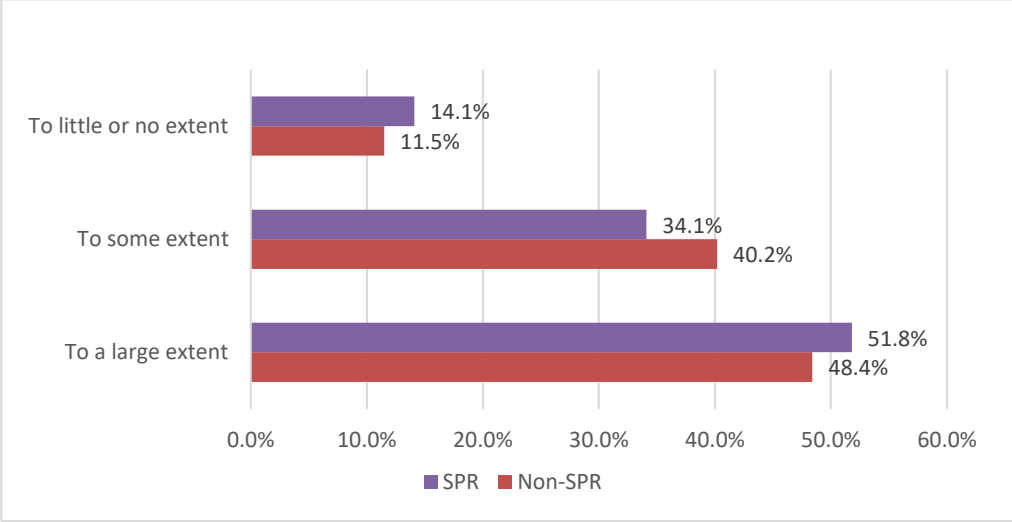
**Table 115. The extent to which the data access restrictions were considered reasonable/legitimate by researchers (n=207)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| To a large extent | 103 | 49.8% |
| To some extent | 78 | 37.7% |
| To little or no extent | 26 | 12.6% |
| Total | 207 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do you think that the data access restrictions were reasonable/legitimate?" n=207.*

In SPR countries, a majority of researchers (51.8%) believed that the data access restrictions were reasonable to a large extent, while 34.1% considered them to some extent and 14.1% to little or no extent. In non-SPR countries, 48.4% expressed that restrictions were reasonable to a large extent, with 40.2% indicating some extent and 11.5% little or no extent. These results suggest relatively similar perspectives in both groups, with a slightly higher percentage in SPR countries viewing the restrictions as reasonable to a large extent.

**Figure 108. The extent to which the data access restrictions were considered reasonable/legitimate by researchers**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do you think that the data access restrictions were reasonable/legitimate?"*

**Table 116. The extent to which the data access restrictions were considered reasonable/legitimate by researchers**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| To a large extent | 44 | 51.8% | 59 | 48.4% |
| To some extent | 29 | 34.1% | 49 | 40.2% |
| To little or no extent | 12 | 14.1% | 14 | 11.5% |
| Total | 85 | 100% | 122 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "To what extent do you think that the data access restrictions were reasonable/legitimate?*

### QUESTION 51: Please specify what was the condition(s) by another party?

Table 117 presents a comprehensive breakdown of the conditions specified by researchers when asked about constraints imposed by external parties on their research data usage. The conditions are categorised into distinct themes, facilitating an organised understanding of the diverse requirements."

**Table 117. The list of conditions by another party (n=102)**

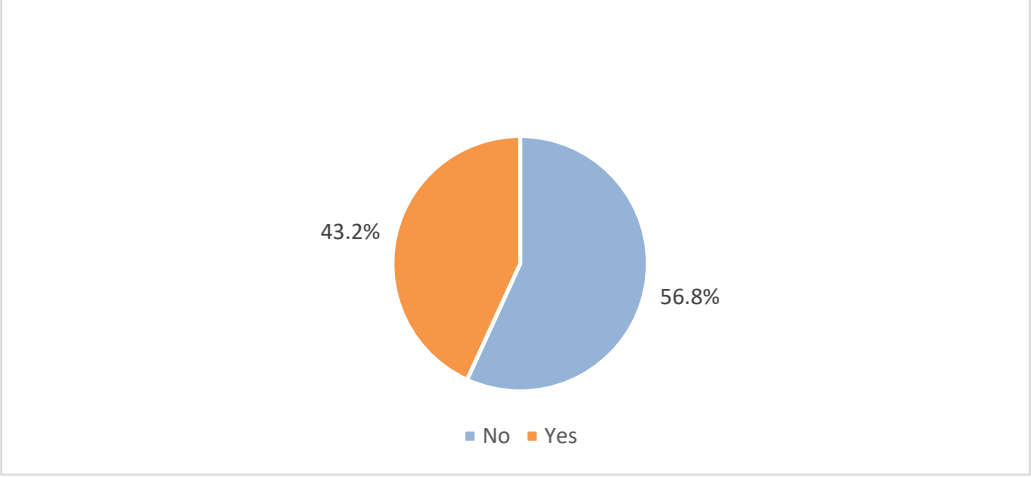
| Confidentiality and Commercial Interests | Access and Usage Restrictions | Legal and Ethical Requirements | Publication and Citation | Data Source and Origin | Technical and Administrative Conditions | Miscellaneous |
|---|---|---|---|---|---|---|
| Commercial confidentiality, no publication without permission.<br>Access restrictions for commercially valuable data.<br>IP by an industry partner.<br>Embargo period, payment of fees.<br>Confidentiality legislation.<br>Data protection/privacy.<br>Data security/privacy in line with GDPR. | Access restrictions to data on a platform only.<br>Not sharing individual-level data.<br>Usage fees, use in an audited remote use environment only.<br>Only using data for the current project (consortium for an EU grant).<br>GDPR due to the use of large sets of administrative data.<br>Must not be released to authorities.<br>No redistribution.<br>Data access through only one authorised person from the own institution.<br>Registration of user-user statement, required acknowledgement. | Anonymous synthetic data should be enforced by law.<br>GDPR due to the use of large sets of administrative data.<br>Anonymous data.<br>Data from private companies with legal restrictions.<br>Acknowledgement of source by naming the original researchers.<br>Acknowledgement and adequate citation.<br>Full absolute secrecy.<br>NDA and MoU, priority to patents. | Original authors listed as co-authors in subsequent publications.<br>Acknowledgement of source by naming the original researchers.<br>Not to share the results after validation by third parties not involved in the research.<br>Some researchers cautious about sharing knowledge.<br>Credit and lack of clarity over usage rights.<br>Unwritten rule in the community of biomedical researchers regarding co-authorship.<br>To be included as co-authors of the study.<br>Acknowledgement of source by naming the original researchers. | Data came from multiple sources, difficult to trace.<br>Some information does not have to be completely public. | Technical administration of the software tool after the end of the project<br>Access to the source files limited to those researchers only.<br>Produce and create good datasets, mainly in human research, is very expensive.<br>Limitation in accessing the data, machine usable for processing the data. | No time relevance.<br>Not applicable at this stage.<br>Too much bureaucracy.<br>I am not sure because I did not manage the data acquisition process directly, I used the data. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "Please specify what was the condition(s) by another party?"*

## QUESTION 52: In the past year, were you obliged to deposit research data generated as part of a project?

Regarding the obligation to deposit research data generated as part of a project in the past year, the survey found that 43.2% of researchers reported being required to do so. In contrast, a larger share of researchers (56.8%), indicated that they were not obligated to deposit research data during this period.

**Figure 109. Obligation to deposit research data generated as part of a project (n=834)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In the past year, were you obliged to deposit research data generated as part of a project?"*

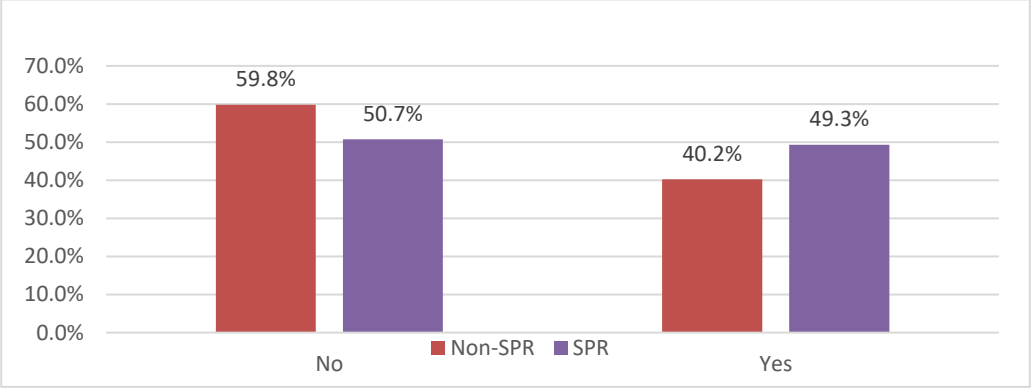
**Table 118. Obligation to deposit research data generated as part of a project (n=834)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 474 | 56.8% |
| Yes | 360 | 43.2% |
| Total | 834 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In the past year, were you obliged to deposit research data generated as part of a project?"*

In SPR countries, 49.3% of researchers reported being obliged to deposit research data generated in the past year, while 50.7% indicated no such obligation. In contrast, a lower percentage of researchers in non-SPR countries (40.2%), stated that they were required to deposit data, with a larger proportion (59.8%), not facing this obligation. These findings suggest varying practices and policies regarding data deposition.

**Figure 110. Obligation to deposit research data generated as part of a project (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In the past year, were you obliged to deposit research data generated as part of a project?"*

**Table 119. Obligation to deposit research data generated as part of a project (SPR and non-SPR countries)**

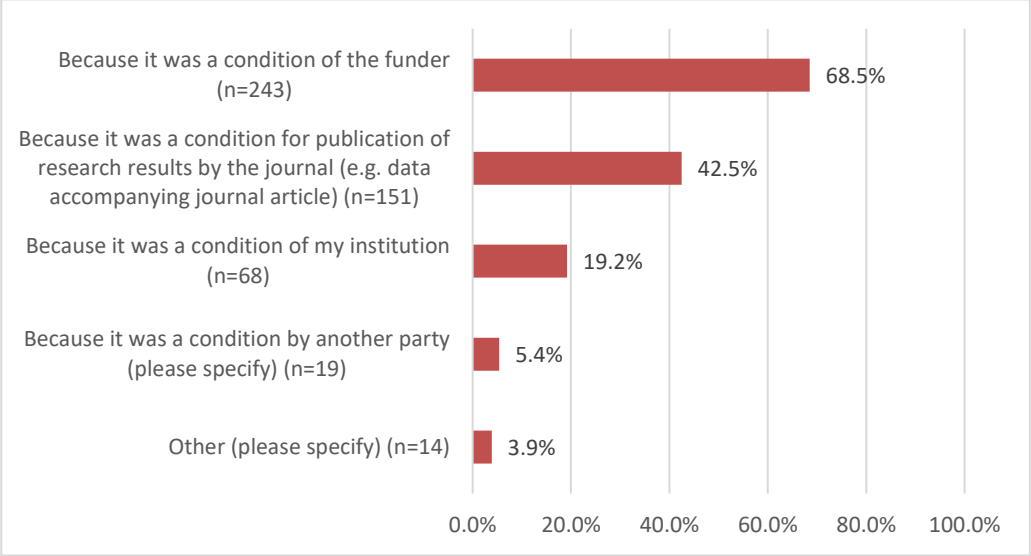
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| No | 138 | 50.7% | 336 | 59.8% |
| Yes | 134 | 49.3% | 226 | 40.2% |
| Total | 272 | 100% | 562 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "In the past year, were you obliged to deposit research data generated as part of a project?"*

### QUESTION 53: What were the reasons why you were obliged to deposit research data generated as part of a project? (choose all that apply)

The survey results show the reasons why researchers felt they had to deposit their research data. The most common reason, mentioned by 68.5% of researchers, was that it was a requirement from the funding organisation. Another important factor, reported by 42.5% of researchers, was the necessity for data deposition as a condition for publishing research results in journals. Institutional policies influenced 19.2% of researchers, and 5.4% mentioned other external parties imposing this condition. The 'other' category, accounting for 3.9%, captured additional reasons provided by researchers, such as consortium agreement, requirements under the EU Framework Programme for Research and Innovation, international facilities (ISIS, PSI), and the research group.

**Figure 111. Reasons why researchers were obliged to deposit research data generated as part of a project**




*Source: Compiled by the study team using data from the researchers' survey, the question* in the survey was "*What were the reasons why you were obliged to deposit research data generated as part of a project?"*

As the question allowed for multiple choices, the overall number of researchers is not specified. However, Table 120 indicates the total count for each of the options.

**Table 120. Reasons why researchers were obliged to deposit research data generated as part of a project**

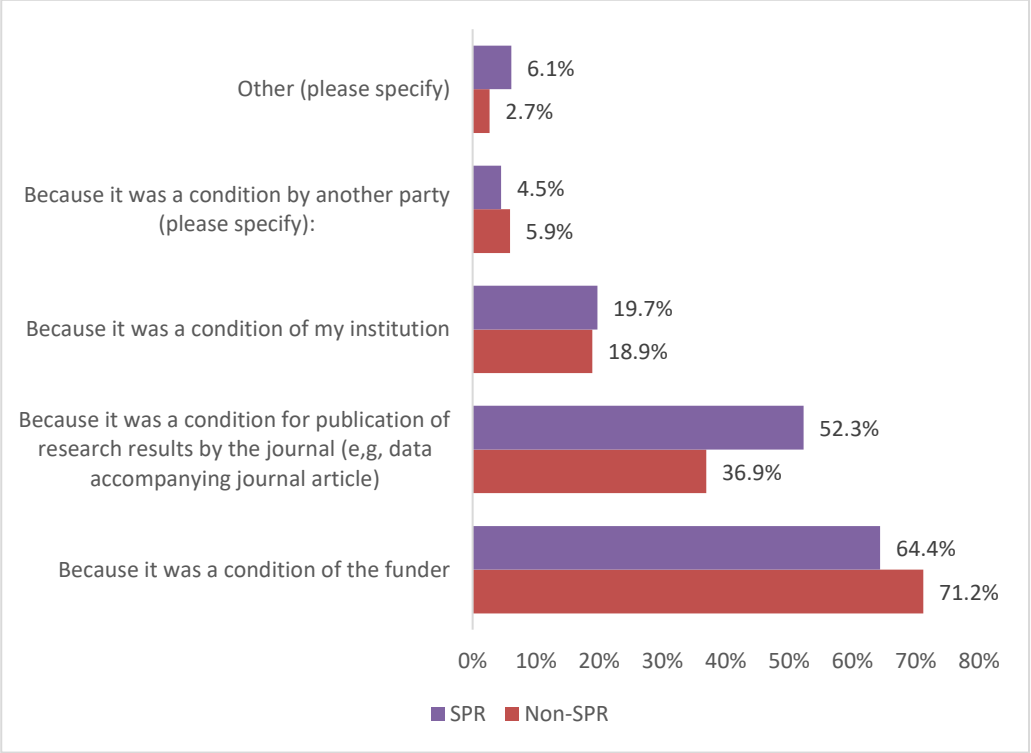
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Because it was a condition of the funder | 243 | 68.5% |
| Because it was a condition for publication of research results by the journal (e.g. data accompanying journal article) | 151 | 42.5% |
| Because it was a condition of my institution | 68 | 19.2% |
| Because it was a condition by another party | 19 | 5.4% |
| Other (please specify) | 14 | 3.9% |
| Total | 354 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What were the reasons why you were obliged to deposit research data generated as part of a project?"*

The survey results distinguish responses from SPR and non-SPR countries. Overall, a predominant share in both SPR (64.4%) and non-SPR (71.2%) countries cited compliance with funder requirements as the primary motivation for data deposition, highlighting the significant role funding agencies play in shaping data-sharing practices. Interestingly, the condition for publication of research results by journals, such as accompanying data with journal articles, was a substantial factor, reported by 52.3% in SPR countries and 36.9% in non-SPR countries. Institutional policies also influenced data deposition, with 19.7% of researchers in SPR countries and 18.9% in non-SPR countries citing it as a requirement. Researchers also provided varied reasons under the 'other' category (6.1% in SPR, 5.9% in non-SPR), while a smaller percentage mentioned obligations imposed by other parties (4.5% in SPR, 2.7% in non-SPR). These findings underscore the multifaceted nature of motivations driving research data deposition, shaped by a combination of external funding, publication practices, institutional policies, and diverse external stakeholders.

Those who selected 'other' mentioned that the reasons to deposit research data included the importance of depositing due to transparency and replicability, a requirement as part of the project, the willingness to provide raw data for students to use for their theses, or the researchers' belief that depositing data are important.

**Figure 112. Reasons why researchers were obliged to deposit research data generated as part of a project (SPR and non-SPR countries)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What were the reasons why you were obliged to deposit research data generated as part of a project?"*

**Table 121. Reasons why researchers were obliged to deposit research data generated as part of a project**

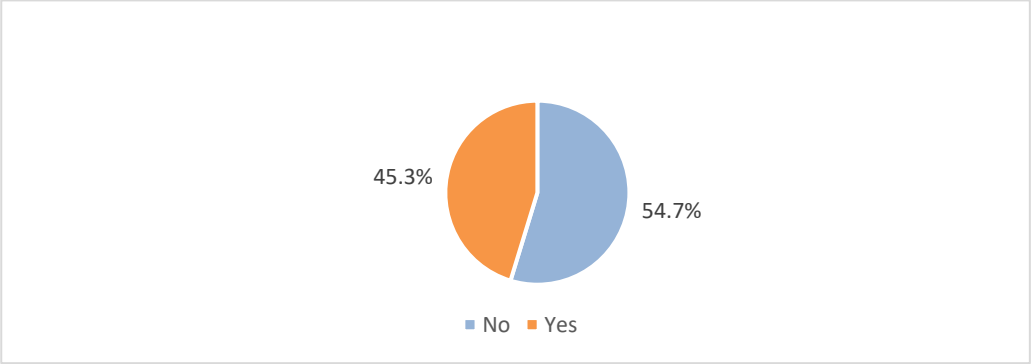
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Because it was a condition of the funder | 85 | 64.4% | 158 | 71.2% |
| Because it was a condition for publication of research results by the journal (e.g. data accompanying journal article) | 69 | 52.3% | 82 | 36.9% |
| Because it was a condition of my institution | 26 | 19.7% | 42 | 18.9% |
| Other (please specify) | 8 | 6.1% | 13 | 5.9% |
| Because it was a condition by another party (please specify): | 6 | 4.5% | 6 | 2.7% |
| Total | 132 | 100% | 222 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was "What were the reasons why you were obliged to deposit research data generated as part of a project?"*

## QUESTION 54: As part of the deposit, did you have to agree to grant a licence for the use of your research data?

In the context of data deposition, researchers were asked about the requirement to grant a licence for the use of their research data. The survey results indicate that 45.3% of researchers reported having to grant a licence as part of the deposit process. Conversely, 54.7% stated that they did not have to agree to such licensing terms. These findings suggest a mixed landscape regarding the imposition of licensing conditions during data deposition, with a notable share of researchers being subject to this requirement while a significant percentage did not encounter such obligations.

**Figure 113. Degree to which researchers had to grant a licence for the use of their research data (n=254)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "As part of the deposit, did you have to agree to grant a licence for the use of your research data?"*

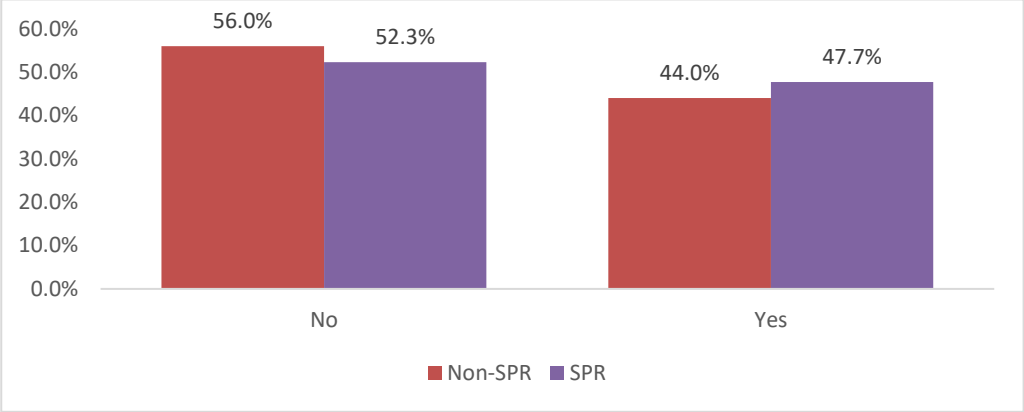
**Table 122. Degree to which researchers had to grant a licence for the use of their research data (n=254)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 139 | 54.7% |
| Yes | 115 | 45.3% |
| Total | 254 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "As part of the deposit, did you have to agree to grant a licence for the use of your research data?"*

In SPR countries, 47.7% of researchers reported having to grant a licence, while 52.3% did not have this requirement. In non-SPR countries, 44.0% of researchers indicated agreeing to a licence, and 56.0% stated that no such agreement was necessary. These findings suggest a relatively balanced distribution, with minor variations between the two groups. It indicates that, in both SPR and non-SPR countries, researchers experience comparable patterns of licensing obligations when depositing research data.

**Figure 114. Degree to which researchers had to grant a licence for the use of their research data (n=254)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "As part of the deposit, did you have to agree to grant a licence for the use of your research data?"*

**Table 123. Degree to which researchers had to grant a licence for the use of their research data (n=254)**

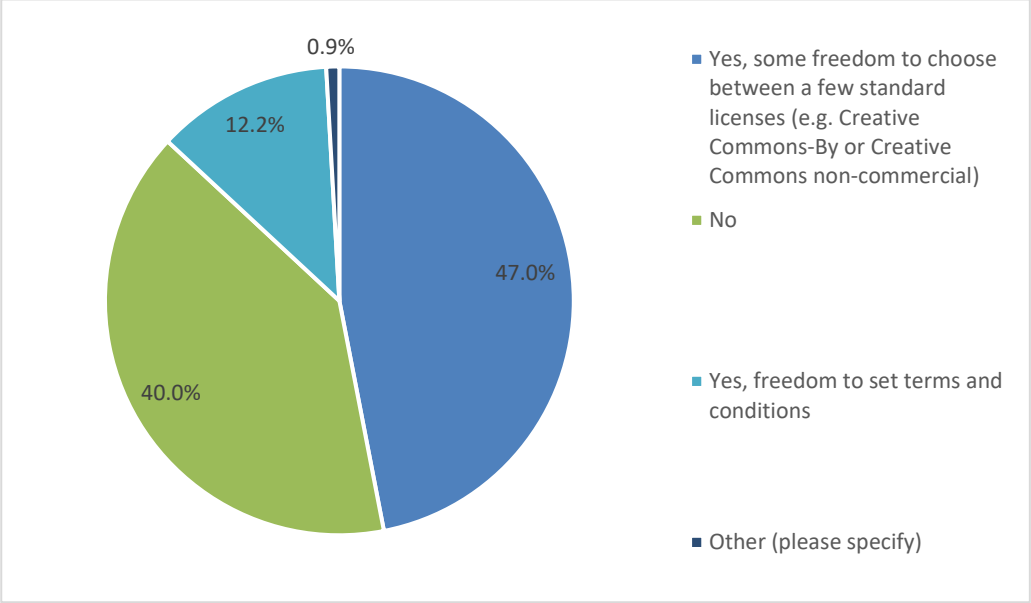
| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| No | 46 | 52.3% | 93 | 56.0% |
| Yes | 42 | 47.7% | 73 | 44.0% |
| Total | 88 | 100% | 166 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "As part of the deposit, did you have to agree to grant a licence for the use of your research data?"*

### QUESTION 55: Did you have any say over the terms and conditions for the use of your research data by others?

Regarding the influence researchers had over the terms and conditions for the use of their research data by others, the survey results indicate diverse levels of control. A majority (47.0%) reported having some freedom to choose between a few standard licences, such as Creative Commons By or Creative Commons Non-Commercial. Conversely, 40.0% stated that they had no say in determining the terms and conditions. A smaller percentage, 12.2%, indicated having the freedom to set their own terms and conditions. 0.9% of respondents selected 'other', with one researcher noting not recalling about having a say over the terms and conditions for the use of their research data by others. These findings underscore the variability in researchers' influence over the terms governing the use of their research data, ranging from limited choices within standard licences to the ability to set bespoke conditions.

**Figure 115. Researchers' freedom to choose the conditions for the use of their research data by others (n=115)**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Did you have any say over the terms and conditions for the use of your research data by others?"*

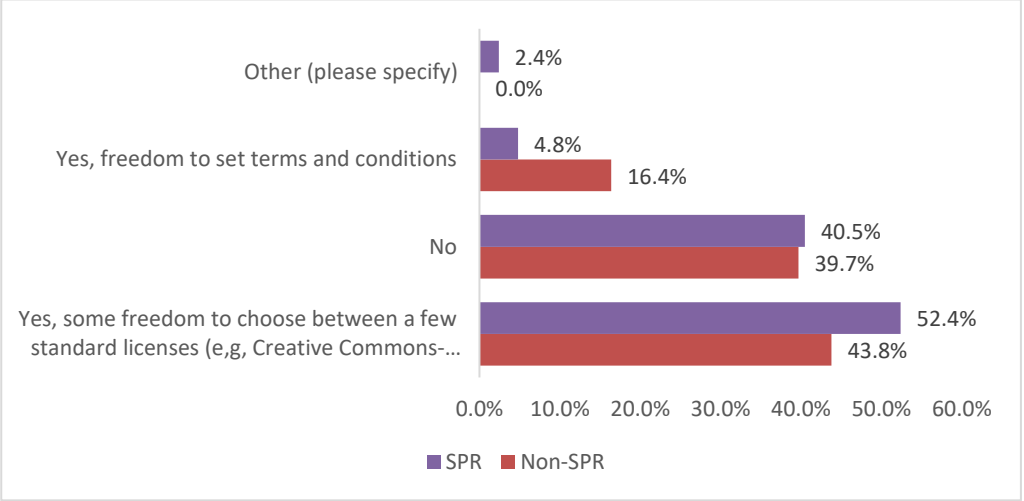
**Table 124. Researchers' freedom to choose the conditions for the use of their research data by others (n=115)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes, some freedom to choose between a few standard licences (e.g. Creative Commons By or Creative Commons Non-Commercial) | 54 | 47.0% |
| No | 46 | 40.0% |
| Yes, freedom to set terms and conditions | 14 | 12.2% |
| Other (please specify) | 1 | 0.9% |
| Total | 115 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Did you have any say over the terms and conditions for the use of your research data by others?"*

In SPR countries, 52.4% of researchers reported having some freedom to choose between standard licences, such as Creative Commons By or Creative Commons Non-Commercial, while 40.5% indicated they had no say in determining terms and conditions. Additionally, 4.8% of researchers in SPR countries had the freedom to set their own terms. In contrast, in non-SPR countries, 43.8% had some freedom to choose between standard licences, 39.7% had no say in determining terms, and 16.4% had the freedom to set their own conditions. Only one researcher in SPR countries selected 'other', accounting for 2.4%, not recalling about having a say over the terms and conditions for the use of their research data by others.

**Figure 116. Researchers' freedom to choose the conditions for the use of their research data by others**




*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Did you have any say over the terms and conditions for the use of your research data by others?"*

**Table 125. Researchers' freedom to choose the conditions for the use of their research data by others**

| | SPR | | Non-SPR | |
|---|---|---|---|---|
| | Count (total) | Share of responses, % (total) | Count (total) | Share of responses, % (total) |
| Yes, some freedom to choose between a few standard licences (e.g. Creative Commons By or Creative Commons Non-Commercial) | 22 | 52.4% | 32 | 43.8% |
| No | 17 | 40.5% | 29 | 39.7% |
| Yes, freedom to set terms and conditions | 2 | 4.8% | 12 | 16.4% |
| Other (please specify) | 1 | 2.4% | 0 | 0.0% |
| Total | 42 | 100% | 73 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Did you have any say over the terms and conditions for the use of your research data by others?"*

## Final questions (both – copyright and data and digital legislation parts)

### QUESTION 56: Would you agree to participate in a follow-up online interview (up to 45 minutes) on certain aspects covered in this survey?

The survey included a query about researchers' willingness to engage in a follow-up online interview, lasting up to 45 minutes, to dive deeper into specific aspects covered in the survey. 13.6% of the researchers agreed to participate in a follow-up interview if needed. A total of 4 follow-up interviews took place.

**Table 126. Agreement to participate in a follow-up interview (n=892)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 771 | 86.4% |
| Yes | 121 | 13.6% |
| Total | 892 | 100% |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Would you agree to participate in a follow-up online interview (up to 45 minutes) on certain aspects covered in this survey?"*

### QUESTION 58: Would you have to share any other observations that were not covered in this survey?

Table 90 presents responses from researchers who were asked if they had additional observations to share that were not addressed in this survey.

**Table 127. Share and observations not covered in the survey (n=189)**

| Concerns About the Publication System: | Funding and Costs: | Open Access and Data Sharing: | Reviewer and Editor Issues: | Industry and SME Challenges: | Legal and Ethical Considerations: |
|---|---|---|---|---|---|
| The publication world is highly commercialised, capital-driven, and has lost its virtuous nature.<br>Capitalisation creates disparities between high-income and low-income countries.<br>The academic system's reward for quantity of publications may lead to low-quality science.<br>Publishers benefit commercially, and authors bear high publishing costs. | Calls for significantly lower publishing costs, suggesting a 10% target.<br>Challenges with funds for Open Access, especially for EU research projects. | Support for Open Access and open data with acknowledgement of potential concerns.<br>Suggestions for mandatory Open Access and retention of copyright by funding bodies.<br>Challenges in using EU funds for hybrid Open Access journals.<br>Emphasis on the importance of Open Access for data and publications. | Reviewers and editors are often non-paid and may be tired of working for free.<br>Additional costs (Publishers providing paid services for rejected manuscripts). | Challenges for micro-SMEs regarding negotiation and access to peer-reviewed papers.<br>Difficulty for part-time university researchers in meeting Open Access requirements (tenure track professors can benefit from Open Access for free, without having to generate income, e.g. from EU funded projects). | Concerns about conflicting requirements for data protection and Open Access.<br>Concerns about data protection when sharing datasets. |

*Source: Compiled by the study team using data from the researchers' survey, the question in the survey was, "Would you have to share any other observations that were not covered in this survey?"*

# RESEARCH PERFORMING ORGANISATIONS' (RPOs) SURVEY

## Copyright

## Status and introduction

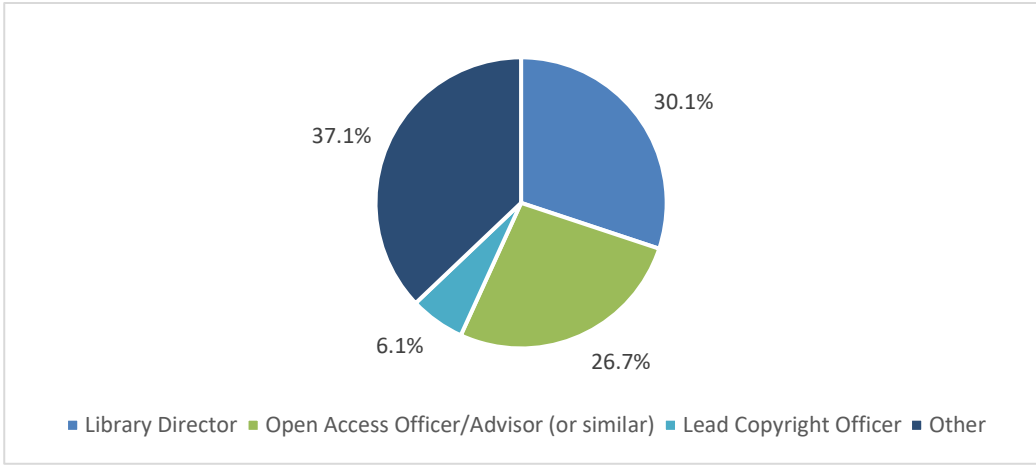
This survey targeted Research Performing Organisations' (RPOs) representatives that had the following profiles:

- Head of libraries or
- Head of Open Access/Open Science policy.

### QUESTION 1: What is your role within the organisation?

The first question asked RPOs' representatives about their role in the organisation. The largest share (37.1%) chose the option 'other', indicating that their role was not listed among the survey options. Of those whose roles were listed, 30.1% were library directors, 26.7% were Open Access officers or Advisers, and 6.1% were Lead copyright officers. A total of 200 RPOs' representatives (37.1%) selected 'Other'. These other roles included leadership positions such as CEO, COO, and Executive Director, as well as those directly involved in research, e.g. Lead Researchers and Project Managers. Additionally, there were individuals specialising in communication, intellectual property, legal affairs, and data protection. Roles related to publishing and library services, such as Scientific Editors, Head of University Press, and Library Directors, highlight the importance of managing scholarly communication.

**Figure 117. RPOs' representatives role in the organisation (n=539)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 128. RPO representatives role in the organisation (n=539)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Library Director | 162 | 30.1% |
| Open Access Officer/Adviser (or similar) | 144 | 26.7% |
| Lead Copyright Officer | 33 | 6.1% |
| Other | 200 | 37.1% |
| Total | 539 | 100% |

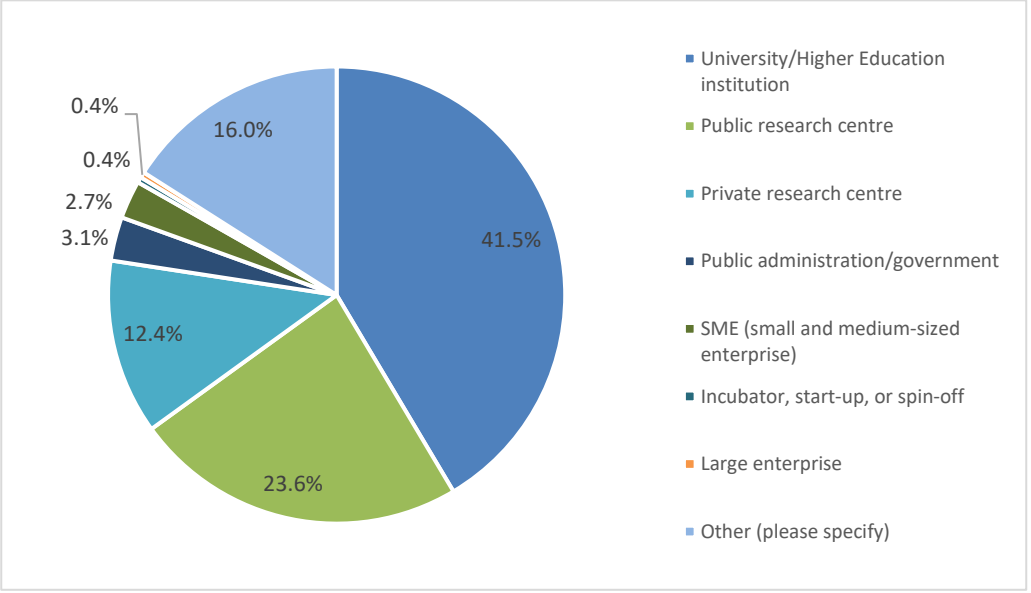
*Source: Compiled by the study team using data from the RPO survey.*

**QUESTION 3: Please indicate the type of organisation you are representing.**

Most (41.5%) RPOs' representatives indicated that they represent universities and higher education institutions, followed by public research centres (23.6%) and private research centres (12.4%). SMEs, start-ups, incubators and large enterprises together accounted for less than 4.0% of RPOs' representatives affiliation.

Those who selected 'other' (16.0%) indicated affiliations with public consortia, research institutes, universities, university hospitals, professional organisations, public and private foundations, non-governmental organisations (NGOs), intergovernmental organisations, public-private associations, trade associations, competence centres, technology clusters, for-profit private clinical research organisations, cultural research institutes, museums, libraries and library associations, non-profit educational associations, and Research and Technology Organisations (RTOs).

**Figure 118. The organisational affiliations of the RPO representatives (n=550)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 129. The organisational affiliations of the RPO representatives**

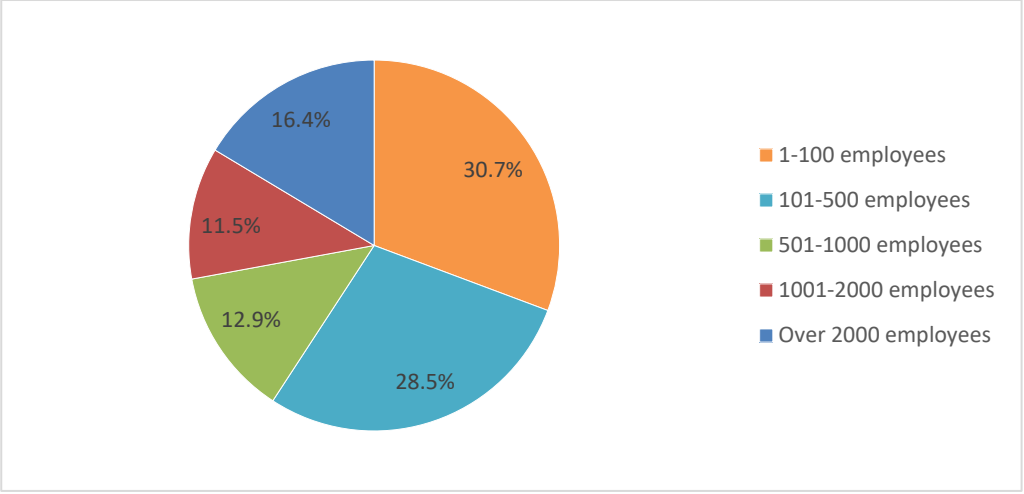
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| University/Higher Education institution | 228 | 41.5% |
| Public research centre | 130 | 23.6% |
| Private research centre | 68 | 12.4% |
| Public administration/government | 17 | 3.1% |
| SME (small and medium-sized enterprise) | 15 | 2.7% |
| Incubator, start-up, or spin-off | 2 | 0.4% |
| Large enterprise | 2 | 0.4% |
| Other (please specify) | 88 | 16.0% |
| Total | 550 | 100% |

*Source: Compiled by the study team using data from the RPO survey.*

## QUESTION 4: What is the size of your organisation?

RPOs represent a wide range of organisation sizes in the survey; however, the majority of RPOs (30.7%) represent organisations with 1-100 employees. Following closely, 28.5% of RPOs are from organisations with 101-500 employees; additionally, 12.9% and 11.5% of RPOs represent organisations with 501-1000 employees and 1001-2000 employees, respectively. Lastly, the survey highlights that 16.4% of RPOs are from organisations with over 2000 employees.

**Figure 119. The size of the surveyed RPOs (n=550)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 130. The size of the surveyed RPOs**

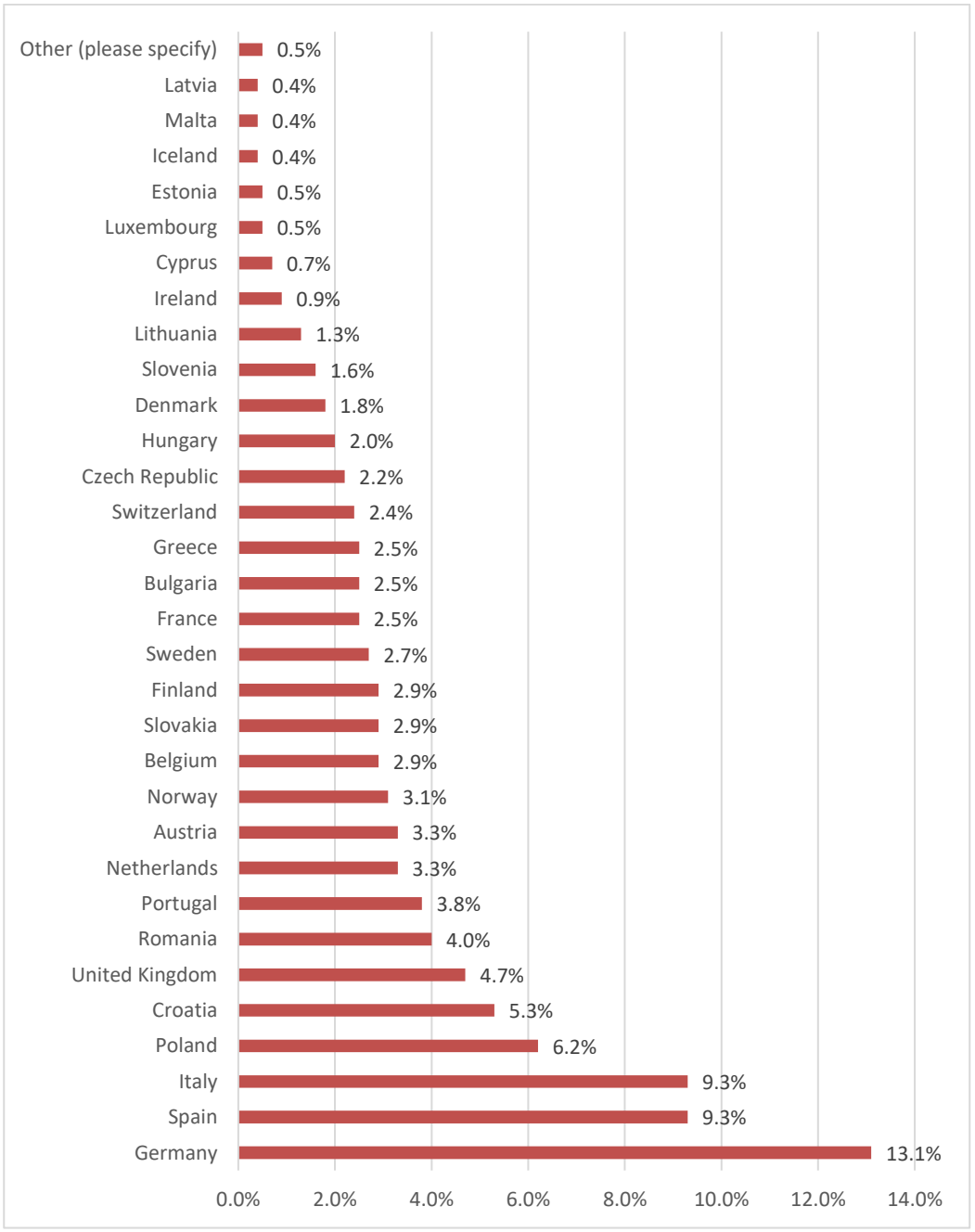
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| 1-100 employees | 169 | 30.7% |
| 101-500 employees | 157 | 28.5% |
| 501-1000 employees | 71 | 12.9% |
| 1001-2000 employees | 63 | 11.5% |
| Over 2000 employees | 90 | 16.4% |
| Total | 550 | 100% |

*Source: Compiled by the study team using data from the RPO survey.*

## QUESTION 5: In which country is the organisation that you represent established?

The largest share (13.1%) of respondents from RPOs represent organisations based in Germany, followed by Spain (9.3%), Italy (9.3%), Poland (6.2%) and Croatia (5.3%). Ireland, Cyprus, Luxembourg, Estonia, Iceland, Malta and Latvia all represented less than 1.0% of the total sample each.

**Figure 120. Country of the surveyed RPOs (n=550)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 131. Country of the surveyed RPOs (n=550)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Germany | 72 | 13.1% |
| Spain | 51 | 9.3% |
| Italy | 51 | 9.3% |
| Poland | 34 | 6.2% |
| Croatia | 29 | 5.3% |
| United Kingdom | 26 | 4.7% |
| Romania | 22 | 4.0% |
| Portugal | 21 | 3.8% |
| Netherlands | 18 | 3.3% |
| Austria | 18 | 3.3% |
| Norway | 17 | 3.1% |
| Belgium | 16 | 2.9% |
| Slovakia | 16 | 2.9% |
| Finland | 16 | 2.9% |
| Sweden | 15 | 2.7% |
| France | 14 | 2.5% |
| Bulgaria | 14 | 2.5% |
| Greece | 14 | 2.5% |
| Switzerland | 13 | 2.4% |
| Czechia | 12 | 2.2% |
| Hungary | 11 | 2.0% |
| Denmark | 10 | 1.8% |
| Slovenia | 9 | 1.6% |
| Lithuania | 7 | 1.3% |
| Ireland | 5 | 0.9% |
| Cyprus | 4 | 0.7% |
| Luxembourg | 3 | 0.5% |
| Estonia | 3 | 0.5% |
| Iceland | 2 | 0.4% |
| Malta | 2 | 0.4% |
| Latvia | 2 | 0.4% |
| Other (please specify) | 3 | 0.5% |
| Total | 550 | 100% |

*Source: Compiled by the study team using data from the RPO survey.*

## Institutional Open Access/Open Science policies

### QUESTION 6: Can you describe the services that scientific publishers offer that you as research performing organisation appreciate the most in helping the publication?

Table 132 reflects the diverse needs and experiences of RPOs in their engagement with scientific publishers, highlighting the appreciation for services that support the quality, accessibility, and impact of research within scholarly circles.

**Table 132. RPOs' most appreciated services offered by scientific publishers (n=322)**

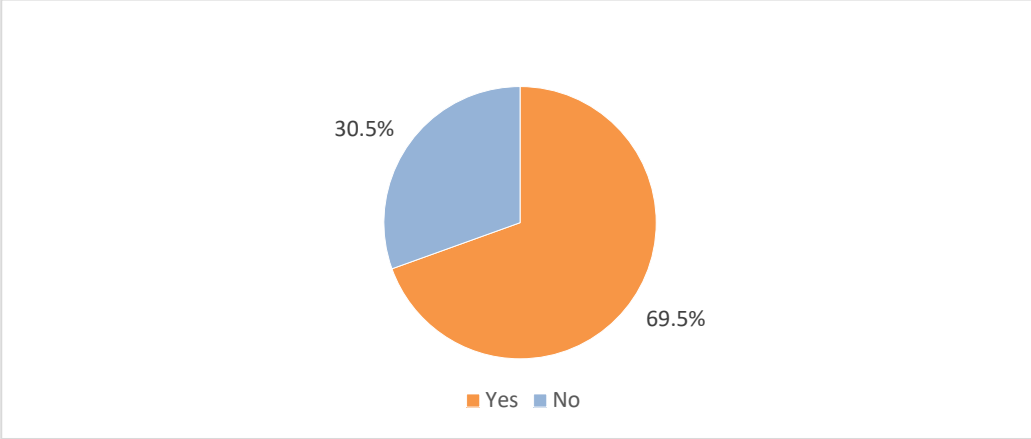
| Access and Dissemination Services | Editorial and Review Services | Financial and Publication Support Services | Additional Resources and Training Services |
|---|---|---|---|
| This includes Open Access publishing, extensive databases, and distribution channels that aid in the accessibility and wider dissemination of research. | Comprises services such as peer review, editorial support, and clear communication during submissions, which are crucial for maintaining the quality and integrity of scientific publications. | This encompasses support for navigating financial constraints related to Article Processing Charges (APCs), along with assistance in finding suitable publishing routes. | This includes the provision of training, support in navigating the publication process, intellectual property protection, indexing, and impact assessments, which are valued for enhancing research quality and impact. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Can you describe the services that scientific publishers offer that you as research performing organisation appreciate the most in helping the publication?"*

## QUESTION 7: Does your organisation have an Open Access/Open Science policy?

The majority (69.5%) of RPOs indicated that their organisation has an Open Access or Open Science policy, while 30.5% indicated that their organisation does not have such policies.

**Figure 121. RPOs having an Open Access/Open Science policy (n=508)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation have an Open Access/Open Science policy?"*

**Table 133. RPOs having an Open Access/Open Science policy (n=508)**

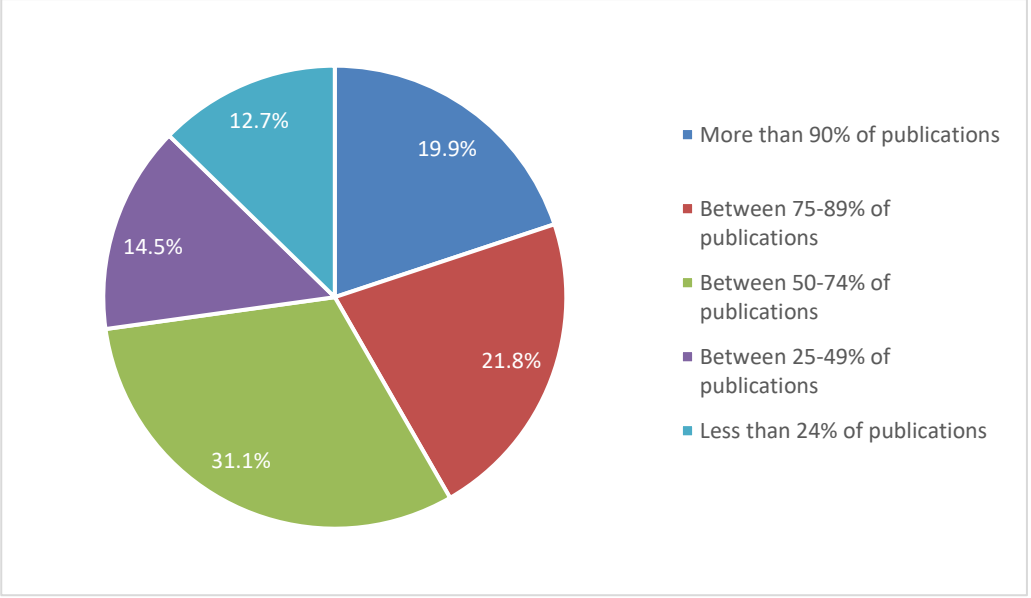
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes | 353 | 69.5% |
| No | 155 | 30.5% |
| Total | 508 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation have an Open Access/Open Science policy?"*

**QUESTION 8: In 2022, approximately what share of your organisation's publications were published in Open Access via a journal, platform, or repository? (n=482)**

When queried about the proportion of organisations' publications published in Open Access in 2022, the survey results indicated varied distribution. Some 19.9% reported that more than 90% of their publications were Open Access, while 21.8% fell within the range of 75-89%. A substantial 31.1% indicated that Open Access publications comprised 50-74% of their output. Furthermore, 14.5% reported that 25-49% of their publications were in Open Access, and 12.7% mentioned that less than 24% of their publications fell under the Open Access category.

**Figure 122. Share of RPOs' publications published in Open Access via a journal, platform, or repository (n=482)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In 2022, approximately what share of your organisation's publications were published in Open Access via a journal, platform, or repository?"*

**Table 134. Share of RPOs' publications published in Open Access via a journal, platform, or repository (n=482)**

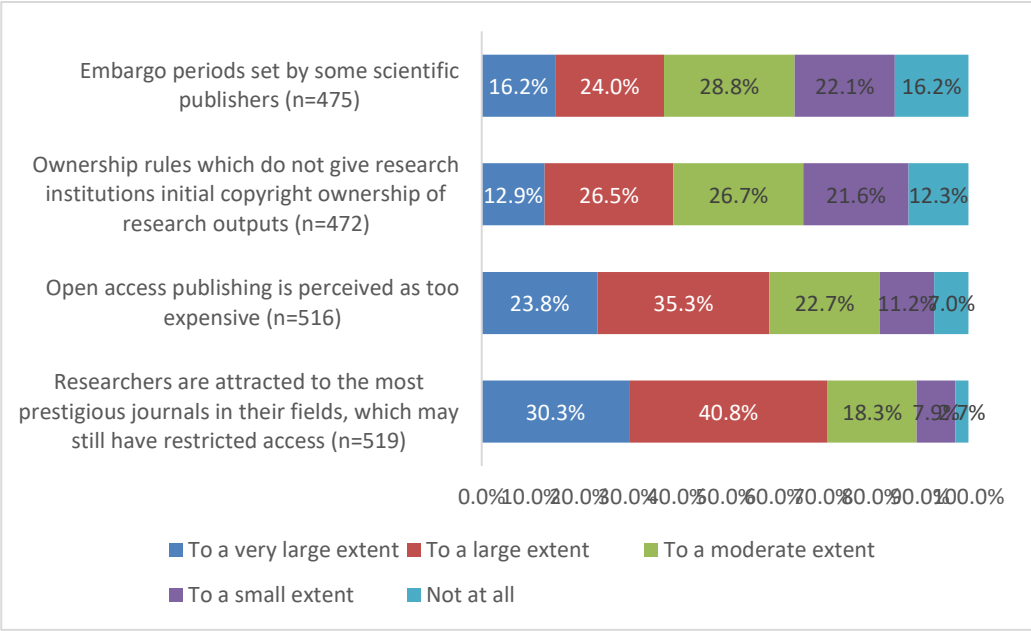
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| More than 90% of publications | 96 | 19.9% |
| Between 75-89% of publications | 105 | 21.8% |
| Between 50-74% of publications | 150 | 31.1% |
| Between 25-49% of publications | 70 | 14.5% |
| Less than 24% of publications | 61 | 12.7% |
| Total | 482 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In 2022, approximately what share of your organisation's publications were published in Open Access via a journal, platform, or repository?"*

**QUESTION 9: To what extent do the following factors represent an obstacle to providing immediate Open Access to publicly funded research outputs?**

When asked about the obstacles to providing immediate Open Access to publicly funded research outputs, RPOs expressed varying degrees of concern across different factors. The majority of RPOs found that researchers' inclination toward prestigious journals with restricted access posed a substantial obstacle, with 71.1% indicating this to a very large or large extent. Concerns about the perceived expense of Open Access publishing were notable, with 59.1% expressing at least a moderate level of hindrance. Ownership rules impacting initial copyright ownership of research outputs were considered a barrier by 39.6% of RPOs to a large or very large extent. Additionally, embargo periods set by some scientific publishers were viewed as hindering Open Access by 40.2% to a large or very large extent. These results highlight the multifaceted challenges perceived by RPOs in achieving immediate Open Access to publicly funded research outputs.

**Figure 123. RPOs' obstacles to providing immediate Open Access to publicly funded research**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do the following factors represent an obstacle to providing immediate Open Access to publicly funded research outputs?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 135 indicates the total count for each of the options.

**Table 135. RPOs obstacles to providing immediate Open Access to publicly funded research**

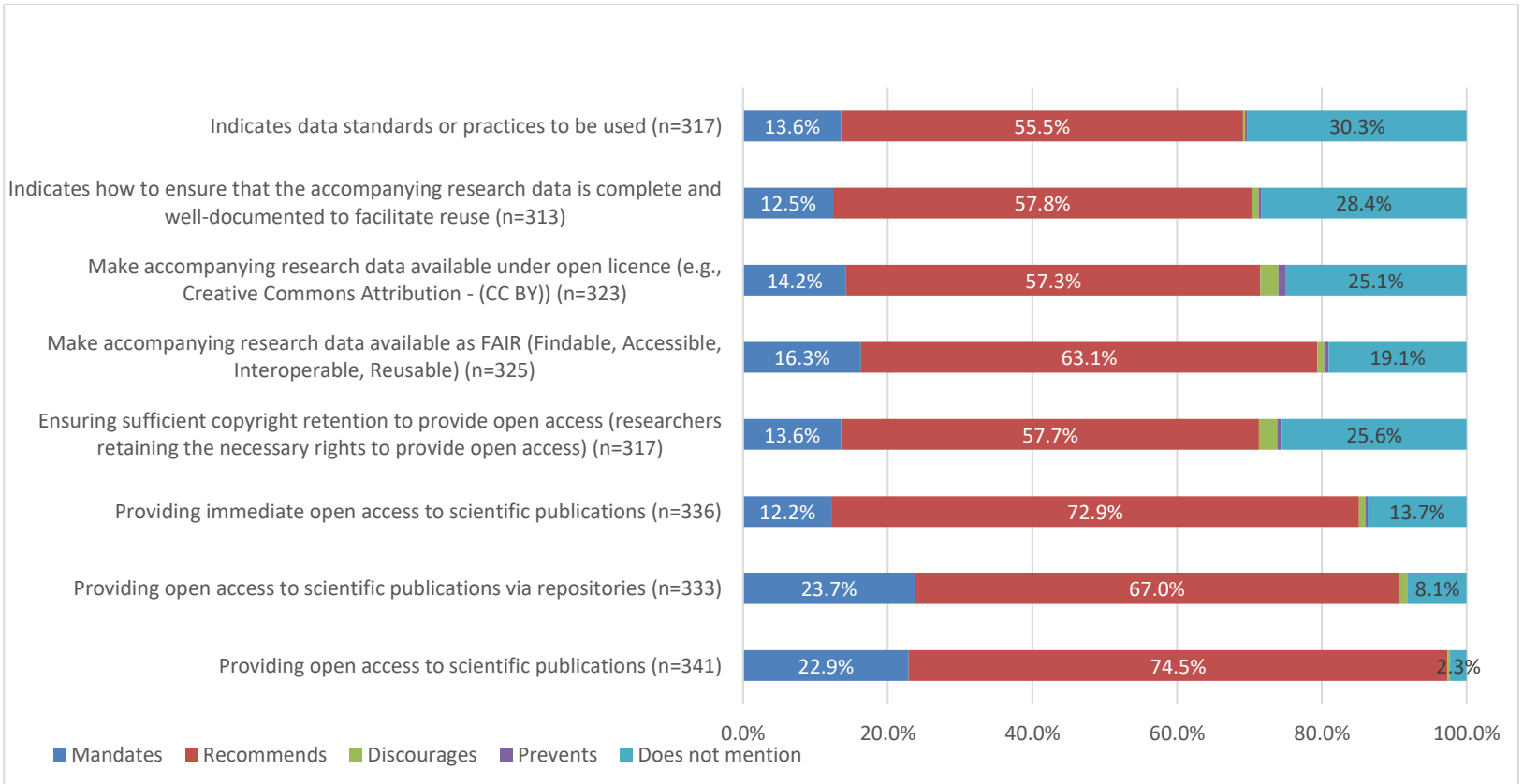
| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Total |
|---|---|---|---|---|---|---|
| Researchers are attracted to the most prestigious journals in their fields, which may still have restricted access (n=519) | 157 (30.3%) | 212 (40.8%) | 95 (18.3%) | 41 (7.9%) | 14 (2.7%) | 519 |
| Open Access publishing is perceived as too expensive (n=516) | 123 (23.8%) | 182 (35.3%) | 117 (22.7%) | 58 (11.2%) | 36 (7.0%) | 516 |
| Ownership rules which do not give research institutions initial copyright ownership of research outputs (n=472) | 61 (12.9%) | 125 (26.5%) | 126 (26.7%) | 102 (21.6%) | 58 (12.3%) | 472 |
| Embargo periods set by some scientific publishers (n=475) | 77 (16.2%) | 114 (24.0%) | 137 (28.8%) | 105 (22.1%) | 77 (16.2%) | 475 |
| Total | | | | | | 516 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do the following factors represent an obstacle to providing immediate Open Access to publicly funded research outputs?"*

## QUESTION 10: To the best of your knowledge, does your institution's Open Access/Open Science policy mandate, recommend, discourage, or prevent any of the following provisions?

*The survey results show that 74.5% of institutions recommend providing Open Access to scientific publications, with 22.9% enforcing it as a mandate. When it comes to using repositories for Open Access, 67.0% of institutions recommend this method, while 23.7% mandate it. Immediate Open Access is also recommended by a large share of RPOs (72.9%), though it is mandated by only 12.2%. Copyright retention, crucial for facilitating open access, sees 57.7% of organisations recommending policies that favour researchers' rights, with 13.6% making it mandatory. In aligning with the FAIR principles to enhance the utility of research data, 63.1% recommend such practices, with 16.3% mandating them. The survey also shows that while a large share of institutions advocate for open licensing of research data (57.3% recommend, 14.2% mandate), there is considerable diversity in how data documentation and standards are addressed, which is further illustrated in Figure 124.*

**Figure 124. Open Access/Open Science provisions in RPOs' policies**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access/Open Science policy mandate, recommend, discourage, or prevent any of the following provisions?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 136 indicates the total count for each of the options.

**Table 136. Open Access/Open Science provisions in RPOs' policies**

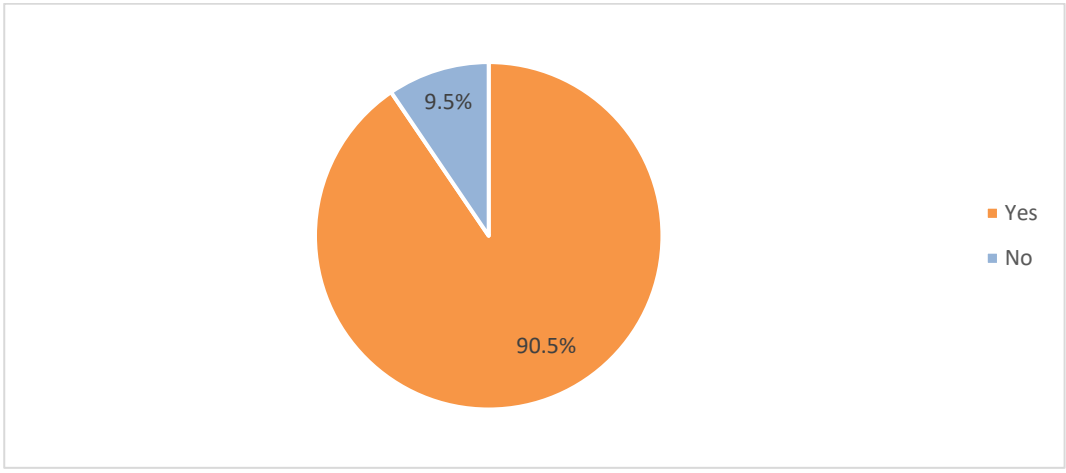
| | Mandates | Recommends | Discourages | Prevents | Does not mention | Total |
|---|---|---|---|---|---|---|
| Providing Open Access to scientific publications (n=341) | 78 (22.9%) | 254 (74.5%) | 1 (0.3%) | 0 (0.0%) | 8 (2.3%) | 341 |
| Providing Open Access to scientific publications via repositories (n=333) | 79 (23.7%) | 223 (67.0%) | 4 (1.2%) | 0 (0.0%) | 27 (8.1%) | 333 |
| Providing immediate Open Access to scientific publications (n=336) | 41 (12.2%) | 245 (72.9%) | 3 (0.9%) | 1 (0.3%) | 46 (13.7%) | 336 |
| Ensuring sufficient copyright retention to provide Open Access (researchers retaining the necessary rights to provide Open Access) (n=317) | 43 (13.6%) | 183 (57.7%) | 8 (2.5%) | 2 (0.6%) | 81 (25.6%) | 317 |
| Make accompanying research data available as FAIR (Findable, Accessible, Interoperable, Reusable) (n=325) | 53 (16.3%) | 205 (63.1%) | 3 (0.9%) | 2 (0.6%) | 62 (19.1%) | 325 |
| Make accompanying research data available under open licence (e.g. Creative Commons Attribution - (Creative Commons By) (n=323) | 46 (14.2%) | 185 (57.3%) | 8 (2.5%) | 3 (0.9%) | 81 (25.1%) | 323 |
| Indicates how to ensure that the accompanying research data are complete and well-documented to facilitate reuse (n=313) | 39 (12.5%) | 181 (57.8%) | 3 (1.0%) | 1 (0.3%) | 89 (28.4%) | 313 |
| Indicates data standards or practices to be used (n=317) | 43 (13.6%) | 176 (55.5%) | 1 (0.3%) | 1 (0.3%) | 96 (30.3%) | 317 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To the best of your knowledge, does your institution's Open Access/Open Science policy mandates, recommends, discourages, or prevents any of the following provisions?"*

### QUESTION 11: Is your organisation involved in research projects in which researchers collaborate with partners in the private sector?

Over 90.5% of RPOs indicated that their organisation is involved in research projects where researchers collaborate with partners in the private sector.

**Figure 125. RPOs' involvement in research projects in which researchers collaborate with partners in the private sector (n=496)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Is your organisation involved in research projects in which researchers collaborate with partners in the private sector?"*

**Table 137. RPO involvement in research projects in which researchers collaborate with partners in the private sector (n=496)**

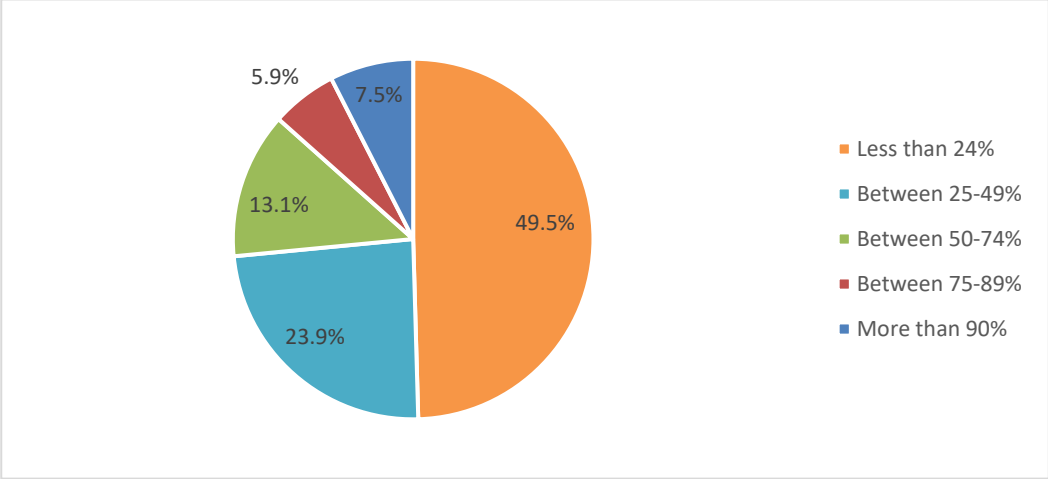
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes | 449 | 90.5% |
| No | 47 | 9.5% |
| Total | 496 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Is your organisation involved in research projects in which researchers collaborate with partners in the private sector?"*

### QUESTION 12: Please indicate the percentage of such public-private partnerships in comparison to all research activities carried out at your organisation.

Survey RPOs were asked to indicate the percentage of public-private partnerships relative to all research activities conducted at their organisations. The majority of RPOs, (9.5%), reported that less than 24% of their research activities were conducted through public-private partnerships. Additionally, 23.9% indicated a moderate involvement, with partnerships accounting for 25-49% of their research activities. A smaller proportion, 13.1%, reported a more substantial engagement, falling within the range of 50-74%. Furthermore, 5.9% noted a high involvement, with partnerships constituting 75-89% of their research activities, and 7.5% reported an extensive commitment, with more than 90% of their research activities conducted through public-private partnerships.

**Figure 126. Share of public-private partnerships in comparison to the total of RPOs' research activities (n=305)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Please indicate the percentage of such public-private partnerships in comparison to all research activities carried out at your organisation".*

**Table 138. Share of public-private partnerships in comparison to the total of RPOs' research activities (n=305)**

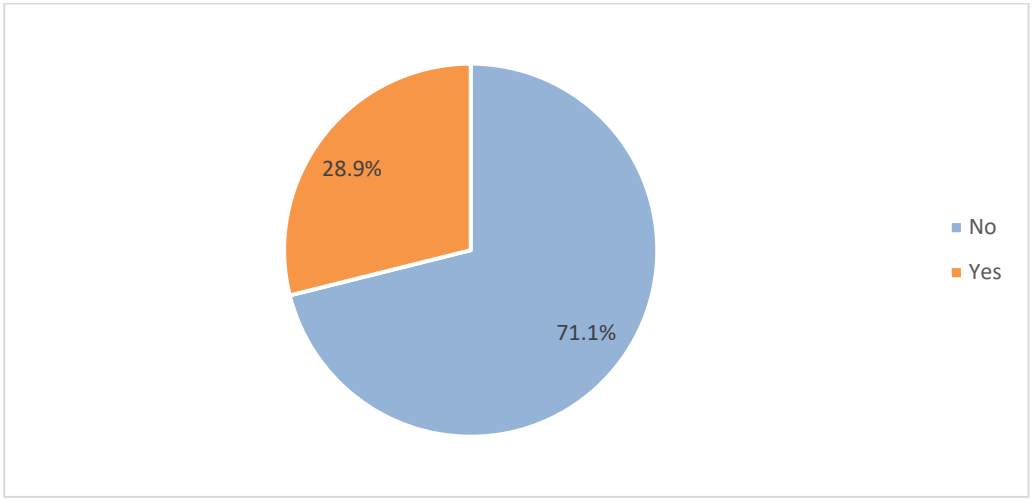
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Less than 24% | 151 | 49.5% |
| Between 25-49% | 73 | 23.9% |
| Between 50-74% | 40 | 13.1% |
| Between 75-89% | 18 | 5.9% |
| More than 90% | 23 | 7.5% |
| Total | 305 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Please indicate the percentage of such public–private partnerships in comparison to all research activities carried out at your organisation".*

### QUESTION 13: Has your organisation adopted any policy regarding access to publications resulting from such public–private collaborations?

The majority (71.1%) of RPOs indicated that the organisation had not adopted any policy regarding access to publications resulting from public-private collaboration, while 28.9% of RPOs indicated that the organisation has adopted policies regarding access to publications resulting from public-private collaborations.

**Figure 127. RPOs that have a policy regarding access to publications resulting from public–private collaborations (n=380)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Has your organisation adopted any policy regarding access to publications resulting from such public-private collaborations?"*

**Table 139. RPOs that have a policy regarding access to publications resulting from public–private collaborations (n=380)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 270 | 71.1% |
| Yes | 110 | 28.9% |
| Total | 380 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Has your organisation adopted any policy regarding access to publications resulting from such public-private collaborations?"*

## Copyright and policy changes

### QUESTION 14: Has your organisation adopted any policy regarding access to publications resulting from such public–private collaborations? Please briefly describe the main provisions.

The policies regarding access to publications resulting from public–private collaborations **vary widely among organisations**. Some prioritise Open Access for all publications, particularly those funded predominantly by public sources, while others have agreements in place that prioritise the protection of results, especially if there is a potential negative impact on the exploitation of findings. In some cases, decisions on publication in Open Access depend on the presence of sensitive information or potential commercial interests, leading to different rules for different collaborative projects.

**Overall, there is an effort in many institutions to balance the interests of all parties involved**, **aiming for Open Access where possible** but also considering legal agreements, intellectual property rights, and commercial interests.

Table 140 provides a categorised breakdown of the responses regarding policies on access to publications resulting from public-private collaborations.

**Table 140. Main provisions in RPOs' policies on access to publications resulting from public–private collaborations (n=67)**

**Open Access Policy Provisions**

- **Open Access as Default:** Prioritise Open Access for all publications, especially those funded by public sources.
- **Open Access by Default but with Embargoes:** Allow Open Access after embargo periods, respecting FAIR principles.
- **Publication after Approval:** Require approval from all partners for publication but lean towards Open Access unless it compromises patents or commercial interests.

**Balancing Open Access and Commercial Interests:**

- **Balanced Approach:** Strive for openness while considering legal agreements, IP rights, and commercialisation potential.
- **Decision Based on Project/IP:** Determine access based on the nature of the project, IP ownership, and agreements in place.
- **Private Partner's Interest Priority:** Prioritise private partner's interests unless public funds are significantly involved.

**Legal and Agreement-Centric Policies:**

- **Compliance with Agreements:** Adhere to agreements between partners or financial support providers regarding access and publication.
- **Embargoes for Commercial Interests:** Automatic embargoes for a specified period (up to 5 years) if commercial interests are involved.
- **Agreement-Based Access:** Access determined by specific agreements, including Non Disclosure Agreements (NDAs) and confidentiality clauses.

**Institutional Compliance and Guidelines:**

- **Institutional Policies:** Adhere to the institution's policies on Open Access and scholarly publishing.
- **Institutional Precedence:** Institutional guidelines and policies govern access, potentially subject to specific project agreements.
- **Public-Private Collaboration Compliance:** Collaborations must align with the organisation's publication policy, even in public-private contexts.

**Compliance and Legal Gray Areas:**

- **Gray Zone Challenges:** Issues arise for independent researchers not affiliated with accredited institutions in complying with Open Access mandates.
- **Legal Certainty Advocacy:** Advocacy for clear data governance, ethical principles, and legal frameworks for non-affiliated researchers.
- **Legal Compliance in Flux:** Uncertainty in navigating legal boundaries for access and reuse of data in non-traditional research contexts.

**Specific Partnership Agreements:**

- **Specific Collaboration Agreements:** Individual contracts or agreements dictate access, especially concerning sensitive or proprietary data.
- **Funder-Focused Policies:** Comply with specific funder rules that dictate Open Access for certain types of partnerships.
- **Partnership-Specific Approval:** Require partner consent for publication, especially when sensitive information is involved.

**Other Notable Points:**

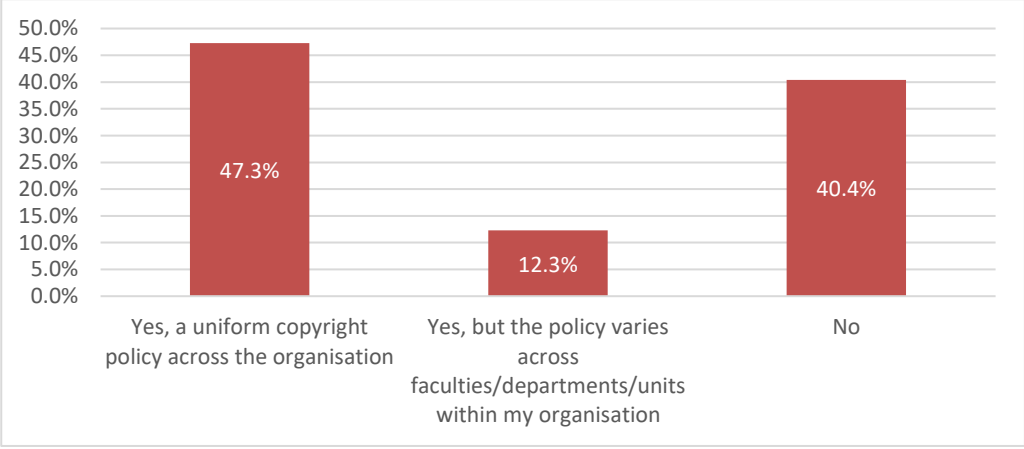
- **Read & Publish Agreements:** Utilise transformative agreements with publishers to facilitate Open Access.
- **Ownership and Rights:** Address ownership of results, copyright, and material rights through specific agreements.
- **Data Governance and Ethics:** Advocate for ethical, rights-based data governance and open data practices.

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Has your organisation adopted any policy regarding access to publications resulting from such public-private collaborations?"*

### QUESTION 15: Does your organisation have a copyright policy?

Some 47.3% of RPOs indicated that their organisations have a uniform copyright policy across all departments. On the other hand, 12.3% reported having a copyright policy, but it varies across faculties, departments, or units within their organisation. About 40.4% stated that their organisations do not have a copyright policy.

**Figure 128. RPOs' having a copyright policy (n=480)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Does your organisation have a copyright policy?"*

**Table 141. RPOs that have a copyright policy (n=480)**

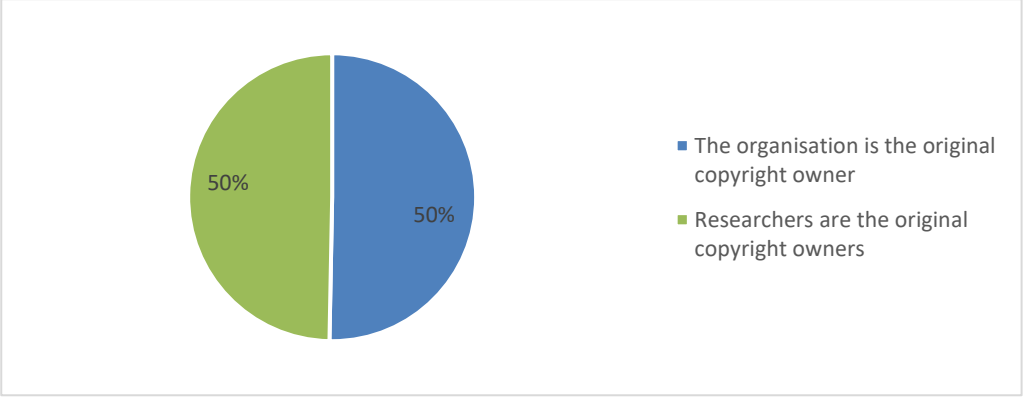
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes, a uniform copyright policy across the organisation | 227 | 47.3% |
| Yes, but the policy varies across faculties/departments/units within my organisation | 59 | 12.3% |
| No | 194 | 40.4% |
| Total | 480 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Does your organisation have a copyright policy?"*

## QUESTION 16: Who is the original copyright owner at your organisation?

The survey revealed a nearly equal distribution, with 50.3% of RPOs stating that the organisation itself is the original copyright owner, while 49.7% indicated that researchers hold the original copyright.

**Figure 129. The original copyright owner at RPOs (n=467)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Who is the original copyright owner at your organisation?"*

**Table 142. The original copyright owner at RPOs (n=467)**

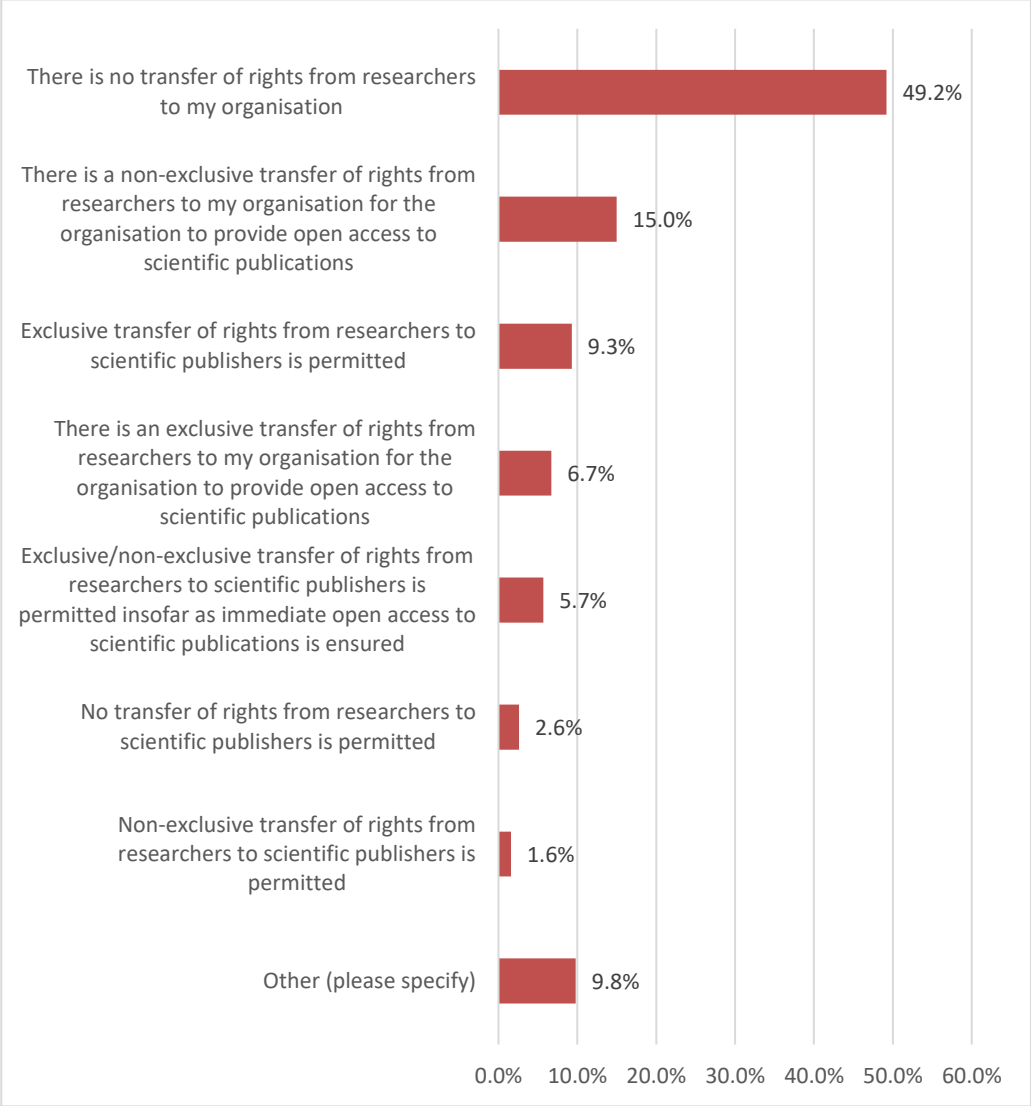
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| The organisation is the original copyright owner | 235 | 50.3% |
| Researchers are the original copyright owners | 232 | 49.7% |
| Total | 467 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Who is the original copyright owner at your organisation?"*

## QUESTION 17: What is the copyright policy at your organisation with regard to scientific output produced by your organisation's researchers? Please select the option that describes your situation the best.

In line with the previous question, a majority (49.2%) indicated that their organisations do not require any transfer of rights from researchers. In contrast, 15.0% indicated a policy allowing a non-exclusive transfer of rights to the organisation for the purpose of facilitating Open Access to scientific publications. A 9.3% share reported permitting an exclusive transfer of rights to scientific publishers. Meanwhile, 6.7% outlined an exclusive transfer of rights to their organisation, specifically to ensure Open Access to scientific publications.

**Figure 130. RPOs' copyright policy with regard to scientific output produced by their researchers (n=193)**




*Source: Compiled by the study team using data from the RPO survey, the question in the*

*survey was "What is the copyright policy at your organisation with regard to scientific output produced by your organisation's researchers?"*

**Table 143. RPOs' copyright policy with regard to scientific output produced by their researchers (n=193)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Other (please specify) | 19 | 9.8% |
| Non-exclusive transfer of rights from researchers to scientific publishers is permitted | 3 | 1.6% |
| No transfer of rights from researchers to scientific publishers is permitted | 5 | 2.6% |
| Exclusive/non-exclusive transfer of rights from researchers to scientific publishers is permitted insofar as immediate Open Access to scientific publications is ensured | 11 | 5.7% |
| There is an exclusive transfer of rights from researchers to my organisation for the organisation to provide Open Access to scientific publications | 13 | 6.7% |
| Exclusive transfer of rights from researchers to scientific publishers is permitted | 18 | 9.3% |
| There is a non-exclusive transfer of rights from researchers to my organisation for the organisation to provide Open Access to scientific publications | 29 | 15.0% |
| There is no transfer of rights from researchers to my organisation | 95 | 49.2% |
| Total | 193 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What is the copyright policy at your organisation with regard to scientific output produced by your organisation's researchers?"*

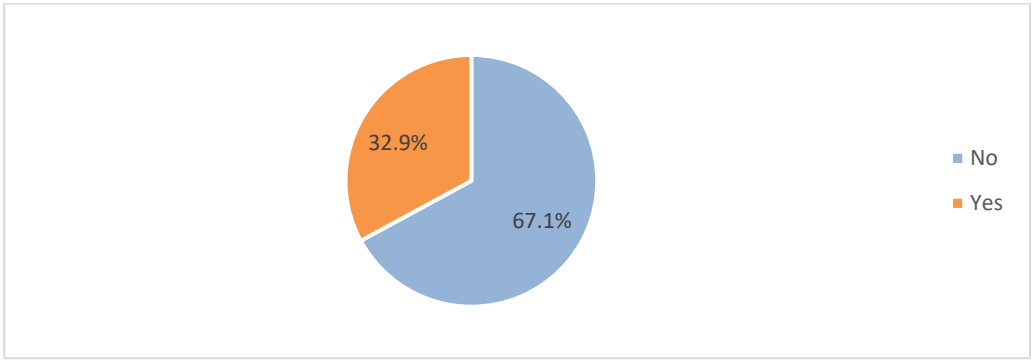
Other responses, accounting for 9.8%, fell into a category labelled 'Other', suggesting additional, varied copyright policies within this cohort:

- In Austria, for instance, copyright inherently remains with the creator, though many journals require a transfer of copyright, presenting a common dilemma.
- Similarly, the German concept of *Urheberrecht* emphasises that copyright is non-transferable, but usage rights can be transferred to the organisation.
- A general trend across several responses is the lack of a universal policy for transferring rights from researchers to their organisations, underscoring a preference for maintaining researchers' control over their work. However, there are provisions for non-exclusive transfers of rights, particularly to facilitate open access publishing or when projects are specifically funded by the organisation, indicating a flexible approach to managing copyrights.
- Some organisations have no copyright policy at all, while others have policies that vary depending on the research context, suggesting a decentralised or case-by-case approach to copyright management.

### QUESTION 18: Overall, does your organisation face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes?

The majority (67.1%) of RPOs indicated that they did not face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes, while 32.9% indicated that their organisation faced challenges.

**Figure 131. Share of RPOs facing challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes (n=353)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Overall, does your organisation face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes?"*

**Table 144. Share of RPOs facing challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes (n=353)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 237 | 67.1% |
| Yes | 116 | 32.9% |
| Total | 353 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Overall, does your organisation face specific challenges due to copyright law when trying to access and use publicly funded R&I results and data for research purposes?"*

### QUESTION 19: Please specify the challenges.

In an open-ended question, RPOs' representatives were asked to specify the challenges encountered due to copyright law, when trying to access and use publicly funded R&I results and data for research purposes. This question received 26 responses. A summary of the responses is provided below:

The challenges highlighted by RPOs are diverse and encompass administrative burdens, expensive access to online journals, and restrictions imposed by governments on accessing specific data at the national level, such as geological data. Paywalls for results published in traditional subscription journals, costs of Open Access, and publishers' restrictions also pose obstacles. Issues arise from limitations on reusing materials without written consent, and universities lacking access to certain online journals due to financial constraints.

Moreover, challenges emerge from communication to the public and reproduction restrictions, varying interpretations and integration of Open Access policies within organisations, complex collaboration agreements specifying access possibilities, and the need for assignment or licensing to use copyrighted content. Financial constraints are a recurring theme, resulting in reduced access to copyrighted materials, extra costs for access, and limited availability of publicly funded research publications in Open Access. Challenges are further compounded by ambiguity in copyright ownership, licensing costs, data privacy and ethical considerations, and divergent international copyright laws.

Additional obstacles include the reluctance of partners to engage in joint publications, hurdles in clearing rights for the reuse of figures and images, limitations on text and data mining, and

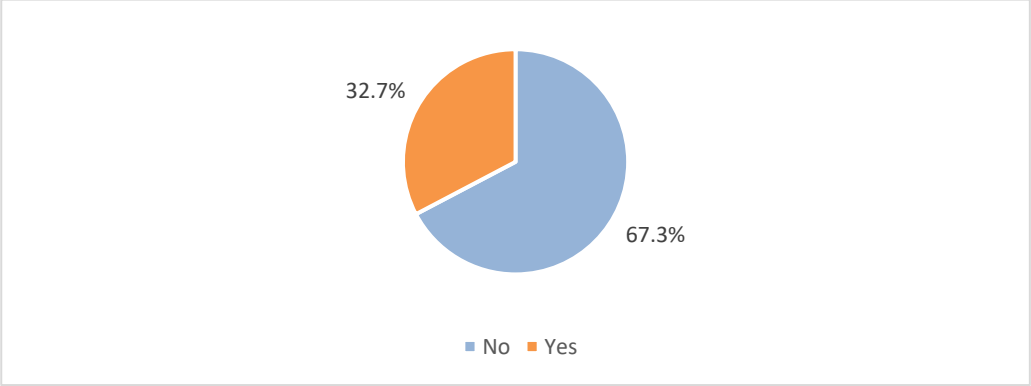
challenges in implementing national provisions like the French exception for Text & Data Mining. The struggle for Open Access is evident, particularly when dealing with private companies funding projects and the limitations posed by licensing restrictions and copyright ambiguity.

Furthermore, some stakeholders such as museum researchers mentioned they are facing prohibitive costs for online access to relevant journals, while organisations committed to building data commons face challenges in finding compatible licensing. Difficulties in obtaining access to Open Access publication, particularly for certain disciplines and national publishers, contribute to restricted access. The tension between the open sharing of knowledge and copyright restrictions affects the reproducibility of experiments and the accessibility of research outputs for scientific purposes. Additionally, issues related to patenting, the fact of having to transfer copyrights to commercial publishers, and organisations seeking payments for data use further underscore the multifaceted challenges faced by research performing organisations in navigating copyright law within the research landscape.

### QUESTION 20: Overall, does your organisation face specific challenges when trying to make publicly funded research and innovation (R&I) results and data available in Open Access due to copyright law?

The majority (67.3%) of RPOs indicated that they did not face specific challenges when trying to make publicly funded R&I results and data available in Open Access due to copyright law, while 32.7% indicated that their organisation faced challenges.

**Figure 132. Share of RPOs facing challenges due to copyright law when trying to make publicly funded R&I results and data available in Open Access (n=395)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, does your organisation face specific challenges when trying to make publicly funded research and innovation (R&I) results and data available in Open Access due to copyright law?"*

**Table 145. Share of RPOs facing challenges due to copyright law when trying to make publicly funded R&I results and data available in Open Access (n=395)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 266 | 67.3% |
| Yes | 129 | 32.7% |
| Total | 395 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, does your organisation face specific challenges when trying to make publicly funded research and innovation (R&I) results and data available in Open Access due to copyright law?"*

### QUESTION 21: Please specify the challenges.

In an open-ended question, RPO representatives were asked to specify the challenges due to copyright law, when trying to make publicly funded research and innovation (R&I) results and data available in Open Access. This question received 75 responses.

The challenges identified by RPOs are multifaceted. A recurring issue is the financial burden associated with publishing in Open Access, with concerns about high costs and the expenses of Open Access fees (APCs) being prevalent. Additionally, challenges arise from publishers retaining copyright, making it difficult to make publications available in Open Access. Private sector partnerships and legal barriers, such as GDPR, pose obstacles beyond copyright-related challenges.

Embargoes imposed by publishers (and their length), inconsistent ownership rules, and licensing complexities are commonly cited challenges. The clash between publishers' policies and those of funding agencies, especially regarding Open Access mandates, adds another layer of complexity. Obtaining approval for dissemination is time-consuming, and transparency is lacking in regulations governing multi-author research results.

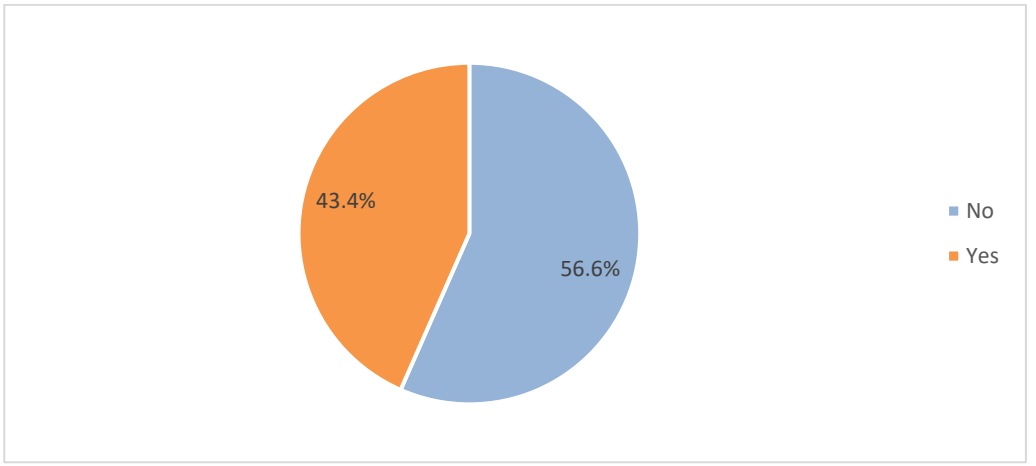
Legal frameworks, such as Section 38 of the German Act on Copyright and Related Rights, are criticised for lacking clarity, hindering reliable Open Access publications. Challenges also arise from publishers' policies on monographs and edited collections.

The survey highlights that navigating copyright complexities, especially concerning third-party copyright, data privacy, ethics, and international copyright laws, remains a significant hurdle. Researchers' reluctance to embrace Open Access practices, inadequate incentivisation, and uncertainties in copyright ownership determination are recurring challenges. Additionally, concerns related to funding expiration, insufficient support for secondary publishing rights, and the need for clearer legal frameworks are prominent aspects hindering Open Access efforts.

### QUESTION 22: Has your organisation entered into any agreements with publishers that define Open Access policies/requirements?

In response to whether organisations have entered into agreements with publishers defining Open Access policies/requirements, the survey results show a division. Approximately 43.4% of RPOs affirmed that their organisations have such agreements in place, while 56.6% reported that their organisations have not entered into such agreements.

**Figure 133. RPOs that have entered into agreements with publishers (n=459)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Has your organisation entered into any agreements with publishers that define Open Access policies/requirements?"*

**Table 146. RPOs that have entered into agreements with publishers (n=459)**

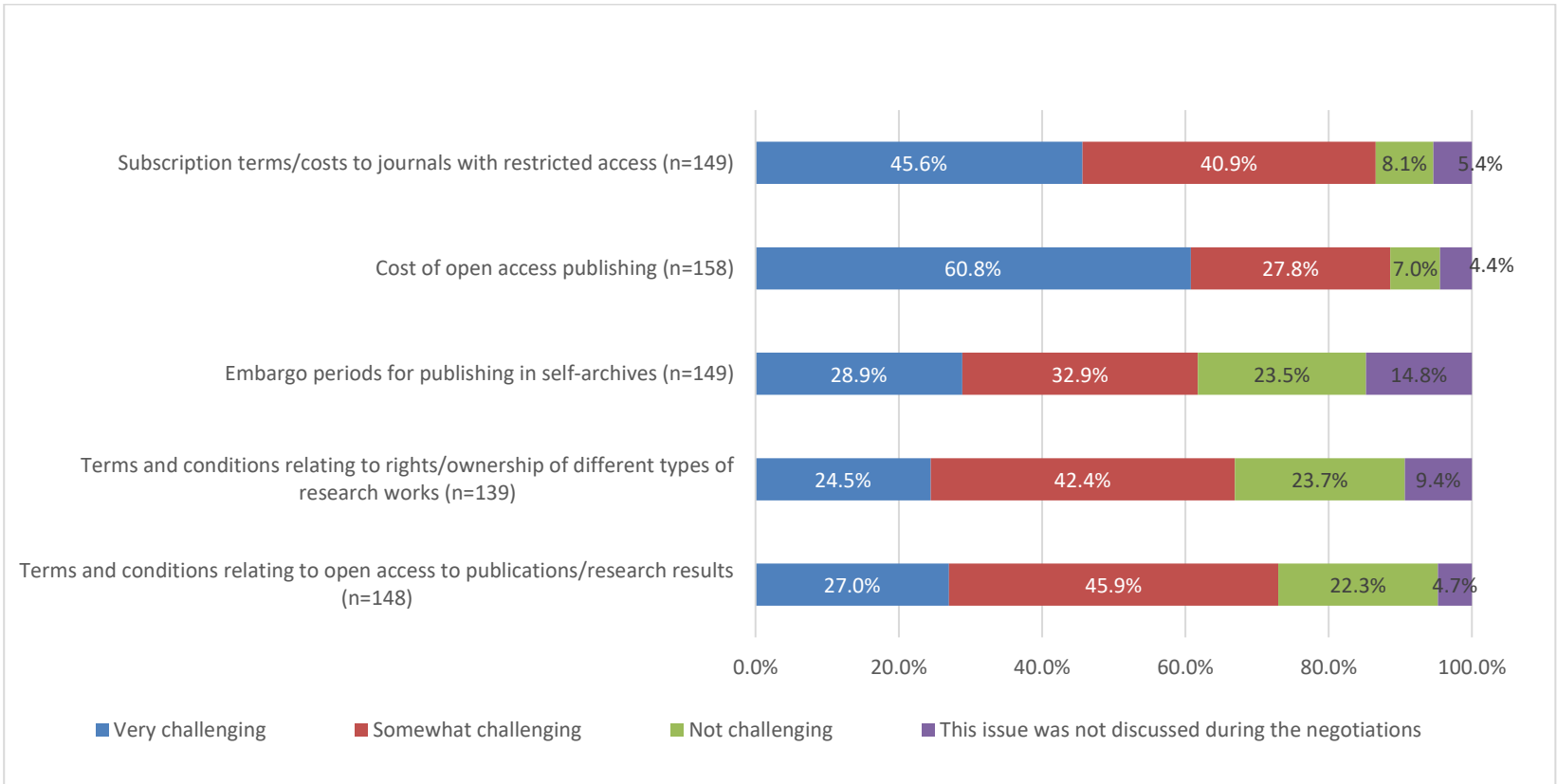
| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| No | 260 | 56.6% |
| Yes | 199 | 43.4% |
| Total | 459 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Has your organisation entered into any agreements with publishers that define Open Access policies/requirements?"*

### QUESTION 23: Overall, how challenging were the following issues during your negotiations with publishers?

In negotiations with publishers, RPOs highlighted varying degrees of challenges across different issues. Concerning terms and conditions related to Open Access to publications/research results, 45.9% found them somewhat challenging, while 27.0% deemed them very challenging. Similarly, negotiations around terms and conditions regarding rights/ownership of different types of research works were somewhat challenging for 42.4%, with 24.5% finding them very challenging. Embargo periods for publishing in self-archives posed challenges for 32.9%, and 28.9% found them very challenging. The cost of Open Access publishing emerged as a substantial challenge, with 60.8% finding it very challenging. Subscription terms/costs to journals with restricted access were somewhat challenging for 40.9% and very challenging for 45.6%.

**Figure 134. Issues faced by RPOs during negotiation with publishers**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Overall, how challenging were the following issues during your negotiations with publishers?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 147 indicates the total count for each of the options.

**Table 147. Issues faced by RPOs during negotiation with publishers**

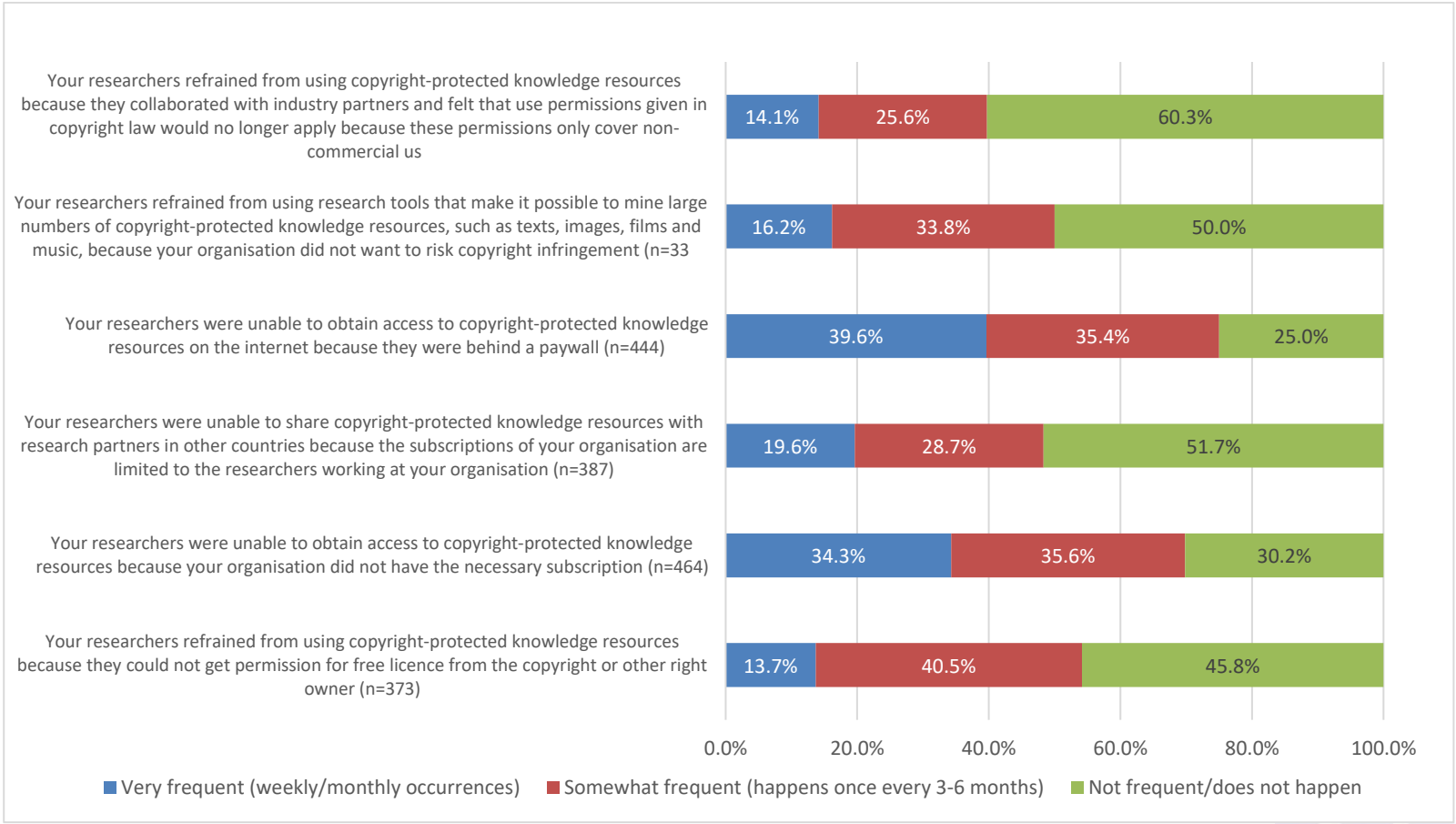
| | Very challenging | Somewhat challenging | Not challenging | This issue was not discussed during the negotiations | Total |
|---|---|---|---|---|---|
| Terms and conditions relating to Open Access to publications/research results (n=148) | 40 (27.0%) | 68 (45.9%) | 33 (22.3%) | 7 (4.7%) | 148 |
| Terms and conditions relating to rights/ownership of different types of research works (n=139) | 34 (24.5%) | 59 (42.4%) | 33 (23.7%) | 13 (9.4%) | 139 |
| Embargo periods for publishing in self-archives (n=149) | 43 (28.9%) | 49 (32.9%) | 35 (23.5%) | 22 (14.8%) | 149 |
| Cost of Open Access publishing (n=158) | 96 (60.8%) | 44 (27.8%) | 11 (7.0%) | 7 (4.4%) | 158 |
| Subscription terms/costs to journals with restricted access (n=149) | 68 (45.6%) | 61 (40.9%) | 12 (8.1%) | 8 (5.4%) | 149 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Overall, how challenging were the following issues during your negotiations with publishers?"*

### QUESTION 24: Overall, how frequent are the following situations in your organisation?

A large share of RPOs reported that researchers somewhat frequently refrained from using copyright-protected knowledge resources due to the inability to obtain permission for a free licence (40.5%) or concerns related to collaboration with industry partners and perceived limitations of copyright permissions for non-commercial use (25.6%). Access to copyright-protected knowledge resources was reported as somewhat frequent for 35.6% when organisations lacked necessary subscriptions and 35.4% when resources were behind a paywall on the internet. Additionally, a notable proportion faced challenges in sharing resources internationally due to limited subscriptions (28.7%). Furthermore, the hesitation to use research tools facilitating the mining of copyright-protected knowledge resources was somewhat frequent for 33.8% of RPOs, due to concerns about copyright infringement risks. Overall, these results illustrate the recurring nature of copyright-related obstacles experienced by researchers within surveyed organisations.

**Figure 135. Issue faced by researchers related to copyright-protected knowledge resources**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, how frequent are the following situations in your organisation?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 148 indicates the total count for each of the options.

**Table 148. Issues faced by researchers related to copyright-protected knowledge resources**

| | Very frequent (weekly/monthly occurrences) | Somewhat frequent (happens once every 3-6 months) | Not frequent/does not happen | Total |
|---|---|---|---|---|
| Your researchers refrained from using copyright-protected knowledge resources because they could not get permission for free licence from the copyright or other right owner | 51 (13.7%) | 151 (40.5%) | 171 (45.8%) | 373 |
| Your researchers were unable to obtain access to copyright-protected knowledge resources because your organisation did not have the necessary subscription | 159 (34.3%) | 165 (35.6%) | 140 (30.2%) | 464 |
| Your researchers were unable to share copyright-protected knowledge resources with research partners in other countries because the subscriptions of your organisation are limited to the researchers working at your organisation | 76 (19.6%) | 111 (28.7%) | 200 (51.7%) | 387 |
| Your researchers were unable to obtain access to copyright-protected knowledge resources on the internet because they were behind a paywall | 176 (39.6%) | 157 (35.4%) | 111 (25.0%) | 444 |
| Your researchers refrained from using research tools that make it possible to mine large numbers of copyright-protected knowledge resources, such as texts, images, films and music, because your organisation did not want to risk copyright infringement | 54 (16.2%) | 113 (33.8%) | 167 (50.0%) | 334 |
| Your researchers refrained from using copyright-protected knowledge resources because they collaborated with industry partners and felt that use permissions given in copyright law would no longer apply because these permissions only cover non-commercial use | 42 (14.1%) | 76 (25.6%) | 179 (60.3%) | 297 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, how frequent are the following situations in your organisation?"*

### QUESTION 25: Could you provide more details on the issues that your organisation encountered? Please provide some examples.

The answers provided by the RPOs regarding the issues that organisations encountered encompass a range of issues, including access restrictions, economic constraints, incomplete policies on Open Science, difficulties in reusing third-party material, and concerns about licensing and ownership. Table 149 provides an overview of the mentioned challenges.

**Table 149. Details on the issues that RPOs encountered related to copyright-protected knowledge resources (n=116)**

| | | | | |
|---|---|---|---|---|
| **Access Restrictions:** RPOs noted difficulties in accessing articles, journals, research tools, and industry collaboration post-projects. Such issues included restricted access to specific information, expensive online journal access, and limitations on accessing publications from private collaborations. | **Economic Challenges:** The high cost of publications in certain journals and the inability to fund Open Access publications were common concerns. Researchers and libraries faced financial constraints, making it challenging to support Open Access initiatives. | **Licensing and Ownership:** Challenges were reported in understanding copyright licences, particularly in Open Access publishing. Lack of clarity on copyright ownership and licence terms, especially in open access publications, raised concerns about reuse beyond reading and citing. | **Incomplete Policies on Open Science:** Some organisations reported incomplete policies on Open Science , making it challenging to navigate issues related to open data, licensing models, and publication standards. | **International Geodata Restrictions:** Specific challenges were noted in dealing with restrictions related to international geodata, impacting the sharing and use of geographical information. |
| **Copyright Trolls:** Instances of copyright trolls attempting to fine organisations for the use of images in conference presentations were highlighted as a growing concern. | **Embargoes and Access Requests:** Researchers faced challenges when requesting access to articles in journals for which they do not have a subscription. Negotiations with publishers for transformative agreements also posed challenges. | **Standards and Norms Access:** Difficulties in accessing technical norms (standards) due to high costs, restrictions on sharing, and issues with Digital Rights Management (DRM) tools were mentioned. | **Data Sharing and Application Programming Interface (API) Access:** Challenges were highlighted in data sharing, interoperability, and API access, especially in projects related to biodiversity, where legal and copyright complexities were prominent. | **Subscription Costs:** The high cost of subscriptions to journals and databases was a recurring challenge, leading to limitations in accessing necessary research materials. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Could you provide more details on the issues that your organisation encountered?"*

### QUESTION 26: How did your organisation try to resolve these issues? Please provide some details.

It seems that a range of strategies are employed to tackle issues related to copyright-protected knowledge resources. Table 150 provides an overview of those mentioned by RPOs. Each approach varies based on the organisation's resources, strategies, and the specific challenges they face in accessing and using research materials.

**Table 150. Approaches to resolving the issues (n=185)**

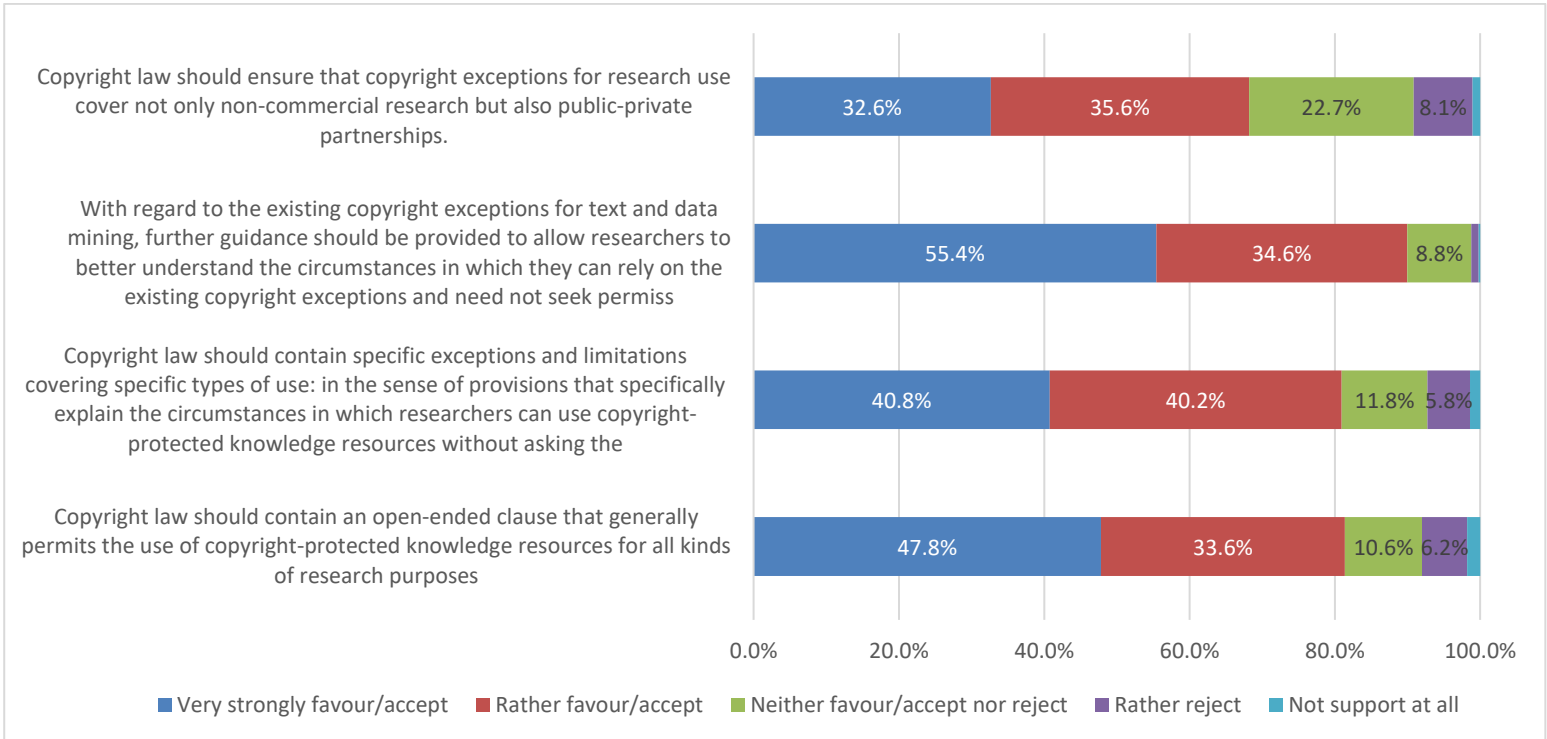
| | | | |
|---|---|---|---|
| **Utilising Open Access Resources:** Some prefer using only openly available resources, avoiding those with restricted access. | **Institutional Support and Resources:** Institutions offer subscriptions to databases, interlibrary loan services, and training to aid researchers. | **Negotiations and Collaborations:** Engaging in negotiations with publishers, forming bilateral agreements, and collaborating with other institutions or libraries to access materials. | **Copyright Management:** Addressing copyright issues through training, guidance, and advice, seeking permissions, re-licensing when possible, or avoiding materials with restrictive licences. |
| **Financial Strategies:** Allocating budgets for fees, seeking additional funds, or incorporating Open Access fees into project budgets. | **Legal Support and Agreements:** Seeking legal advice, establishing specific agreements for copyright material sharing, and lobbying for copyright reform. | **Technology-Based Solutions:** Leveraging technology such as online publishing platforms, or content-sharing platforms like ResearchGate. | **Educational Support:** Providing researchers with help desks, guidance on copyright issues, and training on Open Science and Research Data Management. |

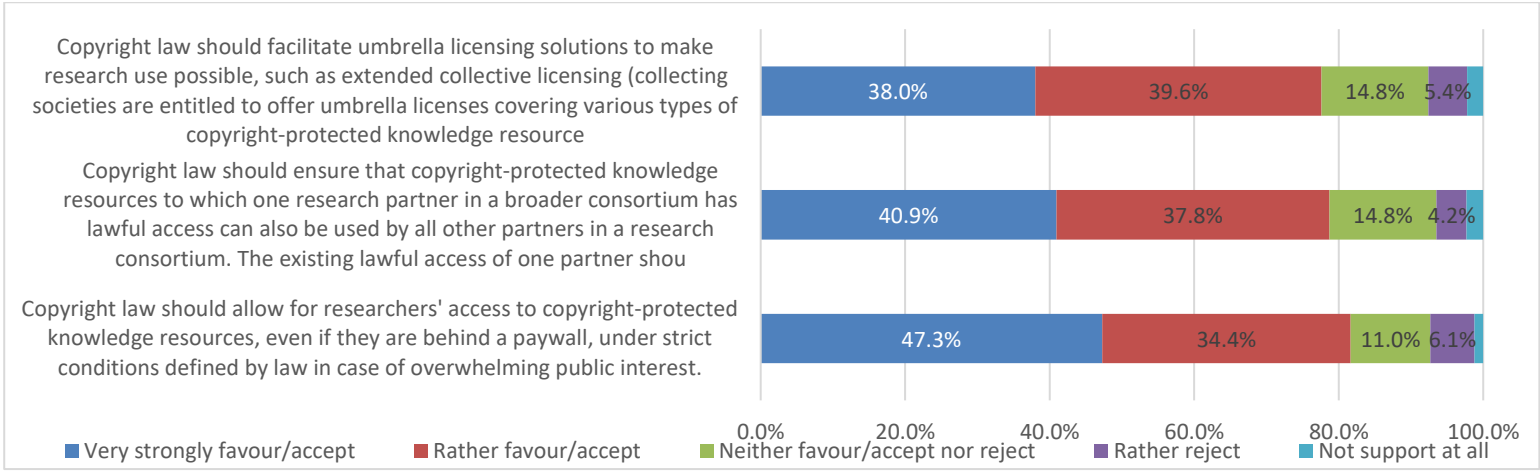
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "How did your organisation try to resolve these issues?"*

### QUESTION 27: Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research?

Some 47.8% strongly favoured the inclusion of an open-ended clause in copyright law, allowing the use of copyright-protected knowledge resources for various research purposes. Similarly, 55.4% expressed strong support for providing further guidance on existing copyright exceptions for text and data mining. RPOs were divided on the need for specific exceptions and limitations in copyright law (40.8% very strongly favouring) and ensuring that copyright exceptions cover public-private partnerships (32.6% very strongly favouring). Additionally, 47.3% strongly favoured allowing access to copyright-protected resources behind paywalls in cases of overwhelming public interest. A large share (40.9%) supported the idea that lawful access to such resources by one partner in a research consortium should extend to all consortium partners. Furthermore, 38.0% expressed strong support for umbrella licensing solutions such as extended collective licensing or lump sum remuneration regimes. These results indicate a varied but generally favourable stance toward policy changes to enhance research access to copyright-protected knowledge resources.

**Figure 136. RPOs views on public policy changes to support the use of copyright-protected knowledge resources**






*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 151 indicates the total count for each of the options.

**Table 151. RPOs views on public policy changes to support the use of copyright-protected knowledge resources**

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes (n=500) | 239 (47.8%) | 168 (33.6%) | 53 (10.6%) | 31 (6.2%) | 9 (1.8%) | 500 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: provisions specifically explain the circumstances in which researchers can use copyright-protected knowledge resources. (n=498) | 203 (40.8%) | 200 (40.2%) | 59 (11.8%) | 29 (5.8%) | 7 (1.4%) | 498 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions. (n=489) | 271 (55.4%) | 169 (34.6%) | 43 (8.8%) | 5 (1.0%) | 1 (0.2%) | 489 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships. (n=481) | 157 (32.6%) | 171 (35.6%) | 109 (22.7%) | 39 (8.1%) | 5 (1.0%) | 481 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest. (n=491) | 232 (47.3%) | 169 (34.4%) | 54 (11.0%) | 30 (6.1%) | 6 (1.2%) | 491 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. (n=479) | 196 (40.9%) | 181 (37.8%) | 71 (14.8%) | 20 (4.2%) | 11 (2.3%) | 479 |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use). (n=447) | 170 (38.0%) | 177 (39.6%) | 66 (14.8%) | 24 (5.4%) | 10 (2.2%) | 447 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, and music) for research?"*

**QUESTION 28: What specific services provided by scientific publishers do you find the most valuable for supporting the publication process as a research performing organisation? Please describe.**

Table 152 provides an overview of specific services provided by scientific publishers that RPOs find the most valuable for supporting the publication process.

**Table 152. Services provided by scientific publishers RPOs find valuable (n=227)**

| | | | | |
|---|---|---|---|---|
| **Peer Review Process:** The peer review process is highlighted as crucial for maintaining the quality and credibility of research publications. Scientific publishers organise and manage peer reviews to ensure rigorous evaluation by experts in the field. | **Editing and Proofreading:** Scientific publishers often provide professional editing and proofreading services. This helps authors refine their manuscripts, ensuring clarity, grammar, and adherence to language and formatting standards. | **Distribution and Indexing:** Publishers have extensive distribution networks, facilitating the global reach of research. They also ensure that published works are indexed in databases and repositories, enhancing discoverability by other researchers. | **Copyright and Licensing Support:** Publishers assist authors in understanding and managing copyright and licensing issues. This includes guidance on choosing appropriate licensing terms, such as Creative Commons licences, and retaining certain rights to the work. | **Digital Object Identifiers (DOIs):** Publishers assign DOIs to published articles, providing a persistent and unique identifier. DOIs are crucial for citation and linking to research, contributing to the traceability and recognition of scholarly work. |
| **Open Access Options:** Many publishers offer Open Access publishing options, allowing research to be freely accessible to a wider audience. This can increase the impact and accessibility of the work. | **Manuscript Submission System:** The manuscript submission system, provided by publishers, streamlines the publication process. It allows for efficient submission and tracking of manuscripts, contributing to a smooth workflow. | **Support for Policies and Compliance:** Publishers support research performing organisations in complying with various policies, including EU policies. This may include assistance with transformative agreements and self-archiving in repositories. | **Networking Opportunities:** Publishers play a role in organising conferences, webinars, and workshops. These events provide valuable networking opportunities for researchers, facilitating collaboration and knowledge exchange. | **Analytical Tools and Metrics:** Access to analytics, such as download counts and citation metrics, helps researchers and institutions gauge the impact and reach of their publications. These data are valuable for assessing the influence of research. |

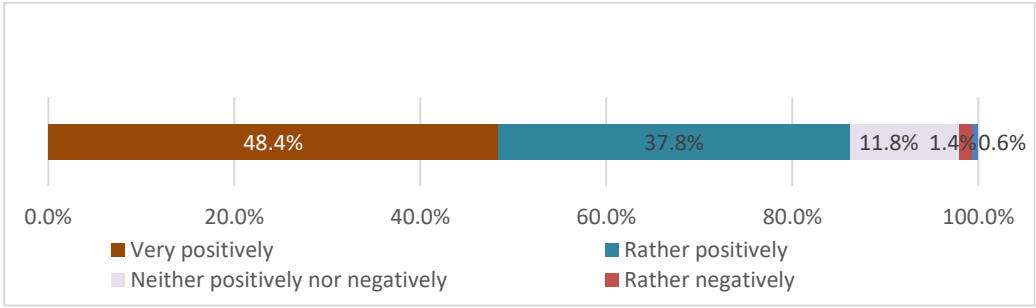
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What specific services provided by scientific publishers do you find the most valuable for supporting the publication process as a research performing organisation?"*

**QUESTION 29: In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?**

RPOs were asked about their views on the potential introduction of an EU-wide SPR. A majority, 86.2%, expressed positive sentiments, with 48.4% viewing it very positively and 37.8% rather positively. A share of 13.8% had neutral or negative views, with 11.8%

indicating neither positive nor negative sentiments, 1.4% rather negatively, and a mere 0.6% very negatively.

**Figure 137. RPOs' attitudes toward the potential introduction of EU-wide Secondary Publication Right legislation (n=489)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

**Table 153. RPOs attitudes toward the potential introduction of EU-wide Secondary Publication Right legislation (n=489)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Very positively | 241 | 48.4% |
| Rather positively | 188 | 37.8% |
| Neither positively nor negatively | 59 | 11.8% |
| Rather negatively | 7 | 1.4% |
| Very negatively | 3 | 0.6% |
| Total | 498 | 100% |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

### QUESTION 30: Could you explain why you negatively view the potential introduction of an EU-wide Secondary Publication Right legislation?

The three RPOs that selected "very negatively" in the previous question were asked to provide further details to explain their choice.

Here are the motivations provided:

1. **Existing strong copyright law in Norway:** One RPO points out that Norway already has a robust copyright law in place. This suggests a sentiment that the current national legal framework is deemed sufficient for protecting the rights of researchers and their works. The implication is that introducing EU-wide Secondary Publication Right legislation might be perceived as unnecessary or duplicative in the context of countries with well-established copyright regulations.

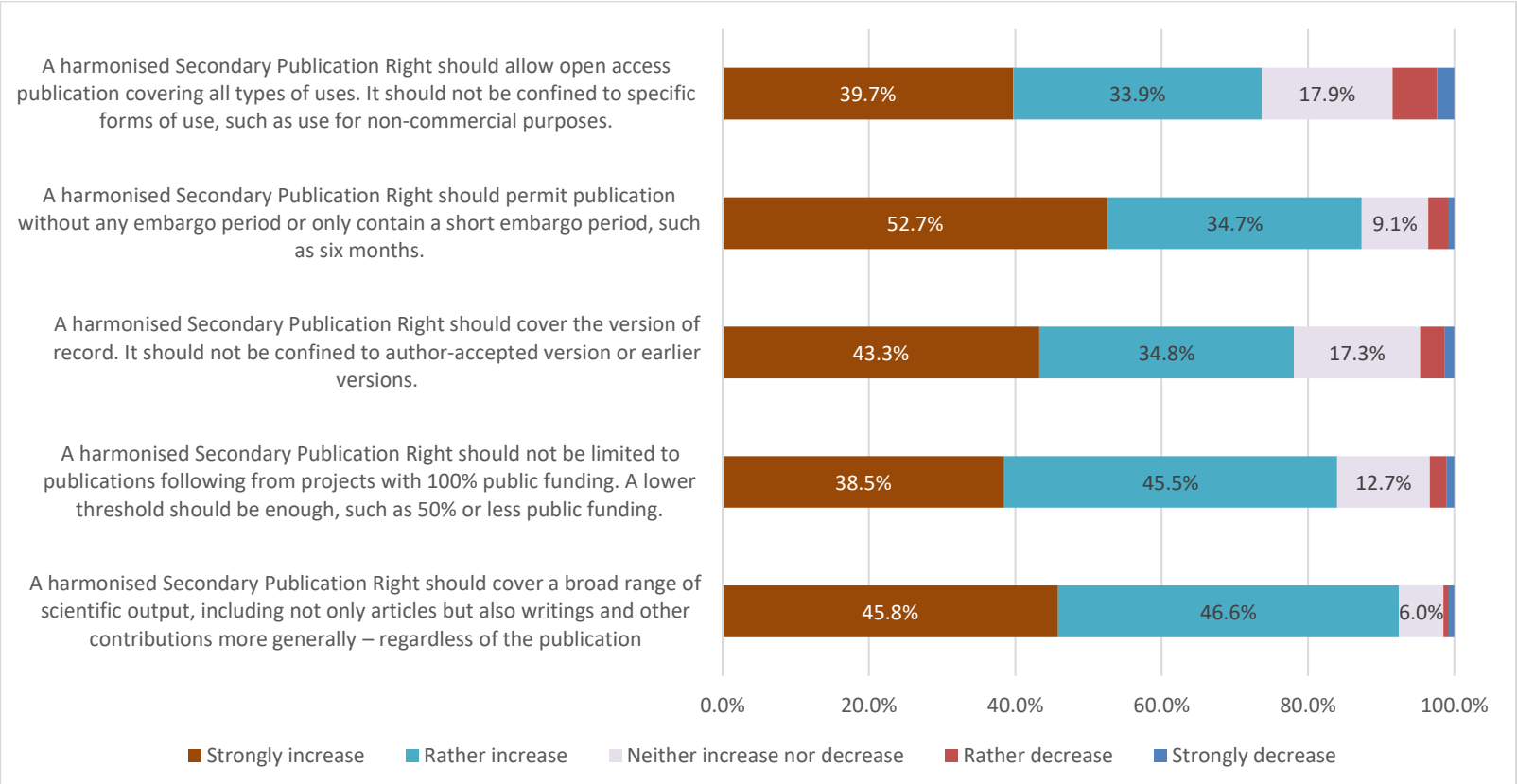
2. **Perceived undue interference in agreements with publishers:** Another concern revolves around the perceived interference in the agreements between RPOs and publishers. The introduction of a EU-wide Secondary Publication Right legislation at the EU level might be viewed as undue meddling in the contractual relationships and agreements that researchers have with publishers. This could indicate a desire to maintain autonomy and flexibility in negotiations without external legislative mandates.

3. **Loss of control over original data and conclusions:** A noteworthy concern raised is the potential loss of control over original data and results in conclusions. It seems that the introduction of a EU-wide Secondary Publication Right is seen as a factor that could compromise the control researchers have over their own intellectual output. The fear may be that such legislation could impact the ability of researchers to manage and disseminate their findings according to their preferences.

**QUESTION 31: To what extent do you believe the following features of the potential Secondary Publication Right would increase or decrease provision of immediate Open Access to publicly funded research, assuming that they are implemented across the EU?**

The RPOs expressed clear views on the potential features of SPR. A large share, ranging from 39.7% to 52.7%, believe that a harmonised SPR should cover a broad range of scientific output, not limited to articles, and should permit Open Access publication without or with only a short embargo period. However, opinions varied on whether the right should be limited to projects with a specific level of public funding, with 48.5% supporting broader inclusion and 12.7% preferring a more restricted approach. Additionally, 43.3% believe the right should cover the version of record, while 17.3% think it should not be confined to specific forms of use.

**Figure 138. Features of an EU-wide Secondary Publication Right legislation and their impact on immediate Open Access**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do you believe the following features of the potential Secondary Publication Right would increase or decrease provision of immediate Open Access to publicly funded research, assuming that they are implemented across the EU?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 117 indicates the total count for each of the options.

**Table 154. Features of an EU-wide Secondary Publication Right legislation and their impact on immediate Open Access**

| | Strongly increase | Rather increase | Neither increase nor decrease | Rather decrease | Strongly decrease | Total |
|---|---|---|---|---|---|---|
| A harmonised Secondary Publication Right should cover a broad range of scientific output, including not only articles but also writings and other contributions more generally – regardless of the publication. | 182 (45.8%) | 185 (46.6%) | 24 (6.0%) | 3 (0.8%) | 3 (0.8%) | 397 |
| A harmonised Secondary Publication Right should not be limited to publications following from projects with 100% public funding. A lower threshold should be enough, such as 50% or less public funding. | 149 (38.5%) | 176 (45.5%) | 49 (12.7%) | 9 (2.3%) | 4 (1.0%) | 387 |
| A harmonised Secondary Publication Right should cover the version of record. It should not be confined to author-accepted version or earlier versions. | 158 (43.3%) | 127 (34.8%) | 63 (17.3%) | 12 (3.3%) | 5 (1.4%) | 365 |
| A harmonised Secondary Publication Right should permit publication without any embargo period or only contain a short embargo period, such as 6 months. | 208 (52.7%) | 137 (34.7%) | 36 (9.1%) | 11 (2.8%) | 3 (0.8%) | 395 |
| A harmonised Secondary Publication Right should allow Open Access publication covering all types of uses. It should not be confined to specific forms of use, such as use for non-commercial purposes. | 151 (39.7%) | 129 (33.9%) | 68 (17.9%) | 23 (6.1%) | 9 (2.4%) | 380 |

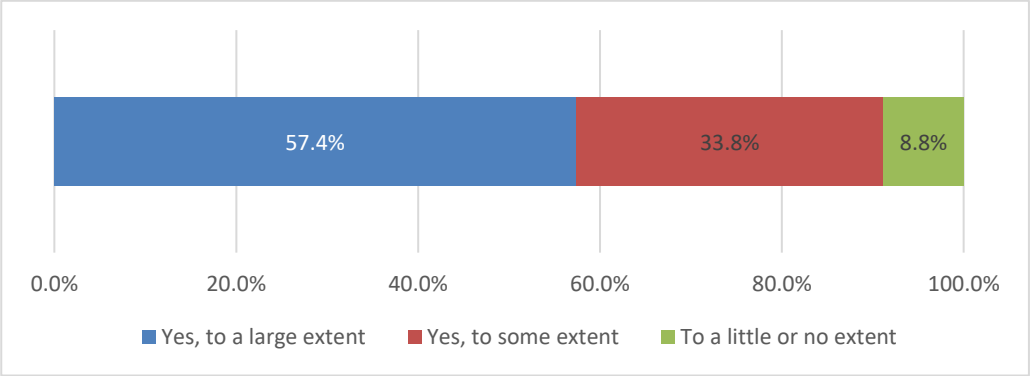
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do you believe the following features of the potential Secondary Publication Right would increase or decrease provision of immediate Open Access to publicly funded research, assuming that they are implemented across the EU?"*

**QUESTION 32: Your country's current Secondary Publishing Right framework limits its scope to "articles published in journals". To what extent would you see a need to cover other scientific outputs such as books, writing, databases, and other outputs?**

This question was administered only to RPOs in the five countries with SPR.

Altogether 57.4% of RPOs strongly believe that there is a substantial need to include other scientific outputs such as books, writings, databases, and various other formats. An additional 33.8% acknowledge the need to some extent. Only 8.8% feel that there is little or no need to broaden the scope of the SPR framework. These results emphasise the perceived importance of extending the SPR coverage to encompass a more diverse range of scientific outputs beyond journal articles.

**Figure 139. Need to extend the scope of national SPR legislation beyond journal articles (n=136)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Your country's current Secondary Publishing Right framework limits its scope to "articles published in journals". To what extent would you see a need to cover other scientific outputs such as books, writing, databases, and other outputs?"*

**Table 155. Need to extend the scope of national SPR legislation beyond journal articles (n=136)**

| | Count (total) | Share of responses, % (total) (total) |
|---|---|---|
| Yes, to a large extent | 78 | 57.4% |
| Yes, to some extent | 46 | 33.8% |
| To a little or no extent | 12 | 8.8% |
| Total | 136 | 100% |

*Compiled by the study team using data from the RPO survey, the question in the survey was, "Your country's current Secondary Publishing Right framework limits its scope to "articles published in journals". To what extent would you see a need to cover other scientific outputs such as books, writing, databases, and other outputs?"*

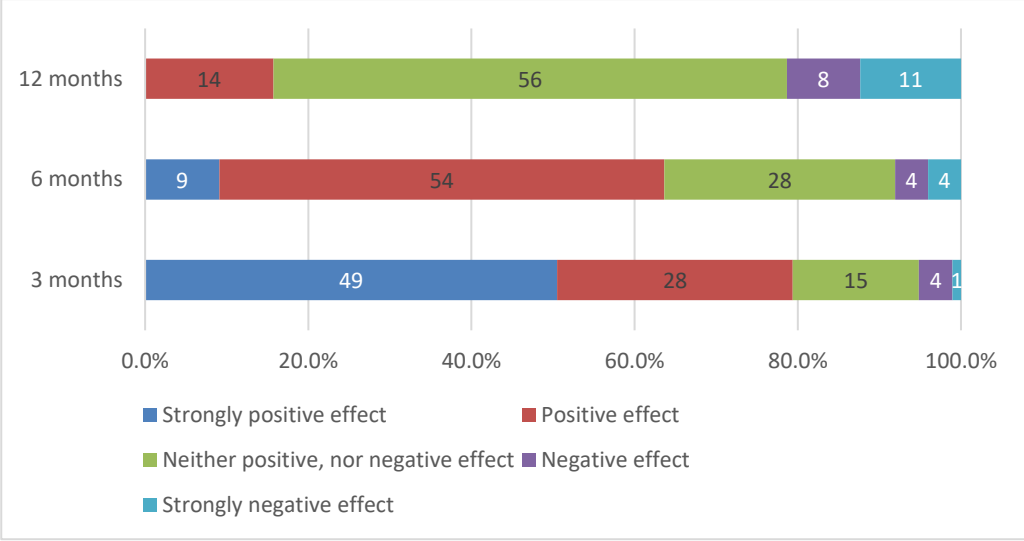
**QUESTION 33: The current Secondary Publication Right legislation in your country has an embargo period of 12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals? (Austria, Germany and the Netherlands)**

Only those who selected Austria, Germany, and the Netherlands as the country of their organisation in question 5 received this question.

The RPOs, representing Austria, Germany, and the Netherlands, provided clear insights into their perspectives on different embargo periods in the current Secondary Publication Right (SPR) legislation in their countries. Notably, 50.5% strongly believe that a three-month embargo period would have a strongly positive effect, with an additional 28.9% expressing a positive effect. In contrast, the existing 12-month embargo period, which is embedded in the current legislation, received no strong positive opinions. Instead, a large share, 62.9%, perceive a 12-month embargo as having a neutral effect, while 15.7% view it positively. The results suggest a preference for shorter embargo periods, particularly the three-month duration, among RPOs from these countries, emphasising the potential positive impact of quicker access to secondary publications.

Due to small numbers, Figure 98 does not provide the shares of the responses but rather the total number of responses.

**Figure 140. Impact of different embargo periods on organisational goals (Austria, Germany, the Netherlands)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of 12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals? (Austria, Germany, and the Netherlands)".*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 119 indicates the total count for each of the options.

**Table 156. Impact of different embargo periods on organisational goals (Austria, Germany, the Netherlands)**

| | Strongly positive effect | Positive effect | Neither positive, nor negative effect | Negative effect | Strongly negative effect | Total |
|---|---|---|---|---|---|---|
| 3 months | 49 (50.5%) | 28 (28.9%) | 15 (15.5%) | 4 (4.1%) | 1 (1.0%) | 97 |
| 6 months | 9 (9.1%) | 54 (54.5%) | 28 (28.3%) | 4 (4.0%) | 4 (4.0%) | 99 |
| 12 months | 0 (0.0%) | 14 (15.7%) | 56 (62.9%) | 8 (9.0%) | 11 (12.4%) | 89 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of 12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals?" (Austria, Germany, and the Netherlands)*

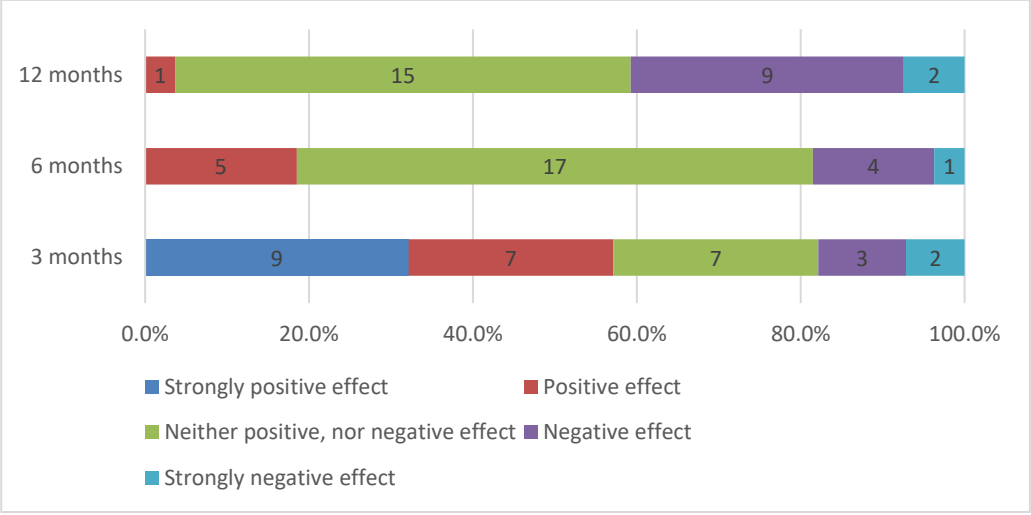
**QUESTION 34: The current Secondary Publication Right legislation in your country has an embargo period of 6-12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals? (Belgium and France)**

Only those who selected Belgium and France as the country of their organisation in question 5 received this question.

RPOs from Belgium and France provided insights into their perspectives on various embargo periods within the current SPR legislation, which currently imposes a 6-12-month embargo. A total 32.1% think that a three-month embargo will have a strongly positive effect, while 25.0% considered it positively impactful. In contrast, the existing 6-12-month embargo received no strongly positive opinions, with 63.0% indicating a neutral effect for a six-month embargo and 55.6% for a 12-month embargo. These results suggest a preference among RPOs from Belgium and France for shorter embargo periods.

Due to small numbers, Figure 141 does not provide the shares of the responses but rather the total number of responses.

**Figure 141. Impact of different embargo periods on organisational goals (Belgium and France)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of 6-12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals? (Belgium and France)".*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 157 indicates the total count for each of the options.

**Table 157. Impact of different embargo periods on organisational goals (Belgium and France)**

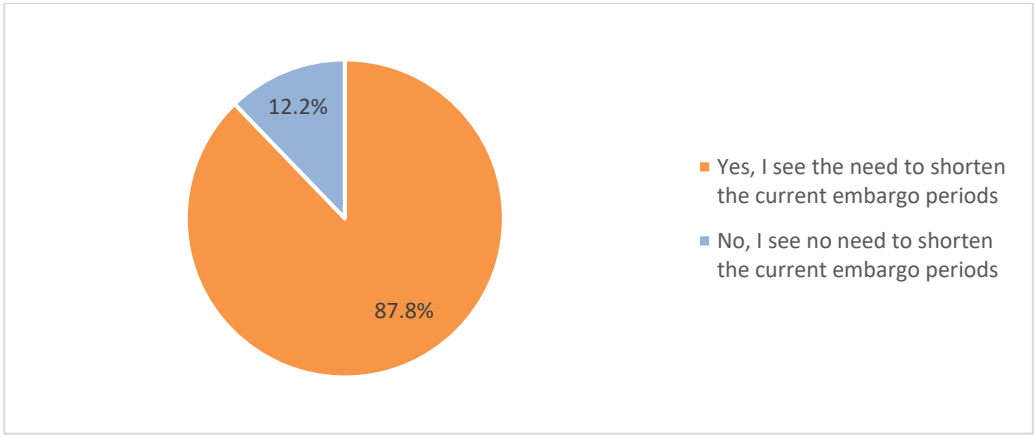
| | Strongly positive effect | Positive effect | Neither positive, nor negative effect | Negative effect | Strongly negative effect | Total |
|---|---|---|---|---|---|---|
| 3 months | 9 (32.1%) | 7 (25.0%) | 7 (25.0%) | 3 (10.7%) | 2 (7.1%) | 28 |
| 6 months | 0 (0.0%) | 5 (18.5%) | 17 (63.0%) | 4 (14.8%) | 1 (3.7%) | 27 |
| 12 months | 0 (0.0%) | 1 (3.7%) | 15 (55.6%) | 9 (33.3%) | 2 (7.4%) | 27 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of 6-12 months. Overall, how would the following embargo periods affect your organisation in pursuing its goals? (Belgium and France)*

### QUESTION 35: The current Secondary Publication Right legislation in your country has an embargo period of 12 months. To what extent would you see a need for the embargo period to become shorter? (Austria, Germany, and the Netherlands)

The majority (87.8%) of RPOs located in Austria, Germany and the Netherlands reported a need to shorten the current embargo period of 12 months.

**Figure 142. Need for a shorter embargo period in SPR legislation (Austria, Germany, and the Netherlands)?**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of 12 months. To what extent would you see a need for the embargo period to become shorter? (Austria, Germany, and the Netherlands)".*

**Table 158. Need for a shorter embargo period in SPR legislation (Austria, Germany and the Netherlands)**

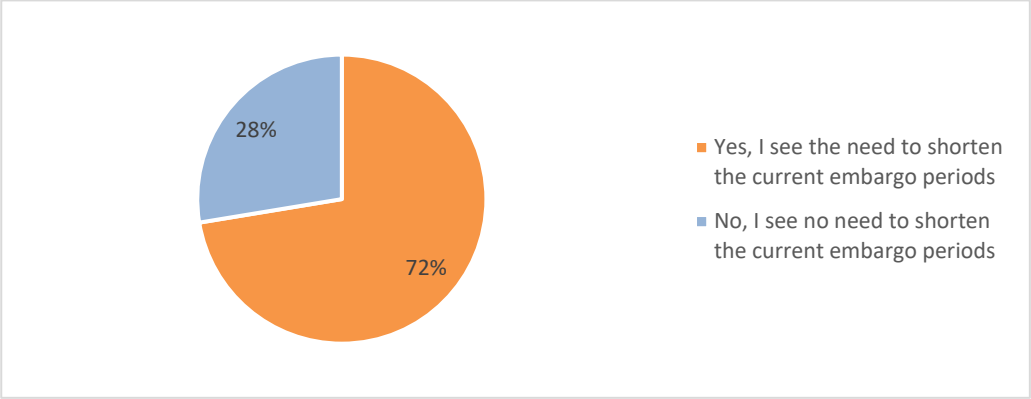
| | Share | Count |
|---|---|---|
| Yes, I see the need to shorten the current embargo periods | 87.8% | 79 |
| No, I see no need to shorten the current embargo periods | 12.2% | 11 |
| Total | 100% | 90 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "The current Secondary Publication Right legislation in your country has an embargo period of 12 months. To what extent would you see a need for the embargo period to become shorter? (Austria, Germany, and the Netherlands)".*

### QUESTION 36: The current Secondary Publication Right legislation in your country has an embargo period of between 6-12 months. To what extent would you see a need for the embargo period to become shorter? (Belgium and France)

The majority (72.4%) of RPOs located in Belgium and France reported a need to shorten the current embargo period of 6-12 months.

**Figure 143. Need for a shorter embargo shortening period in SPR legislation (Belgium and France)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of between 6-12 months. To what extent would you see a need for the embargo period to become shorter? (Belgium and France)".*

**Table 159. Need for a shorter embargo period in SPR legislation (Belgium and France)**

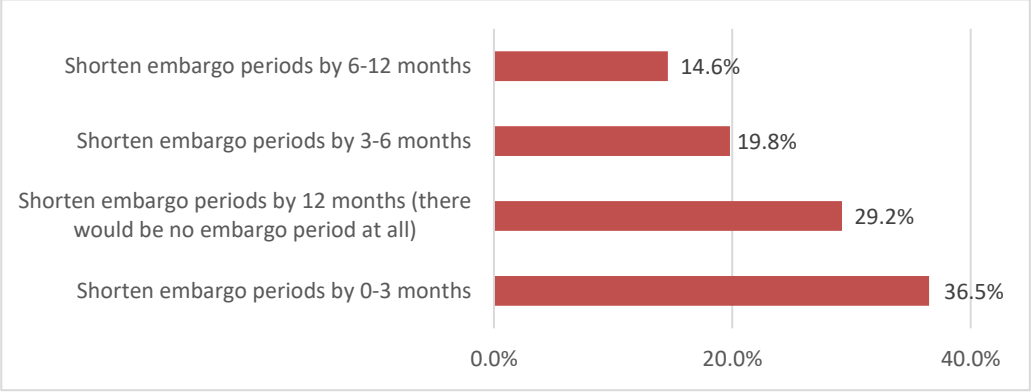
| | Share | Count |
|---|---|---|
| Yes, I see the need to shorten the current embargo periods | 72.4% | 21 |
| No, I see no need to shorten the current embargo periods | 27.6% | 8 |
| Total | 100% | 29 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "The current Secondary Publication Right legislation in your country has an embargo period of between 6-12 months. To what extent would you see a need for the embargo period to become shorter? (Belgium and France)".*

### QUESTION 37: In the previous question you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most?

This question was asked of all RPOs who chose "Yes" for questions 35 and 36, and so it includes RPOs located in all five countries with SPR legislation. The largest share, 36.5%, favoured the option of reducing embargo periods by 0-3 months, indicating a desire for immediate or near immediate Open Access to secondary publications. Additionally, 29.2% supported the idea of eliminating the embargo entirely, while 19.8% leaned towards shortening the periods by 3-6 months. A smaller proportion, 14.6%, favoured reducing embargo periods by 6-12 months.

**Figure 144. Preferred length of embargo periods (Austria, Belgium, France, Germany, the Netherlands) (n=96)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey ways, "In the previous question you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most?"*

**Table 160. Preferred length of embargo periods (Austria, Belgium, France, Germany, the Netherlands) (n=96)**

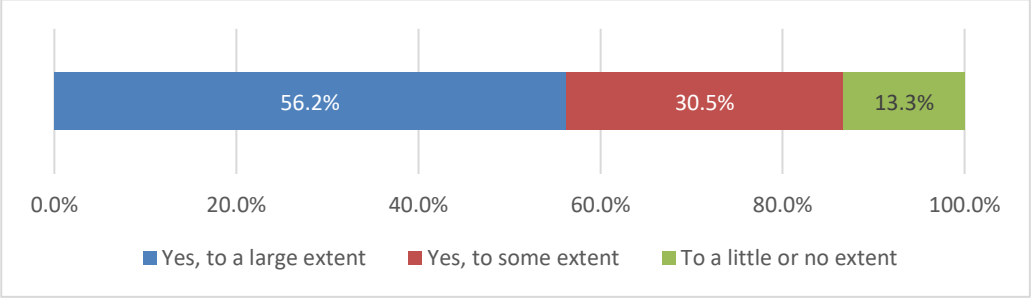
| In the previous question you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most? | Share | Count |
|---|---|---|
| Shorten embargo periods by 0-3 months | 36.5% | 35 |
| Shorten embargo periods by 12 months (there would be no embargo period at all) | 29.2% | 28 |
| Shorten embargo periods by 3-6 months | 19.8% | 19 |
| Shorten embargo periods by 6-12 months | 14.6% | 14 |
| Total | 100% | 96 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey ways, "In the previous question you indicated that you see the need to shorten the current embargo periods. Which of the below proposed options would you prefer the most?"*

### QUESTION 38: The current Secondary Publication Right is limited to author accepted manuscripts (or manuscript). To what extent do you see the need to extend this provision to the version of record, i.e. article as published by the journal or platform after going through peer-review?

RPOs located in the five countries with current SPR legislation were asked to what extent they saw a need to extend the current provision to the version of record. A notable 56.2% of RPOs expressed a significant need to extend the provision of the current SPR to cover the version of record – referring to the article as published by the journal or platform after undergoing peer-review. An additional 30.5% indicated a partial need for such an extension. In contrast, a relatively smaller proportion, 13.3%, perceived little or no need for extending this provision.

**Figure 145. Need to extend to the version of record in SPR legislation (Austria, Belgium, France, Germany, the Netherlands) (n=128)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "The current Secondary Publication Right is limited to author accepted manuscripts (or manuscript). To what extent do you see the need to extend this provision to the version of record, i.e. article as published by the journal or platform after going through peer-review?"*

**Table 161. Need to extend to the version of record in SPR legislation (Austria, Belgium, France, Germany, the Netherlands) (n=128)**

| | Share | Count |
|---|---|---|
| Yes, to a large extent | 56.2% | 72 |
| Yes, to some extent | 30.5% | 39 |
| To a little or no extent | 13.3% | 17 |
| Total | 100% | 128 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "The current Secondary Publication Right is limited to author-accepted manuscripts (or manuscript). To what extent do you see the need to extend this provision to the version of record, i.e. article as published by the journal or platform after going through peer-review?"*

**QUESTION 39: As an alternative to introducing a Secondary Publication Right, would you agree that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could facilitate the mission of research organisations such as yours in a comparable way? Please explain the reasons for your answer.**

In response to whether specific licensing arrangements—like extended collective licensing or lump sum remuneration regimes—could serve as viable alternatives to introducing SPR, 27.8% of respondents supported the alternatives, and 19.9% opposed them. 52.3% provided diverse responses beyond simple agreement or disagreement, reflecting a wide range of opinions on the topic (the answers are further elaborated in Table 125).

**Table 162. Views on specific licensing arrangements (such as collective licensing) or lump sum remuneration as an alternative to SPR (n=241)**

| | Share | Count |
|---|---|---|
| Yes | 27.8% | 67 |
| No | 19.9% | 48 |
| Other responses | 52.3% | 126 |
| Total | 100% | 241 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "As an alternative to introducing a Secondary Publication Right, would you agree that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could facilitate the mission of research organisations such as yours in a comparable way?"*

The answers to the question on alternatives to introducing SPR can be categorised into four main areas:

**Table 163. Views on specific licensing arrangements (such as collective licensing) or lump sum remuneration as an alternative to SPR (n=126)**

| Financial and Economic Concerns | Legal and Regulatory Preferences | Licensing and Remuneration Strategies | Cultural and Systemic Shifts |
|---|---|---|---|
| Focus on the current financial dynamics in scholarly publishing, the need for systemic changes, and concerns regarding the cost-effectiveness of the licensing arrangements. | Highlight the call for regulatory interventions, the need for clear and straightforward legislation, and preferences for either a harmonised Secondary Publication Right or specific contractual arrangements. | Discuss the potential of extended collective licensing and lump sum remuneration regimes, along with their implications for research organisations' missions and Open Access. | Emphasise the pressure to publish in high-impact non-Open Access journals, the necessity for a shift away from traditional values in scientific publishing, and the desire for simplicity, transparency, and fairness in any alternative solutions. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "As an alternative to introducing a Secondary Publication Right, would you agree that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could facilitate the mission of research organisations such as yours in a comparable way?"*

### QUESTION 40: As an alternative to introducing a Secondary Publication Right, what other legislative interventions or practices can you envisage to facilitate the mission of research organisations such as yours?

The responses to the question regarding alternatives to introducing a Secondary Publication Right (SPR) highlight several challenges and proposed interventions to facilitate the mission of research organisations in terms of Open Access and research dissemination. Here is an overview of the main inputs received:

**Table 164. Views on other legislative interventions or practices as an alternative to introducing a SPR (n=187)**

| | | | |
|---|---|---|---|
| **Value and Evaluation Metrics:** Many RPOs emphasised the need to reassess the value attributed to research publications, which is often tied to impact factors and track records. There is a call for a shift in the evaluation metrics used for researchers. | **IP Policy and Regulation:** Some RPOs suggested the establishment of an intellectual property (IP) policy or regulation across Europe. This would include explicit support from funding authorities for Open Access practices, such as funding for article processing charges (APCs ). | **Publisher Regulations and Fees:** Criticisms were raised regarding the policies of publishers, with a specific mention of publishers like Elsevier. Suggestions included the regulation of publisher policies and a reduction in fees for publication and access. | **EU Public Access Repository:** A proposal for the creation of an EU public access repository managed by the European Commission to facilitate Open Access to research outputs. |
| **Taxation and VAT:** Suggestions included minimising taxation (VAT) for the publication of studies and research works in electronic format to reduce financial burdens. | **Rights Retention:** Several RPOs advocated for rights retention as a default, allowing researchers or institutions to retain copyright over their material. The idea of retaining the right to re-publish publicly financed research in institutional repositories was also raised. | **Embargo Periods:** Some RPOs called for the elimination of embargo periods on the publication of publicly financed research to ensure immediate Open Access. | **Financial Support:** The idea of financial support for Open Access, including the establishment of funds to cover publication fees and national consortia agreements to cap article processing charges, was mentioned. |
| **Public Good Approach:** Some RPOs proposed viewing research results funded by taxpayers as a public good, with open and free access to all. | **Education and Public Engagement:** Suggestions included promoting awareness about copyright law, Open Access, and best practices for legal use. Engaging with the public and policymakers to demonstrate the value of Open Access was also mentioned. | **EU-Wide Policies:** Advocacy for EU-wide policies, such as rights retention provisions and Open Access mandates, to harmonise copyright-related questions across European countries. | **Data Repository Integration:** A suggestion was made to widen the use of data repositories for datasets, integrating them with the publications in an Open Access regime. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "As an alternative to introducing a Secondary Publication Right, what other legislative interventions or practices can you envisage to facilitate the mission of research organisations such as yours?"*

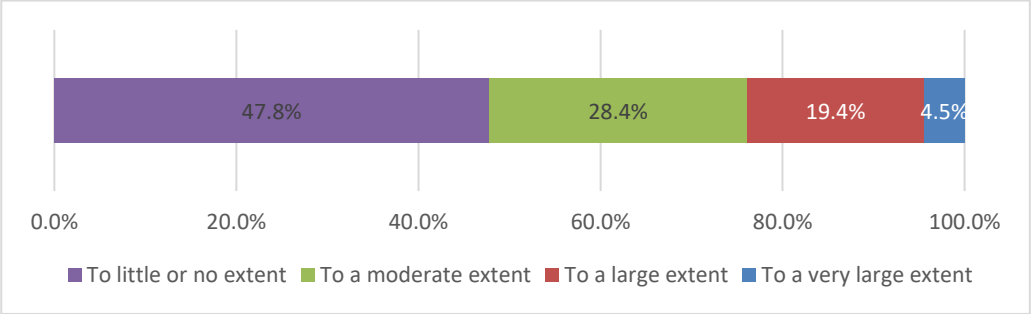
It is clear from the responses that there is a diverse set of opinions and suggestions, reflecting the complex nature of the challenges and potential interventions in the realm of Open Access and research dissemination.

### QUESTION 41: Overall, to what extent do the Secondary Publication Right provisions in Germany impact your organisation?

Only those who selected Germany as the country of their organisation in question 5 received this question.

Nearly half of the RPOs (47.8%), indicated that the SPR provisions in Germany have a limited impact on their organisations. A substantial share, 28.4%, perceived a moderate extent of impact, while 19.4% reported a large extent. A smaller fraction, 4.5%, acknowledged a very large impact. These results suggest a varied among RPOs, with a notable proportion viewing the influence of the SPR provisions as relatively limited.

**Figure 146. Impact of SPR provisions on RPOs in Germany (n=67)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in Germany impact your organisation?"*

**Table 165. Impact of SPR provisions on RPOs in Germany (n=67)**

| | Share | Count |
|---|---|---|
| To little or no extent | 47.8% | 32 |
| To a moderate extent | 28.4% | 19 |
| To a large extent | 19.4% | 13 |
| To a very large extent | 4.5% | 3 |
| Total | 100% | 67 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in Germany impact your organisation?"*

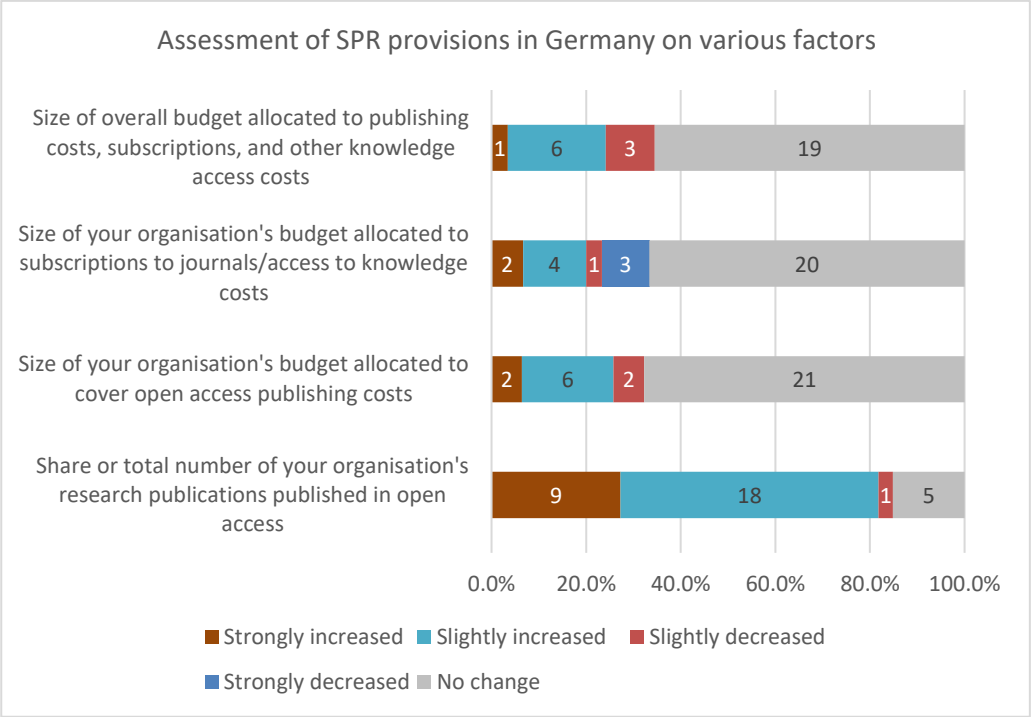
### QUESTION 42: Specifically, how strongly do the Secondary Publication Right provisions in Germany affect the following?

Only those who selected Germany as the country of their organisation in question 5 were administered this question.

Following the previous question, RPOs were asked how the SPR provisions in Germany affected different aspects of their organisation. A large share, 54.5%, reported a slight increase in the share or total number of their organisation's research publications published in Open Access. In contrast, the influence on the size of the budget allocated to cover Open Access publishing costs was more evenly distributed, with 67.7% indicating no change. Similarly, the impact on the budget allocated to subscriptions to journals/access to knowledge costs showed varied responses, with 66.7% reporting no change. When considering the size of the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs, 65.5% noted no change, while 20.7% reported a slight increase. These findings suggest a nuanced influence of the SPR provisions on different aspects within the organisations.

Due to small numbers, Figure 147 does not provide the shares of the responses but rather the total number of responses.

**Figure 147. Impact of SPR provisions in Germany on various factors**




*Source: Compiled by the study team using data from the RPO survey, the survey question was "Specifically, how strongly do the Secondary Publication Right provisions in Germany affect the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 166 indicates the total count for each of the options.

**Table 166. Impact of SPR provisions in Germany on various factors**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open Access | 9 (27.3%) | 18 (54.5%) | 1 (3.0%) | 0 (0.0%) | 5 (15.2%) | 33 |
| Size of your organisation's budget allocated to cover Open Access publishing costs | 2 (6.5%) | 6 (19.4%) | 2 (6.5%) | 0 (0.0%) | 21 (67.7%) | 31 |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | 2 (6.7%) | 4 (13.3%) | 1 (3.3%) | 3 (10.0%) | 20 (66.7%) | 30 |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | 1 (3.4%) | 6 (20.7%) | 3 (10.3%) | 0 (0.0%) | 19 (65.5%) | 29 |

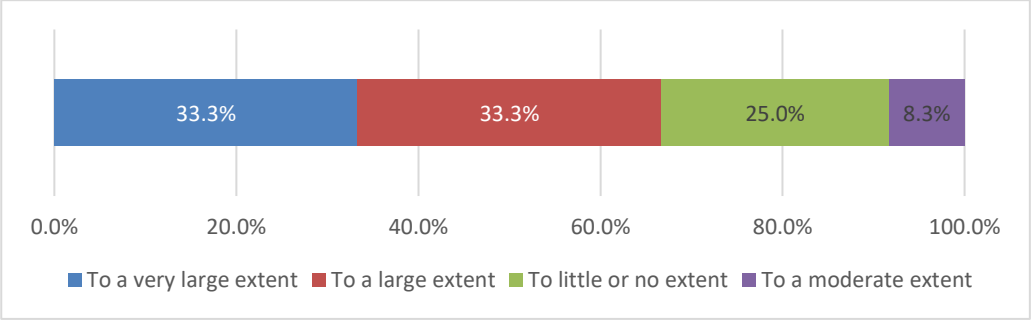
*Source: Compiled by the study team using data from the RPO survey, the survey question was "Specifically, how strongly do the Secondary Publication Right provisions in Germany affect the following?"*

## QUESTION 43: Overall, to what extent do the Secondary Publication Right provisions in France impact your organisation?

Only those who selected France as the country of their organisation in question 5 were administered this question.

The RPOs' perspectives on the impact of the SPR provisions in France varied. A substantial share (33.3%), indicated that the provisions had a very large impact on their organisations, while an equal percentage felt a large impact. However, 25.0% believed the impact was too little or no extent, and 8.3% considered it to be of moderate extent. This diversity in responses highlights differing perceptions of the influence of the SPR provisions on organisations in France.

**Figure 148. Impact of SPR provisions on RPOs in France (n=12)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in France impact your organisation?"*

**Table 167. Impact of SPR provisions on RPOs in France (n=12)**

| | Share | Count |
|---|---|---|
| To a very large extent | 33.3% | 4 |
| To a large extent | 33.3% | 4 |
| To little or no extent | 25.0% | 3 |
| To a moderate extent | 8.3% | 1 |
| Total | 100% | 12 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in France impact your organisation?"*

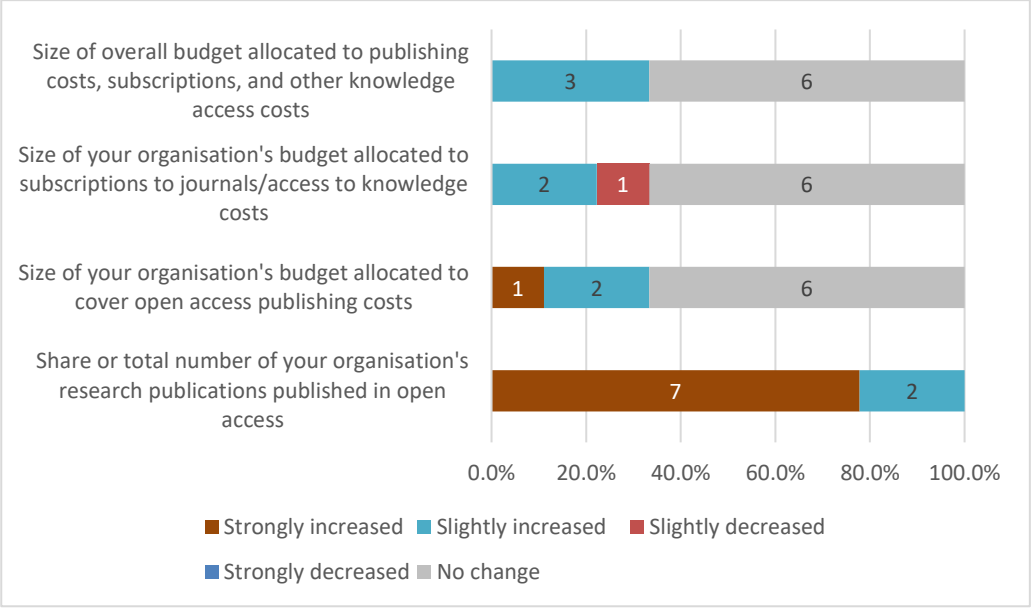
## QUESTION 44: Specifically, how strongly do the Secondary Publication Right provisions in France affect the following?

Only those who selected France as the country of their organisation in question 5 were administered this question.

In terms of the impact of the SPR provisions in France on various aspects, the majority of RPOs (77.8%, n=7) reported a strong increase in the share or total number of their organisation's research publications published in Open Access. Meanwhile, regarding budget allocations, responses varied: 66.7% (n=6) indicated no change in the size of the organisation's budget allocated to cover Open Access publishing costs, subscriptions to journals/access to knowledge costs, and the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs. These findings suggest a notable positive influence on Open Access publishing but a more nuanced impact on budgetary considerations among surveyed organisations in France.

Due to small numbers, Figure 149 does not provide the shares of the responses but rather the total number of responses.

**Figure 149. Impact of SPR provisions in France on various factors**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey ways "Specifically, how strongly do the Secondary Publication Right provisions in France affect the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 168 indicates the total count for each of the options.

**Table 168. Impact of SPR provisions in France on various factors**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open Access | 7 (77.8%) | 2 (22.2%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 9 |
| Size of your organisation's budget allocated to cover Open Access publishing costs | 1 (11.1%) | 2 (22.2%) | 0 (0.0%) | 0 (0.0%) | 6 (66.7%) | 9 |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | 0 (0.0%) | 2 (22.2%) | 1 (11.1%) | 0 (0.0%) | 6 (66.7%) | 9 |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | 0 (0.0%) | 3 (33.3%) | 0 (0.0%) | 0 (0.0%) | 6 (66.7%) | 9 |

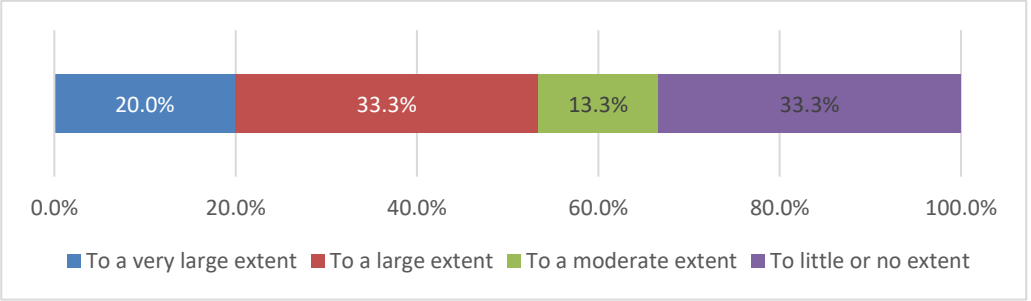
*Source: Compiled by the study team using data from the RPO survey, the question in the survey ways "Specifically, how strongly do the Secondary Publication Right provisions in France affect the following?"*

## QUESTION 45: Overall, to what extent do the Secondary Publication Right provisions in the Netherlands impact your organisation?

Only those who selected the Netherlands as the country of their organisation in question 5 were administered this question.

The impact of the SPR provisions in the Netherlands varied among RPOs, with 33.3% indicating a large extent, 20.0% a very large extent, 13.3% a moderate extent, and another 33.3% suggesting little or no impact on their organisations. These results suggest a diverse range of perceptions regarding the influence of these provisions, with a substantial share expressing a notable impact and others perceiving minimal or no effect on their organisations.

**Figure 150. Impact of SPR provisions on RPOs in the Netherlands (n=15)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the Netherlands impact your organisation?"*

**Table 169. Impact of SPR provisions on RPOs in the Netherlands (n=15)**

| | Share | Count |
|---|---|---|
| To a large extent | 33.3% | 5 |
| To little or no extent | 33.3% | 5 |
| To a very large extent | 20.0% | 3 |
| To a moderate extent | 13.3% | 2 |
| Total | 100% | 15 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the Netherlands impact your organisation?"*

## QUESTION 46: Specifically, how strongly do the Secondary Publication Right provisions in the Netherlands affect the following?

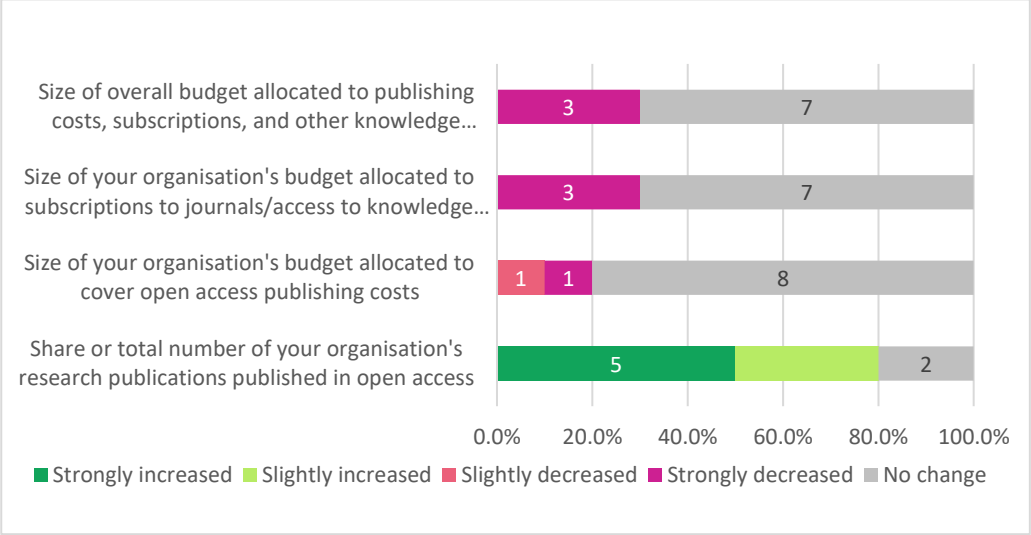
Only those who selected the Netherlands as the country of their organisation in question 5 were administered this question.

The impact of the SPR provisions in the Netherlands on specific aspects varied among RPOs. Notably, 50.0% (n=5) reported a strong increase in the share or total number of their organisation's research publications published in Open Access, while 30.0% (n=3) indicated a slight increase. In terms of budget allocation, none reported a direct impact on the budget allocated to cover Open Access publishing costs. However, 30.0% (n=3) observed a slight decrease in the budget allocated to subscriptions to journals/access to knowledge costs, and the same percentage reported a similar impact on the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs. The majority, 80.0% (n=8), noted no change in the latter category. These findings suggest a nuanced impact on financial and

publication aspects, with some positive shifts in Open Access publication and limited effects on budget allocations.

Due to small numbers, Figure 151 does not provide the shares of the responses but rather the total number of responses.

**Figure 151. Impact of SPR provisions in the Netherlands on various factors**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in the Netherlands affect the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 170 indicates the total count for each of the options.

**Table 170. Impact of SPR provisions in the Netherlands on various factors**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open Access | 5 (50.0%) | 3 (30.0%) | 0 (0.0%) | 0 (0.0%) | 2 (20.0%) | 10 |
| Size of your organisation's budget allocated to cover Open Access publishing costs | 0 (0.0%) | 0 (0.0%) | 1 (10.0%) | 1 (10.0%) | 8 (80.0%) | 10 |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 3 (30.0%) | 7 (70.0%) | 10 |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 3 (30.0%) | 7 (70.0%) | 10 |

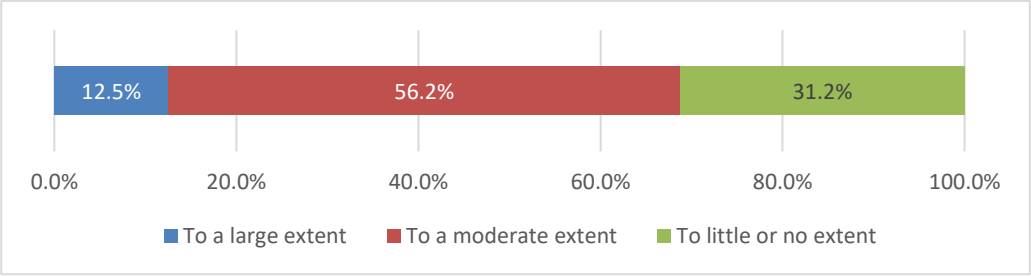
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in the Netherlands affect the following?"*

### QUESTION 47: Overall, to what extent do the Secondary Publication Right provisions in Austria impact your organisation?

Only those who selected Austria as the country of their organisation in question 5 were administered this question.

The RPOs provided insights into the impact of SPR provisions in Austria on their organisations. A majority, comprising 56.2%, expressed that the impact was of moderate extent. Meanwhile, 31.2% perceived little to no impact, and 12.5% indicated a large extent of influence. This suggests a diverse range of perspectives among RPOs, with a large share considering the impact to be of moderate significance.

**Figure 152. Impact of SPR provisions on RPOs in Austria (n=16)**




*Source: Compiled by the study team using data from the RPO survey, the survey question was "Overall, to what extent do the Secondary Publication Right provisions in Austria impact your organisation?"*

**Table 171. Impact of SPR provisions on RPOs in Austria (n=16)**

| | Share | Count |
|---|---|---|
| To a moderate extent | 56.2% | 9 |
| To little or no extent | 31.2% | 5 |
| To a large extent | 12.5% | 2 |
| Total | 100% | 16 |

*Source: Compiled by the study team using data from the RPO survey, the survey question was, "Overall, to what extent do the Secondary Publication Right provisions in Austria impact your organisation?"*

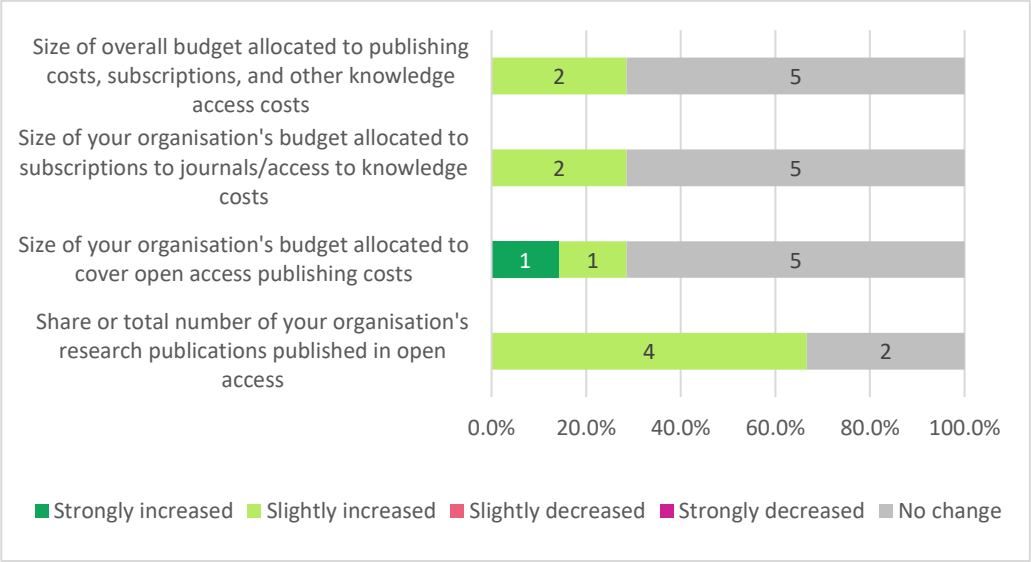
### QUESTION 48: Specifically, how strongly do the Secondary Publication Right provisions in Austria affect the following?

Only those who selected Austria as the country of their organisation in question 5 were administered this question.

The RPOs provided insights into the specific impact of SPR provisions in Austria on their organisations. Notably, 66.7% (n=4) indicated that these provisions slightly increased the share or total number of their organisation's research publications published in Open Access. Regarding the budget allocations, 71.4% (n=5) mentioned that there was no change in the size of their organisation's budget allocated to cover Open Access publishing costs, subscriptions to journals/access to knowledge costs, and the overall budget allocated to publishing costs, subscriptions, and other knowledge access costs. These findings suggest a nuanced impact on different aspects of organisational operations.

Due to small numbers, Figure 153 does not provide the shares of the responses but rather the total number of responses.

**Figure 153. Impact of SPR provisions in Austria on various factors**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in Austria affect the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 172 indicates the total count for each of the options.

**Table 172. Impact of SPR provisions in Austria on various factors**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open Access | 0 (0.0%) | 4 (66.7%) | 0 (0.0%) | 0 (0.0%) | 2 (33.3%) | 6 |
| Size of your organisation's budget allocated to cover Open Access publishing costs | 1 (14.3%) | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 5 (71.4%) | 7 |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | 0 (0.0%) | 2 (28.6%) | 0 (0.0%) | 0 (0.0%) | 5 (71.4%) | 7 |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | 0 (0.0%) | 2 (28.6%) | 0 (0.0%) | 0 (0.0%) | 5 (71.4%) | 7 |

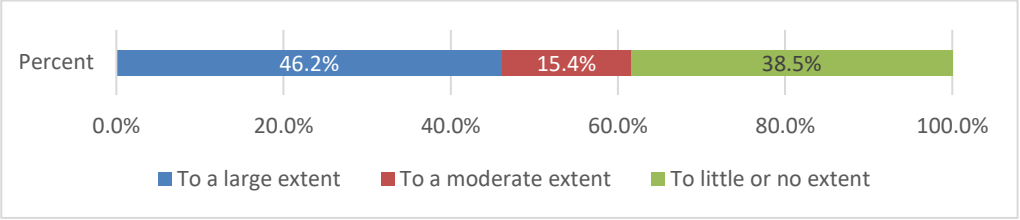
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in Austria affect the following?"*

### QUESTION 49: Overall, to what extent do the Secondary Publication Right provisions in Belgium impact your organisation?

Only those who selected Belgium as the country of their organisation in question 5 were administered this question.

The RPOs shared perspectives on the impact of SPR provisions in Belgium on their organisations. 46.2% (n=6) expressed that these provisions affect their organisations to a large extent, indicating a substantial influence on their operations. 38.5% (n=5) believed that the impact was to little or no extent, suggesting a more limited effect. Additionally, 15.4% (n=2) reported a moderate extent of impact, indicating a varied response among the RPOs.

**Figure 154. Impact of SPR provisions on RPOs in Belgium (n=13)**




*Source: Compiled by the study team using data from RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in Belgium impact your organisation?"*

**Table 173. Impact of SPR provisions on RPOs in Belgium (n=13)**

| | Share | Count |
|---|---|---|
| To a large extent | 46.2% | 6 |
| To little or no extent | 38.5% | 5 |
| To a moderate extent | 15.4% | 2 |
| Total | 100% | 13 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in Belgium impact your organisation?"*

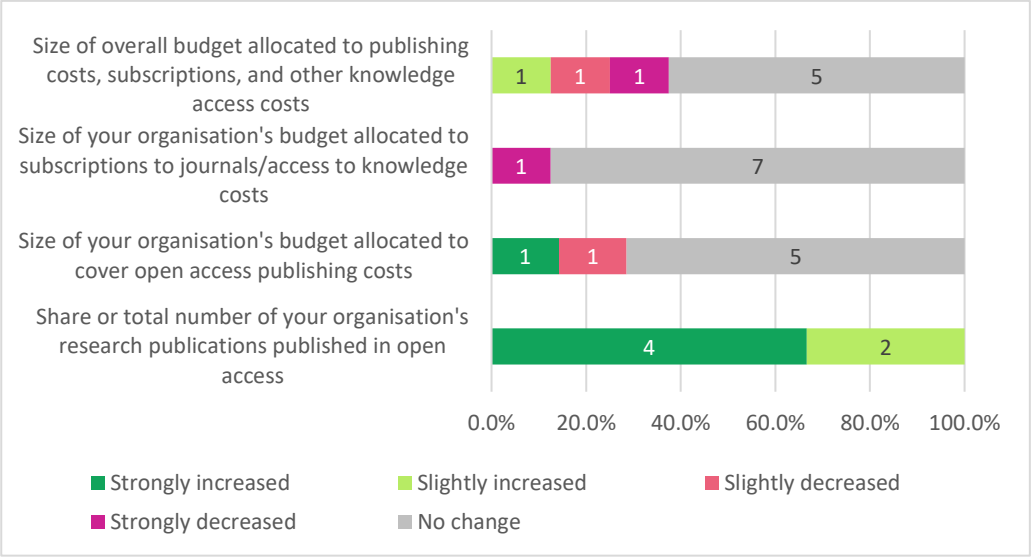
### QUESTION 50: Specifically, how strongly do the Secondary Publication Right provisions in Belgium affect the following?

Only those who selected Belgium as the country of their organisation in question 5 received this question.

When assessing the specific impact of SPR provisions in Belgium on various aspects, RPOs provided insights. Notably, 66.7% (n=4) reported a strong increase in the share or total number of their organisation's research publications published in Open Access, indicating a positive influence on accessibility. Regarding budget allocation, responses varied: one RPO noted a slight increase in Open Access publishing costs, one observed a slight increase in subscriptions/access costs, and 1 reported a slight increase in the overall budget allocated to publishing, subscriptions, and other knowledge access costs. However, a majority (71.4% (n=5) to 87.5% (n=7)) noted no change in these budgetary aspects, suggesting stability in financial allocations.

Due to small numbers, Figure 155 does not provide the shares of the responses but rather the total number of responses.

**Figure 155. Impact of SPR provisions in Belgium on various factors**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in Belgium affect the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 174 indicates the total count for each of the options.

**Table 174. Impact of SPR provisions in Belgium on various factors**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| Share or total number of your organisation's research publications published in Open Access | 4 (66.7%) | 2 (33.3%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 6 |
| Size of your organisation's budget allocated to cover Open Access publishing costs | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 0 (0.0%) | 5 (71.4%) | 7 |
| Size of your organisation's budget allocated to subscriptions to journals/access to knowledge costs | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (12.5%) | 7 (87.5%) | 8 |
| Size of overall budget allocated to publishing costs, subscriptions, and other knowledge access costs | 0 (0.0%) | 1 (12.5%) | 1 (12.5%) | 1 (12.5%) | 5 (62.5%) | 8 |

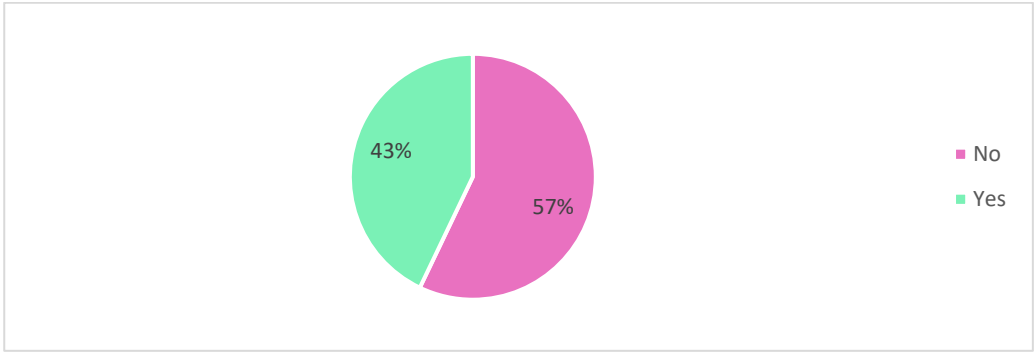
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Specifically, how strongly do the Secondary Publication Right provisions in Belgium affect the following?"*

### QUESTION 51: Does your organisation consider that the Secondary Publication Right creates uncertainties in relation to access and reuse activities covering protected publications or data repositories?

This question was asked to all the survey RPOs. The majority (57.1%) indicated that their organisation did not consider SPR to create uncertainties in relation to access and reuse

activities covering protected publications or data repositories. However, a large share (42.9%) did indicate that such uncertainties are created by SPR.

**Figure 156. Perceived uncertainties regarding access and reuse activities under SPR, covering protected publications or data repositories (n=105)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation consider that the Secondary Publication Right creates uncertainties in relation to access and reuse activities covering protected publications or data repositories?"*

**Table 175. Perceived uncertainties regarding access and reuse activities under SPR, covering protected publications or data repositories (n=105)**

| | Share | Count |
|---|---|---|
| No | 57.1% | 60 |
| Yes | 42.9% | 45 |
| Total | 100% | 105 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation consider that the Secondary Publication Right creates uncertainties in relation to access and reuse activities covering protected publications or data repositories?"*

## QUESTION 52: What challenges and risks do you see?

The responses regarding challenges and risks related to the Secondary Publication Right (SPR) provide insights into the complexities and uncertainties perceived by research performing organisations. Table 176 provides an overview of the mentioned challenges.

**Table 176. Challenges and risks related to the SPR (n=48)**

| | |
|---|---|
| **Lack of Awareness and Understanding:** Several RPOs noted a lack of awareness and understanding of the SPR, both among individual authors and researchers. This lack of clarity leads to difficulties in comprehending the details of the provisions, and some researchers seek legal consultation to navigate the complexities. | **Publisher Practices and Access Limitations:** Concerns were raised about publishers seeking new revenues and potentially blocking access to research outputs. Some RPOs highlighted limitations faced by larger institutions, suggesting that smaller institutions may be unable to benefit from the SPR. |
| **Legal Ambiguity and Complexity:** RPOs pointed out legal ambiguities and complexities associated with applying SPR. This includes challenges related to determining the discipline | **Access and Reuse Challenges:** Lack of open licences attached to publications and concerns about the reuse of content without explicit permission were highlighted. Access and reuse challenges arise due to |

| | |
|---|---|
| for embargo periods, understanding the definition of publicly funded research. | the absence of open licences and potential legal actions when utilising SPR rights outside of Europe. |
| **Impact on Journals and Viability**: Concerns were raised about potential opposition from traditional publishers, fearing that SPR legislation could undermine their business models and impact the viability of journals, especially in the social sciences and humanities. | **Undefined Rights and Conditions:** The SPR legislation was criticised for not clearly defining access and reuse activities, specifying embargo periods, and creating uncertainties regarding the types of publications that qualify for secondary publication. |
| **Evolution of Publishing Landscape:** The dynamic nature of the academic publishing landscape was acknowledged, with potential challenges arising from emerging models, legislation, and technologies affecting the implementation and enforcement of SPR. | **Embargo Period Limitations:** The limitation to the accepted author's version and the imposition of embargo periods were cited as challenges, limiting the usability of the SPR due to decreased relevance of publications. |
| **Legal Certainty and Harmonisation:** There is a call for legal certainty, particularly in situations where funder mandates for immediate Open Access conflict with publisher embargo periods. Some RPOs suggested the need for EU-wide SPR legislation to align with Horizon Europe requirements. | **Source Citation and Visibility:** Risks associated with source citation were mentioned, expressing concerns about potential errors, loss of visibility, and biased key performance indicator (KPI) indicators. The uncertainty surrounding proper citation (this risk is linked to the fact that the current SPR legislation cover only the AAM) and potential loss of visibility can be challenging for researchers. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What challenges and risks do you see?"*

### QUESTION 53: Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Germany? Please suggest some examples.

Only those who selected Germany as the country of their organisation in question 5 were administered this question.

Altogether 17 responses were received to this open-ended question.

RPOs expressed a range of perspectives. Some RPOs emphasised the need for simplification, suggesting that data should either be accessible and reusable or not, underscoring a desire for clarity in the SPR framework. Others proposed specific modifications, such as a shorter embargo period and the inclusion of various publication types like newspaper articles and proceedings. There were calls for expanding the scope of the SPR to cover different media types, including layouts, and advocating for a provision that applies to publications beyond journal articles, such as books and book chapters. The Deep Green project, focused on automating the distribution of secondary publications into local repositories, was highlighted as a potential solution.

Several recommendations focused on refining definitions and removing certain restrictions. RPOs suggested clear definitions, SPR right for the public sector, and the removal of restrictions on research activities, academic teaching publications, and promotional materials. Other proposed changes included specifying that the version of record (VoR) is the one covered by the SPR and allowing immediate sharing of full articles upon direct author communication. The overarching theme involved creating clear provisions for reuse, such as adopting a CC-BY licence, aligning with the expectation of making republished materials

available for broader use. Additionally, there were calls to shorten the time limits for copyright, reflecting a desire for more timely access to and reuse of research outputs. These recommendations collectively highlight a nuanced landscape of opinions, emphasising the importance of simplicity, clarity, and expanded access within the SPR regime in Germany.

**QUESTION 54: Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in France? Please suggest some examples.**

Only those who selected France as the country of their organisation in question 5 were administered this question.

Six responses were received to this open-ended question.

RPOs provided varied perspectives. One recommendation emphasised the need for more communication and information about SPR, indicating a desire for increased awareness and understanding within the research community. Some RPOs expressed a straightforward preference for mandatory SPR, underscoring a potential shift in perception regarding the nature of this right. Another suggestion involved advocating for either no embargo or a significantly shortened one, with specified timeframes for different publication types, particularly emphasising shorter embargo periods for science, technology, engineering, and mathematics (STEM) disciplines compared to humanities and social sciences (SSH). Additionally, there was a call for extended rights retention possibilities for the research community, enhancing their control over the use of their publications. Notably, some RPOs expressed uncertainty or provided no specific recommendations. Overall, these responses highlight the complexity of opinions and preferences regarding the SPR regime in France, with considerations ranging from communication strategies to mandatory implementation and adjustments to embargo periods and rights retention.

**QUESTION 55: Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in the Netherlands? Please suggest some examples.**

Only those who selected the Netherlands as the country of their organisation in question 5 were administered this question.

Four responses were received to this open-ended question.

RPOs highlighted several recommendations. Firstly, there is a suggestion for the establishment of a national consortium or fund for Open Access. Secondly, there is a call for the adoption of the Creative Commons (CC) licensing framework within the SPR, emphasising the need for clear provisions enabling reuse. RPOs expressed a desire to extend SPR beyond short scientific works, indicating a broader scope for its application. Moreover, there was a recognition of the importance of taxpayer money in funding research, leading to a recommendation to prohibit commercial restrictions on republished materials funded through public–private partnerships. Finally, the RPOs that have a legal address in the Netherlands but operate in an international context express openness to discussions and collaboration on proposals for SPR, emphasising the need for a final version that supports research initiatives without harming the market in the European Union.

**QUESTION 56: Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Austria? Please suggest some examples.**

Only those who selected Austria as the country of their organisation in question 5 were administered this question.

Three responses were received to this open-ended question.

In Austria, RPOs recommended a change to the existing SPR regime by advocating for the removal of the 12-month embargo period, aligning this suggestion with the Austrian Science Fund's (FWF) Open Access policy. This emphasises a crucial concern surrounding timely access to research outputs and indicates a broader commitment to aligning SPR provisions with established Open Access principles and guidelines within the Austrian research landscape.

**QUESTION 57: Are there any additional features to the existing Secondary Publication Right regime that you would recommend? Are there any additional publication access and reuse provisions that you would recommend in Belgium? Please suggest some examples.**

Only those who selected Belgium as the country of their organisation in question 5 were administered this question.

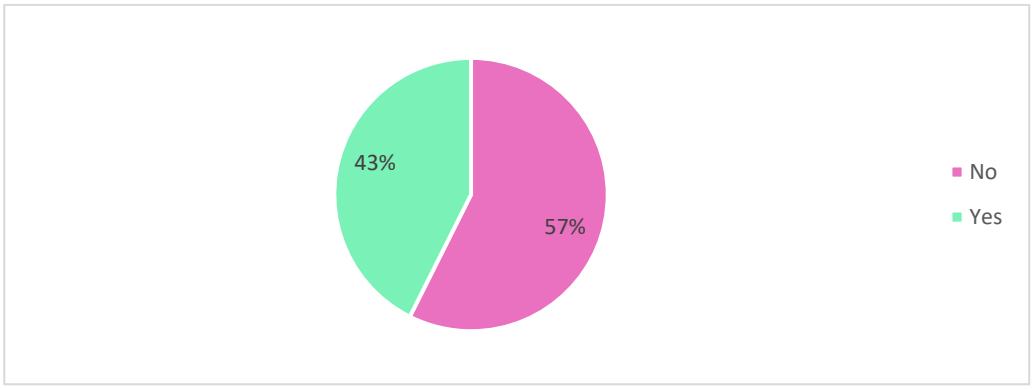
Seven responses were received to this open-ended question.

In Belgium, RPOs expressed a mixed perspective on the existing SPR regime. While some indicated that the current features are well understood by researchers and may not necessitate additional access and reuse provisions, others proposed significant expansions and modifications to enhance the effectiveness and applicability of SPR. Recommendations included extending SPR to cover all research publications, such as books, book chapters, conference proceedings, and posters. There was a clear call for permission to use the version of record and a preference for open licences, such as CC-BY or CC-BY-SA, to facilitate reuse. Additionally, RPOs advocated for zero embargo periods. Practical considerations, such as harmonising SPR legislation with international standards, were highlighted as crucial aspects for successful implementation. The recommendations also emphasised the importance of metadata and regular review and adaptation of SPR legislation to keep pace with evolving practices.

**QUESTION 58: Does your organisation have a publishing/press house or a related entity?**

Some 42.9% of RPOs expressed concerns that the SPR creates uncertainties regarding access and reuse activities covering protected publications or data repositories, while 57.1% do not perceive such uncertainties.

**Figure 157. RPOs that have a publishing/press house (n=537)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation have a publishing/press house or a related entity?"*

**Table 177. RPOs that have a publishing/press house (n=537)**

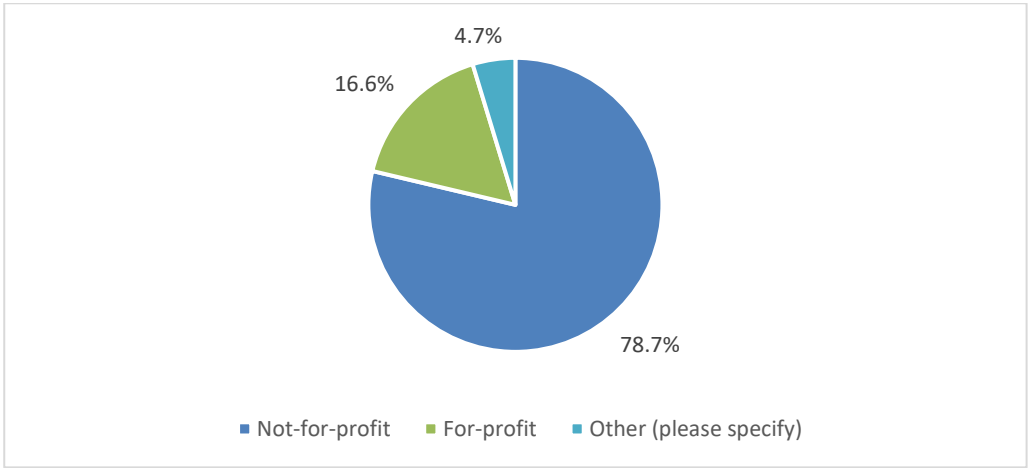
| | Share | Count |
|---|---|---|
| No | 57.4% | 308 |
| Yes | 42.6% | 229 |
| Total | 100% | 537 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "Does your organisation have a publishing/press house or a related entity?"*

## QUESTION 59: What is the status of this entity?

Of those who answered "yes" to question 58, which asked if their organisation had a publishing house, the majority (78.7%) reported that the publishing house was not-for-profit, while 16.6% indicated that the publishing house was for-profit.

**Figure 158. Status of the RPO's publishing/press house (n=211)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What is the status of this entity?"*

**Table 178. Status of the RPO's publishing/press house (n=211)**

| | Share | Count |
|---|---|---|

| | | |
|---|---|---|
| Not-for-profit | 78.7% | 166 |
| For-profit | 16.6% | 35 |
| Other (please specify) | 4.7% | 10 |
| Total | 100% | 211 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What is the status of this entity?"*

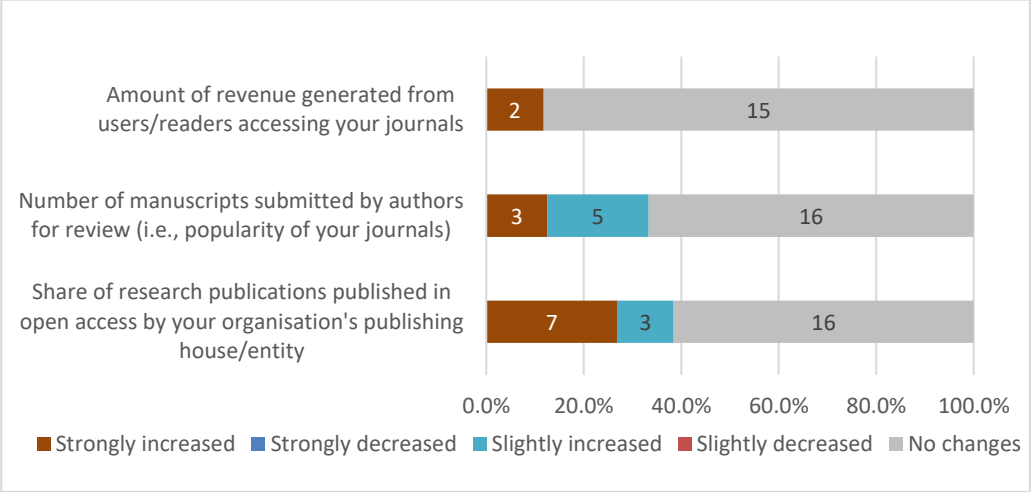
### QUESTION 60: In your opinion, did the Secondary Publication Right provisions in Germany increase or decrease the following

Only those who selected Germany as the country of their organisation in question 5 received this question.

The responses regarding the impact of SPR provisions in Germany reveal diverse perspectives. A large share, 61.5% (n=16), observed no change in the share of research publications published in Open Access by their organisation's publishing house/entity. In terms of the popularity of journals, 66.7% (n=16) reported no change in the number of manuscripts submitted by authors for review, while 20.8% (n=5) noted a slight increase. Additionally, 88.2% (n=15) reported no change in the amount of revenue generated from users/readers accessing their journals. These findings suggest a varied impact on different aspects of publishing activities.

Due to small numbers, Figure 159 does not provide the shares of the responses but rather the total number of responses.

**Figure 159. Impact of SPR provisions in Germany**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was, "In your opinion, did the Secondary Publication Right provisions in Germany increase or decrease the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 179 indicates the total count for each of the options.

**Table 179. Impact of SPR provisions in Germany**

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Total |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Share of research publications published in Open Access by your organisation's publishing house/entity | 7 (26.9%) | 0 (0.0%) | 3 (11.5%) | 0 (0.0%) | 16 (61.5%) | 26 |
| Number of manuscripts submitted by authors for review (i.e. popularity of your journals) | 3 (12.5%) | 0 (0.0%) | 5 (20.8%) | 0 (0.0%) | 16 (66.7%) | 24 |
| Amount of revenue generated from users/readers accessing your journals | 2 (11.8%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 15 (88.2%) | 17 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in Germany increase or decrease the following?"*

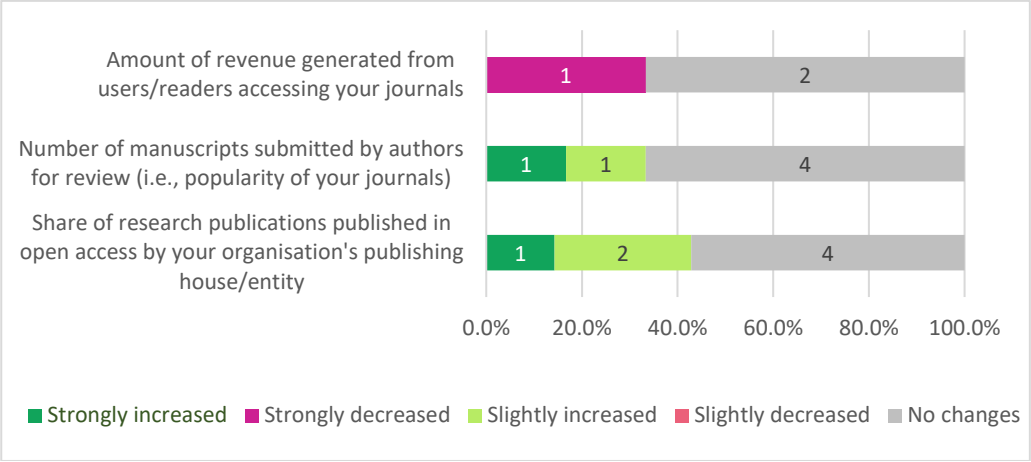
### QUESTION 61: In your opinion, did the Secondary Publication Right provisions in France increase or decrease the following

Only those who selected France as the country of their organisation in question 5 were administered this question.

The survey responses regarding the impact of SPR provisions in France indicate varied effects on publishing activities. A majority, 57.1% (n=4), observed no change in the share of research publications published in Open Access by their organisation's publishing house/entity. For the popularity of journals, 66.7% (n=4) reported no change in the number of manuscripts submitted by authors for review, while 16.7% (n=1) noted a slight increase. In terms of revenue generation from users/readers accessing journals, 66.7% (n=4) reported no change, and 33.3% (n=1) observed a slight decrease. These findings suggest diverse outcomes, emphasising the nuanced impact of the provisions on different aspects of publishing.

Due to small numbers, Figure 160 does not provide the shares of the responses but rather the total number of responses.

**Figure 160. Impact of SPR provisions in France**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in France increase or decrease the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 180 indicates the total count for each of the options.

**Table 180. Impact of SPR provisions in France**

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Total |
|---|---|---|---|---|---|---|
| Share of research publications published in Open Access by your organisation's publishing house/entity | 1 (14.3%) | 0 (0.0%) | 2 (28.6%) | 0 (0.0%) | 4 (57.1%) | 7 |
| Number of manuscripts submitted by authors for review (i.e. popularity of your journals) | 1 (16.7%) | 0 (0.0%) | 1 (16.7%) | 0 (0.0%) | 4 (66.7%) | 6 |
| Amount of revenue generated from users/readers accessing your journals | 0 (0.0%) | 1 (33.3%) | 0 (0.0%) | 0 (0.0%) | 2 (66.7%) | 3 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in France increase or decrease the following?"*

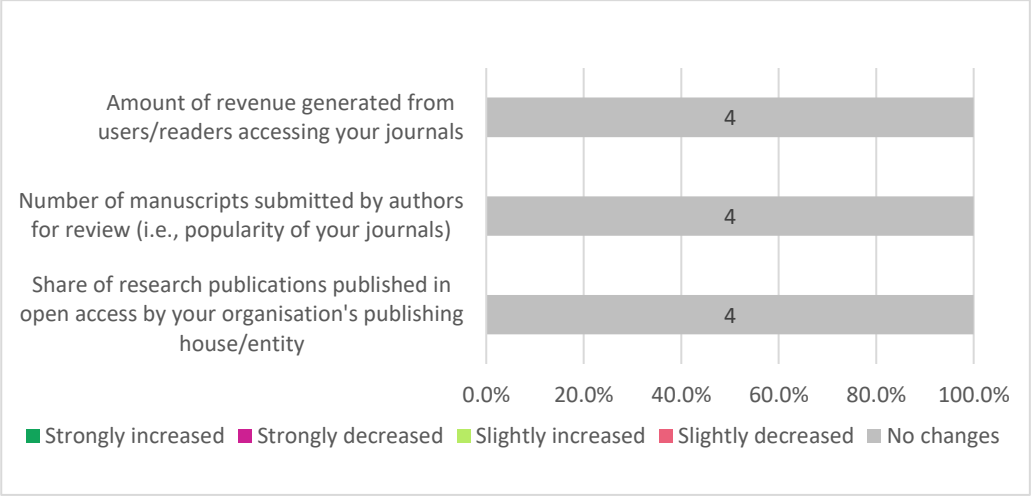
### QUESTION 62: In your opinion, did the Secondary Publication Right provisions in the Netherlands increase or decrease the following

Only those who selected the Netherlands as the country of their organisation in question 5 were administered this question.

The feedback on the impact of SPR provisions in the Netherlands suggests that RPOs did not perceive significant changes in various aspects of their publishing activities. Across all three categories, including the share of research publications published in Open Access, the number of manuscripts submitted by authors for review (popularity of journals), and the amount of revenue generated from users/readers accessing journals, 100% (n=4) of RPOs reported no increase or decrease, indicating perceived stability in these aspects following the implementation of the provisions.

Due to small numbers, Figure 161 does not provide the shares of the responses but rather the total number of responses.

**Figure 161. Impact of SPR provisions in the Netherlands**




*Source: Compiled by the study team using data from the RPO survey, the survey question was "In your opinion, did the Secondary Publication Right provisions in the Netherlands increase or decrease the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 181indicates the total count for each of the options.

**Table 181. Impact of SPR provisions in the Netherlands**

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Total |
|---|---|---|---|---|---|---|
| Share of research publications published in Open Access by your organisation's publishing house/entity | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (100.0%) | 4 |
| Number of manuscripts submitted by authors for review (i.e. popularity of your journals) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (100.0%) | 4 |
| Amount of revenue generated from users/readers accessing your journals | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (100.0%) | 4 |

*Source: Compiled by the study team using data from the RPO survey, the survey question was "In your opinion, did the Secondary Publication Right provisions in the Netherlands increase or decrease the following?"*

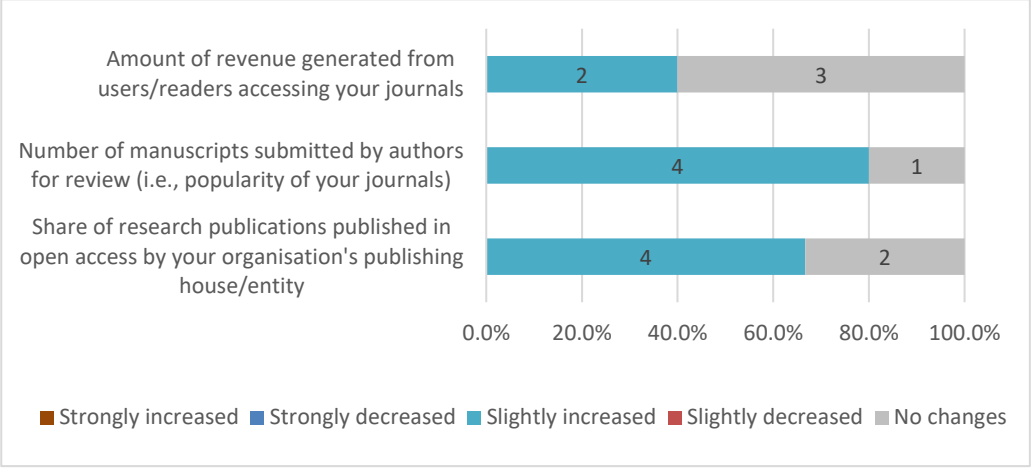
### QUESTION 63: In your opinion, did the Secondary Publication Right provisions in Austria increase or decrease the following

Only those who selected Austria as the country of their organisation in question 5 were administered this question.

The feedback regarding the impact of SPR provisions in Austria indicates a mixed response among RPOs. In terms of the share of research publications published in Open Access by their organisation's publishing house/entity, 66.7% (n=4) reported a slight increase, while 33.3% (n=2) noted no changes. For the number of manuscripts submitted by authors for review (popularity of journals), 80.0% (n=4) observed a slight increase, with 20.0% (n=1) reporting no changes. Regarding the amount of revenue generated from users/readers accessing their journals, 40.0% (n=2) reported a slight increase, and 60.0% (n=3) noted no changes. No RPOs indicated a strong increase or decrease in any of the mentioned categories.

Due to small numbers, Figure 162 does not provide the shares of the responses but rather the total number of responses.

**Figure 162. Impact of SPR provisions in Austria**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in Austria increase or decrease the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 182 indicates the total count for each of the options.

**Table 182. Impact of SPR provisions in Austria**

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Total |
|---|---|---|---|---|---|---|
| Share of research publications published in Open Access by your organisation's publishing house/entity | 0 (0.0%) | 0 (0.0%) | 4 (66.7%) | 0 (0.0%) | 2 (33.3%) | 6 |
| Number of manuscripts submitted by authors for review (i.e. popularity of your journals) | 0 (0.0%) | 0 (0.0%) | 4 (80.0%) | 0 (0.0%) | 1 (20.0%) | 5 |
| Amount of revenue generated from users/readers accessing your journals | 0 (0.0%) | 0 (0.0%) | 2 (40.0%) | 0 (0.0%) | 3 (60.0%) | 5 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in Austria increase or decrease the following?"*

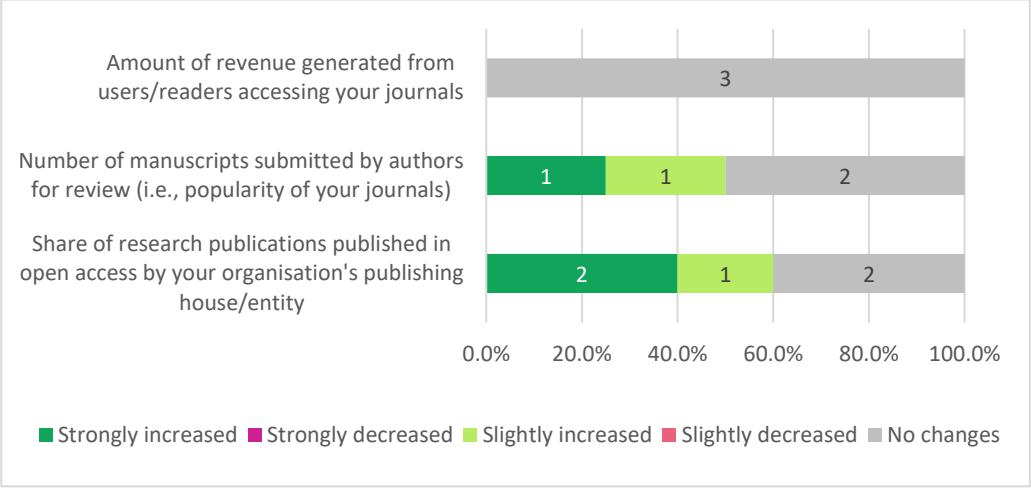
**QUESTION 64: In your opinion, did the Secondary Publication Right provisions in Belgium increase or decrease the following**

Only those who selected Belgium as the country of their organisation in question 5 were administered this question.

The feedback on the impact of SPR provisions in Belgium reveals varied perspectives among RPOs. Regarding the share of research publications published in Open Access by their organisation's publishing house/entity, 40.0% (n=2) noted a slight increase, while another 40.0% (n=2) reported no changes. For the number of manuscripts submitted by authors for review (popularity of journals), 50.0% (n=2) observed no changes, while 25.0% (n=1) reported both a slight increase and decrease. Concerning the amount of revenue generated from users/readers accessing their journals, 100% (n=3) reported no changes. No RPOs indicated a strong increase or decrease in any of the mentioned categories.

Due to small numbers, Figure 163 does not provide the shares of the responses but rather the total number of responses.

**Figure 163. Impact of SPR provisions in Belgium**




*Source: Compiled by the study team using data from the RPO survey, in the survey question was, "In your opinion, did the Secondary Publication Right provisions in Belgium increase or decrease the following?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 183 indicates the total count for each of the options.

**Table 183. Impact of SPR provisions in Belgium**

| | Strongly increased | Strongly decreased | Slightly increased | Slightly decreased | No changes | Total |
|---|---|---|---|---|---|---|
| Share of research publications published in Open Access by your organisation's publishing house/entity | 2 (40.0%) | 0 (0.0%) | 1 (20.0%) | 0 (0.0%) | 2 (40.0%) | 5 |
| Number of manuscripts submitted by authors for review (i.e. popularity of your journals) | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| Amount of revenue generated from users/readers accessing your journals | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 3 (100.0%) | 3 |

*Source: Compiled by the study team using data from the RPO survey, in the survey question was "In your opinion, did the Secondary Publication Right provisions in Belgium increase or decrease the following?"*

## Data-related questions (RPOs)

The section of the RPO survey focusing on data and digital legislation received 450 responses. This encompassed 441 (98.0%) complete responses and 9 (2.0%) partial responses. This signifies that RPOs either completed the entire set of questions related to data and digital legislation or omitted only 9 questions within the data and digital legislation section.

### Introduction

**Table 184. Overview of survey responses (n=450)**

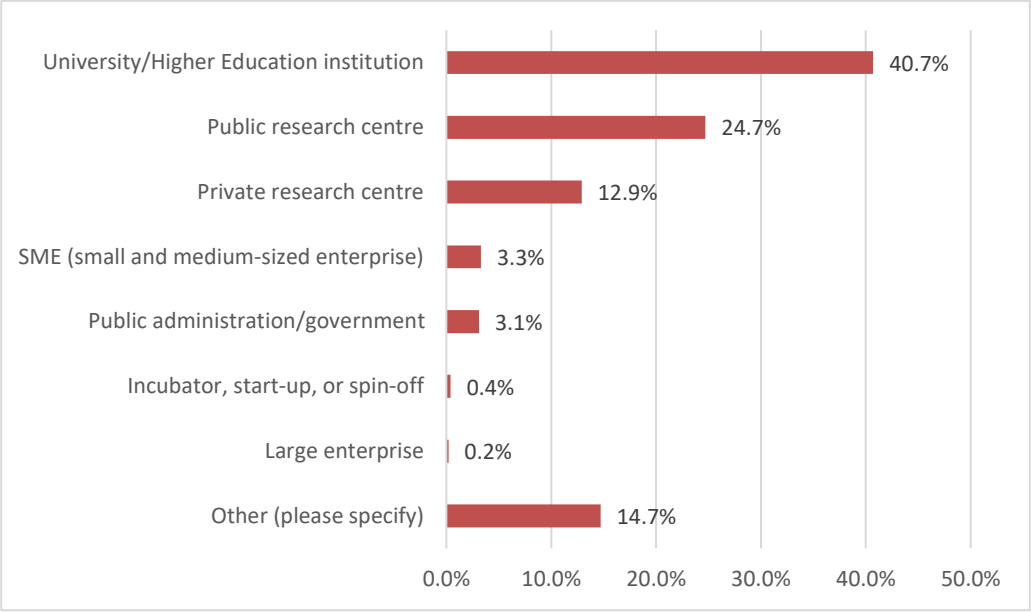
| | Share | Count |
|---|---|---|
| Complete | 98.0% | 441 |
| Partial | 2.0% | 9 |
| Total | 100% | 450 |

*Source: Compiled by the study team using data from the RPO survey.*

### QUESTION 3: Please indicate the type of organisation you are representing

The surveyed RPOs represented a diverse range of organisations, with the majority (40.7%) affiliating with universities and higher education institutions. Public research centres accounted for 24.7% of the RPOs, while private research centres comprised 12.9%. Public administration or government entities constituted 3.1%, SMEs (small and medium-sized enterprises) made up 3.3%, and incubators, start-ups, or spin-offs were represented by 0.4%. Large enterprises were a minor fraction at 0.2%. Additionally, 14.7% fell under the category of 'other'.

**Figure 164. The organisational affiliation of the RPO representatives (n=450)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 185. The organisational affiliation of the RPOs' representatives (n=450)**

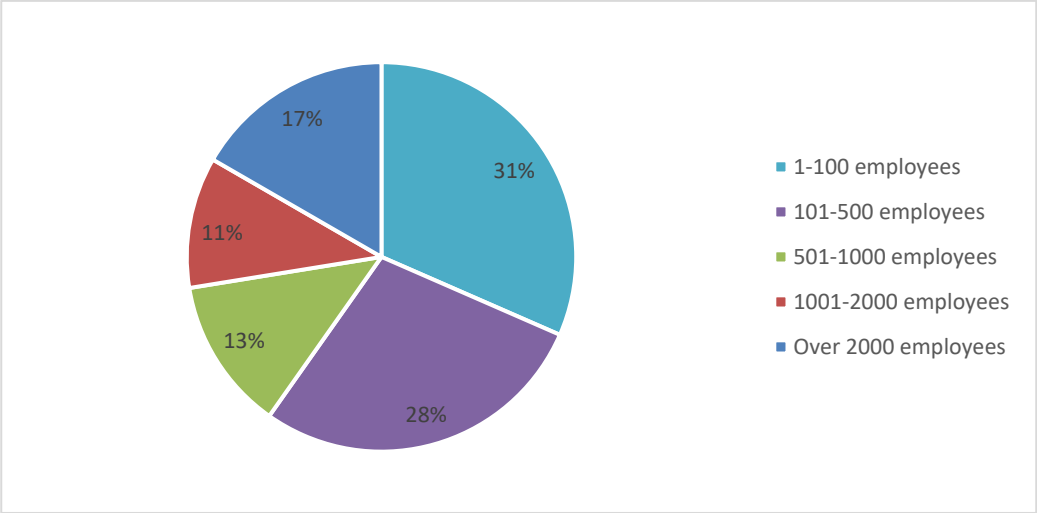
| | Share | Count |
|---|---|---|
| Other (please specify) | 14.7% | 66 |
| Large enterprise | 0.2% | 1 |
| Incubator, start-up, or spin-off | 0.4% | 2 |
| Public administration/government | 3.1% | 14 |
| SME (small and medium-sized enterprise) | 3.3% | 15 |
| Private research centre | 12.9% | 58 |
| Public research centre | 24.7% | 111 |
| University/Higher Education institution | 40.7% | 183 |
| Total | 100% | 450 |

*Source: Compiled by the study team using data from the RPO survey.*

### QUESTION 4: What is the size of your organisation?

The survey captured a varied distribution of organisational sizes among RPOs, with 31.6% representing organisations with 1-100 employees and 28.2% falling in the bracket of 101-500 employees. The category of 501-1000 employees accounted for 12.7%, while 1001-2000 employees constituted 10.9%. The largest organisations, those with over 2000 employees, made up 16.7% of the RPOs pool. This distribution reflects a diverse range of organisational sizes among those surveyed.

**Figure 165. The size of the surveyed RPOs (n=450)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 186. The size of the surveyed RPOs (n=450)**

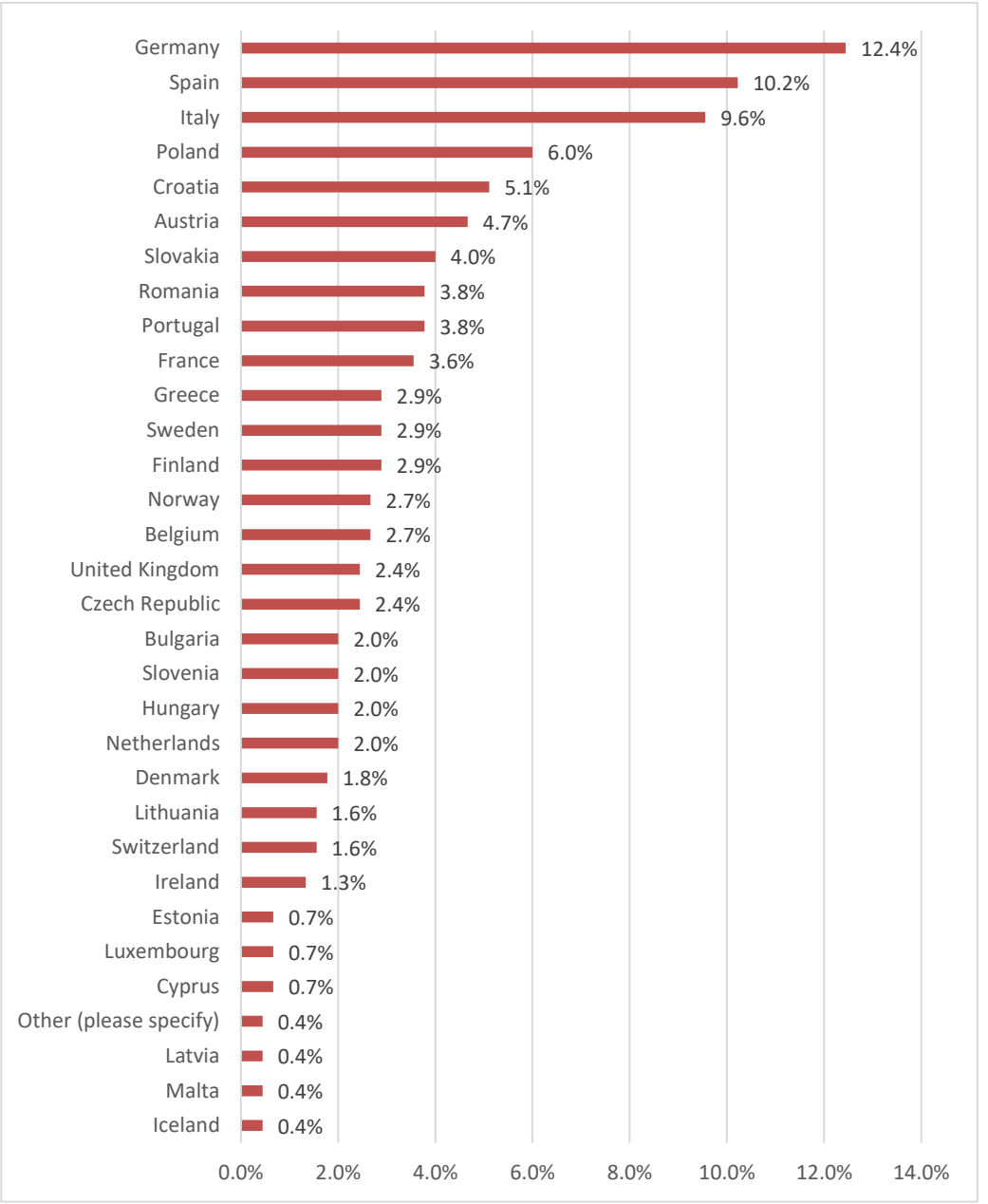
| | Share | Count |
|---|---|---|
| 1-100 employees | 31.6% | 142 |
| 101-500 employees | 28.2% | 127 |
| 501-1000 employees | 12.7% | 57 |
| 1001-2000 employees | 10.9% | 49 |
| Over 2000 employees | 16.7% | 75 |
| Total | 100% | 450 |

*Source: Compiled by the study team using data from the RPO survey.*

### QUESTION 5: In which country is the organisation that you represent established?

The surveyed RPOs represent a diverse range of countries, with Germany leading at 12.4%, followed by Spain (10.2%) and Italy (9.6%). Poland, Croatia, and Austria each contribute around 5.0% of the RPOs. The survey also includes responses from various other European countries, with varying percentages, showcasing a broad geographical representation among the organisations surveyed.

**Figure 166. Country of the surveyed RPOs (n=450)**




*Source: Compiled by the study team using data from the RPO survey.*

**Table 187. Country of the surveyed RPOs (n=450)**

| | Share | Count |
|---|---|---|
| Germany | 12.4% | 56 |
| Spain | 10.2% | 46 |
| Italy | 9.6% | 43 |
| Poland | 6.0% | 27 |
| Croatia | 5.1% | 23 |
| Austria | 4.7% | 21 |
| Slovakia | 4.0% | 18 |
| Portugal | 3.8% | 17 |
| Romania | 3.8% | 17 |
| France | 3.6% | 16 |
| Finland | 2.9% | 13 |
| Sweden | 2.9% | 13 |
| Greece | 2.9% | 13 |
| Belgium | 2.7% | 12 |
| Norway | 2.7% | 12 |
| Czechia | 2.4% | 11 |
| United Kingdom | 2.4% | 11 |
| Netherlands | 2.0% | 9 |
| Hungary | 2.0% | 9 |
| Slovenia | 2.0% | 9 |
| Bulgaria | 2.0% | 9 |
| Denmark | 1.8% | 8 |
| Switzerland | 1.6% | 7 |
| Lithuania | 1.6% | 7 |
| Ireland | 1.3% | 6 |
| Cyprus | 0.7% | 3 |
| Luxembourg | 0.7% | 3 |
| Estonia | 0.7% | 3 |
| Iceland | 0.4% | 2 |
| Malta | 0.4% | 2 |
| Latvia | 0.4% | 2 |
| Other (please specify) | 0.4% | 2 |
| Total | 100% | 450 |

*Source: Compiled by the study team using data from the RPO survey.*

### QUESTION 65: Would you have any specific reservations about the Secondary Publication Right provisions in your country, considering your position as a publishing house/entity?

This question was administered only to RPOs in the five countries with SPR. This open-ended question obtained 143 responses. The overview here below summarises the main inputs received.

**Table 188. Specific reservations about the SPR provisions from the publishing house/entity position**

| No Reservations or Positive Response | Concerns or Specific Conditions | Not Applicable or Lack of Relevance | Uncertainty or Lack of Clarity |
|---|---|---|---|
| **No Objections:** Many RPOs expressed no concerns or reservations regarding the proposed change. Open Access Publishers: Organisations already engaged in Open Access publishing did not see this change affecting them. Support for Open Science: Some RPOs welcomed the idea, emphasising the importance of Open Science and freely accessible knowledge.<br><br>**Not Aware/Not Enough Information:** A few indicated a lack of knowledge about the subject or insufficient information to form an opinion. | **Financial Implications:** Concerns about potential financial impact on revenue streams or increased administrative burdens were highlighted.<br><br>**Need for Prior Agreement/Consent:** Several organisations expressed the need for prior consent or agreement before any publishing model change.<br><br>**Specific Conditions for Implementation:** Some suggested specific conditions for implementation, such as employing professional editors or the need for wider discussions within the organisation.<br><br>**Open Access Publishers:** Organisations already engaged in Open Access publishing did not see this change affecting them. | **Not Applicable Situations:** Certain organisations mentioned the irrelevance of this change due to their existing publishing models or specific niche focuses. | **Uncertain/Don't Know:** A few RPOs expressed uncertainty or indicated they did not have enough information about the proposed change. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Would you have any specific reservations about the Secondary Publication Right provisions in your country, considering your position as a publishing house/entity?"*

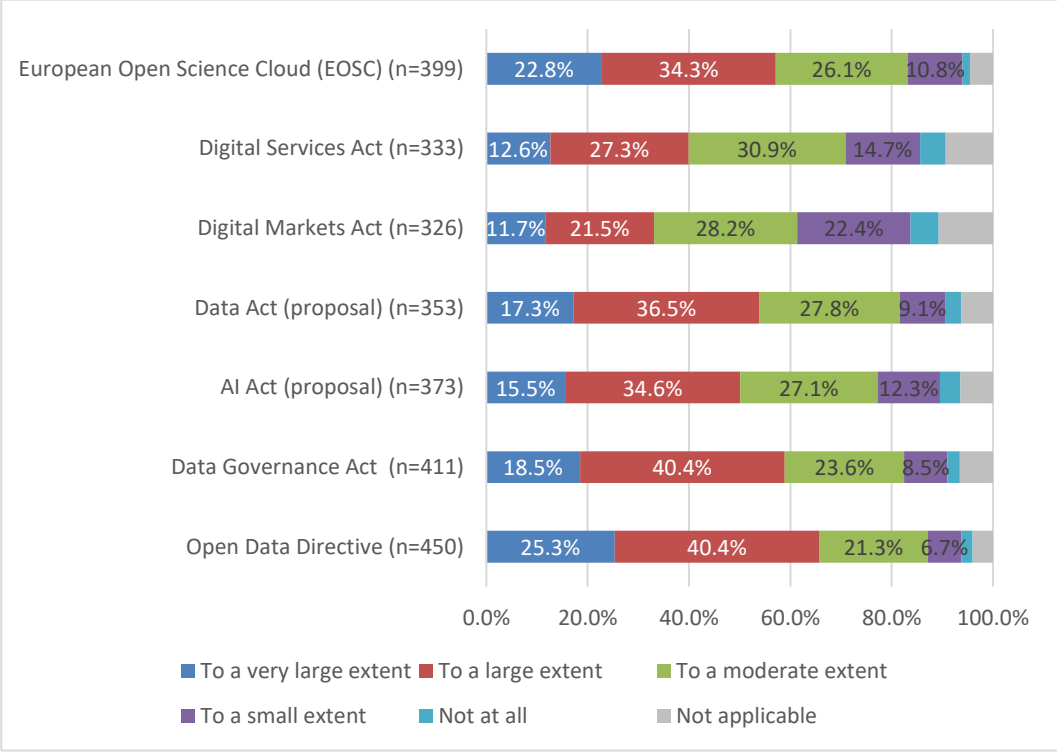
Overall, the majority expressed no reservations or were supportive of the proposed changes, especially those already engaged in Open Access publishing. However, concerns were raised regarding financial implications, the need for prior consent, or specific conditions for implementation. Some RPOs lacked clarity or sufficient information to form a definitive opinion.

### QUESTION 66: To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect research at your organisation in the next few years?

The RPOs anticipate a significant impact from various EU laws and frameworks on research activities in the coming years. The Open Data Directive is expected to influence research to a very large extent or to a large extent, with 65.7% expressing this view. Similarly, the Data Governance Act is foreseen to have an impact by 58.9%. The AI Act (proposal) and the Data

Act (proposal) are also expected to influence research, with 50.1% and 53.8%, respectively, indicating a very large extent or a large extent. The Digital Services Act and Digital Markets Act are anticipated to have varying impacts, with 39.9% foreseeing a very large effect or a large effect for the Digital Services Act and 33.2% for the Digital Markets Act. The European Open Science Cloud (EOSC) is expected to play a role, with 57.1% expressing that it will have a very large or large impact on research at their organisations.

**Figure 167. Expected impact of EU and national laws/framework on research at RPOs**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect research at your organisation in the next few years?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 189 indicates the total count for each of the options.

**Table 189. Expected impact of EU and national laws/framework on research at RPOs**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive (n=450) | 25.3% | 40.4% | 21.3% | 6.7% | 2.2% | 4.0% | 450 |
| Data Governance Act (n=411) | 18.5% | 40.4% | 23.6% | 8.5% | 2.4% | 6.6% | 411 |
| AI Act (proposal) (n=373) | 15.5% | 34.6% | 27.1% | 12.3% | 4.0% | 6.4% | 373 |
| Data Act (proposal) (n=353) | 17.3% | 36.5% | 27.8% | 9.1% | 3.1% | 6.2% | 353 |
| Digital Markets Act (n=326) | 11.7% | 21.5% | 28.2% | 22.4% | 5.5% | 10.7% | 326 |
| Digital Services Act (n=333) | 12.6% | 27.3% | 30.9% | 14.7% | 5.1% | 9.3% | 333 |
| European Open Science Cloud (EOSC) (n=399) | 22.8% | 34.3% | 26.1% | 10.8% | 1.5% | 4.5% | 399 |

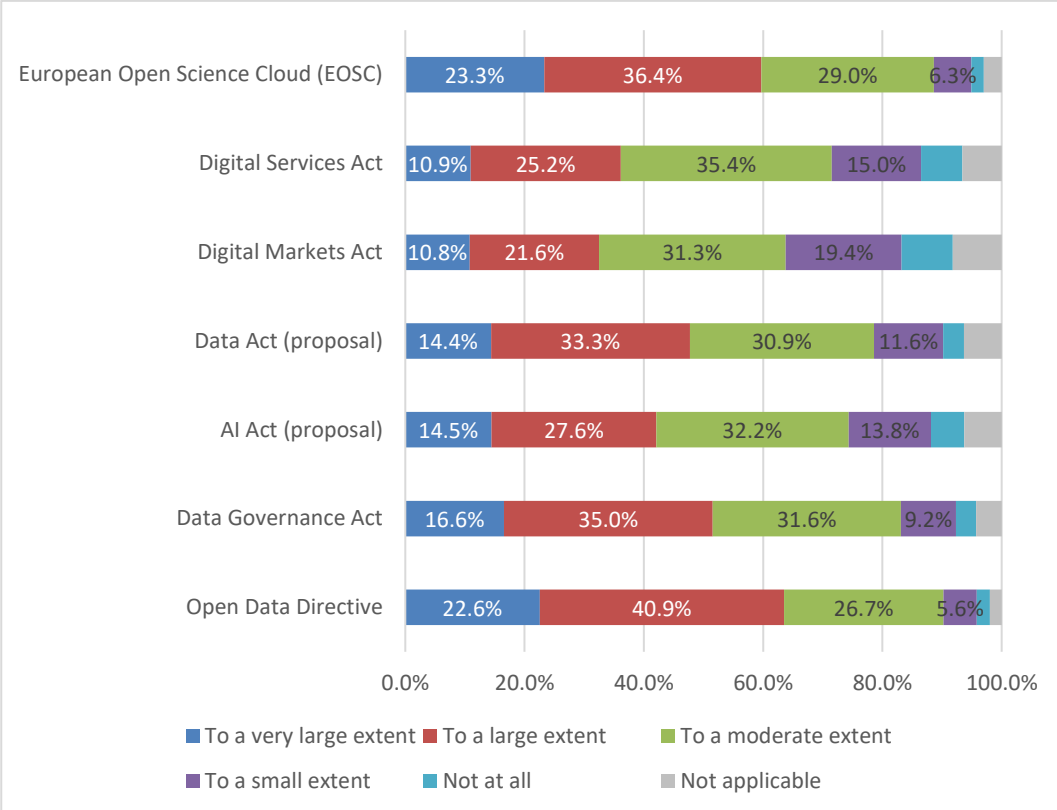
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect research at your organisation in the next few years?"*

### QUESTION 67: To what extent does your organisation (expect to) benefit from the following laws and framework?[1761]

RPOs anticipate varying degrees of benefit from EU laws and frameworks. The Open Data Directive is expected to benefit organisations to a very large or large extent, with 63.5% expressing this perspective. The Data Governance Act is foreseen to bring benefits, with 51.6% indicating a very large or large extent. The AI Act and the Data Act are also expected to be beneficial, with 42.1% and 47.7%, respectively, foreseeing a very large or large extent. Meanwhile, the Digital Services Act and Digital Markets Act are anticipated to provide benefits, with 36.1% expressing a very large or large extent for the Digital Services Act and 32.4% for the Digital Markets Act. The European Open Science Cloud (EOSC) is perceived as highly beneficial, with 59.7% expecting a very large or large benefits for their organisations.

1761 Some questions have only been asked to the respondents who answered "to a moderate/large/very large extent" to Question 66.

**Figure 168. The extent to which RPOs benefit from laws and frameworks**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 190 indicates the total count for each of the options.

**Table 190. The extent to which RPOs benefit from laws and frameworks**

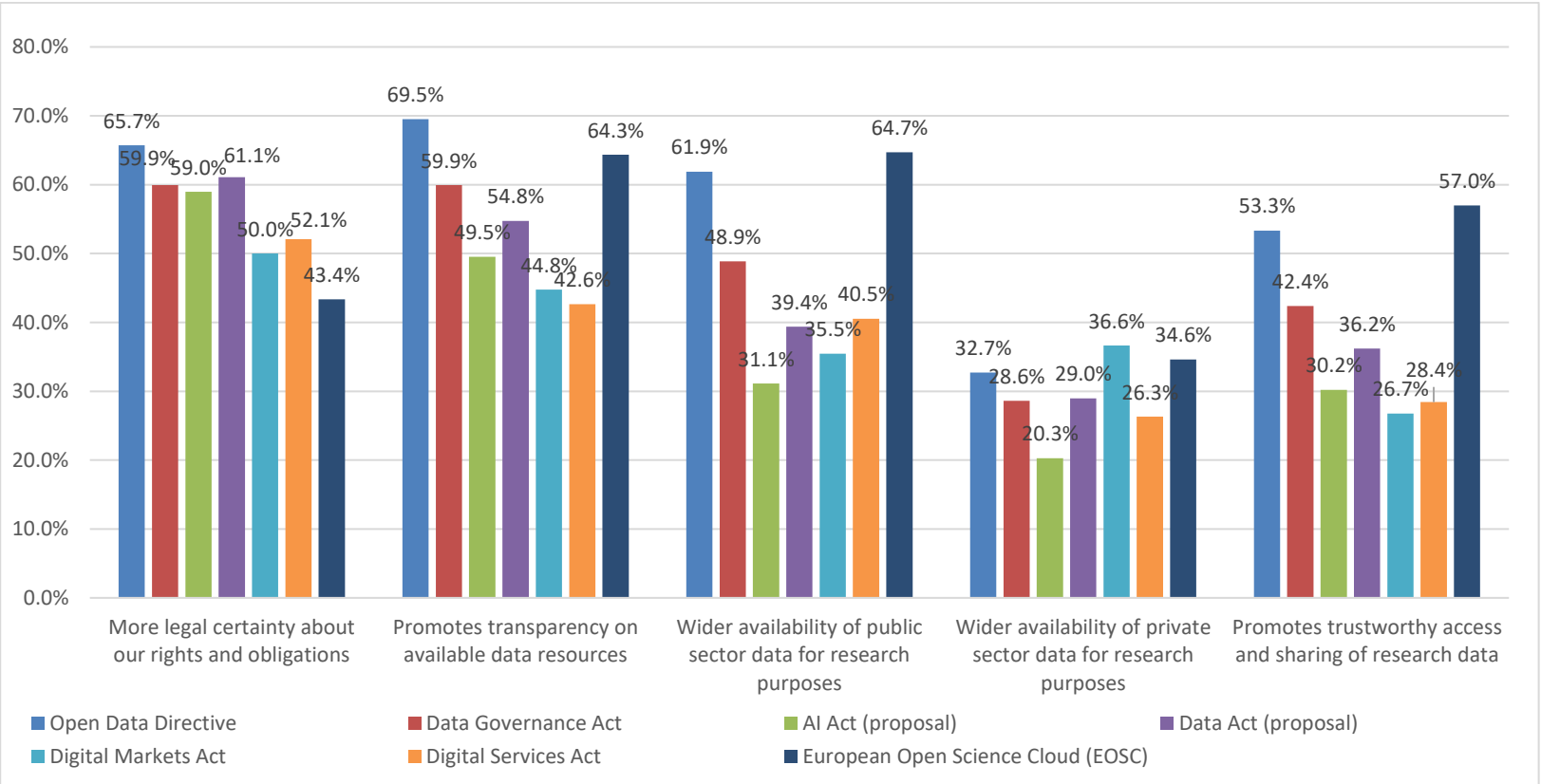
| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 22.6% | 40.9% | 26.7% | 5.6% | 2.2% | 1.9% | 359 |
| Data Governance Act | 16.6% | 35.0% | 31.6% | 9.2% | 3.4% | 4.3% | 326 |
| AI Act (proposal) | 14.5% | 27.6% | 32.2% | 13.8% | 5.6% | 6.3% | 304 |
| Data Act (proposal) | 14.4% | 33.3% | 30.9% | 11.6% | 3.5% | 6.3% | 285 |
| Digital Markets Act | 10.8% | 21.6% | 31.3% | 19.4% | 8.6% | 8.2% | 268 |
| Digital Services Act | 10.9% | 25.2% | 35.4% | 15.0% | 6.9% | 6.6% | 274 |
| European Open Science Cloud (EOSC) | 23.3% | 36.4% | 29.0% | 6.3% | 2.1% | 3.0% | 335 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

### QUESTION 68: What aspects of the laws and framework do you expect or consider to be an opportunity for scientific research?

RPOs foresee several opportunities for scientific research within the EU laws and frameworks. A majority across various regulations highlights expectations of increased legal certainty about rights and obligations, particularly with 65.7% for the Open Data Directive, 59.9% for the Data Governance Act, and 61.1% for the Data Act. Transparency on available data resources is also anticipated, as indicated by 69.5% for the Open Data Directive and 59.9% for the Data Governance Act. Moreover, the wider availability of public sector data for research is viewed positively, with 61.9% for the Open Data Directive and 48.9% for the Data Governance Act. The European Open Science Cloud (EOSC) is seen as an opportunity, with expectations of promoting transparency (64.3%) and wider availability of public sector data (64.7%) and private sector data (57.0%). However, variations exist, with lower percentages for certain aspects, indicating diverse perceptions across the regulations.

**Figure 169. Aspects of laws and frameworks considered as opportunities for scientific research**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What aspects of the laws and framework do you expect or consider to be an opportunity for scientific research?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 191indicates the total count for each of the options.

**Table 191. Aspects of laws and frameworks considered as opportunities for scientific research**

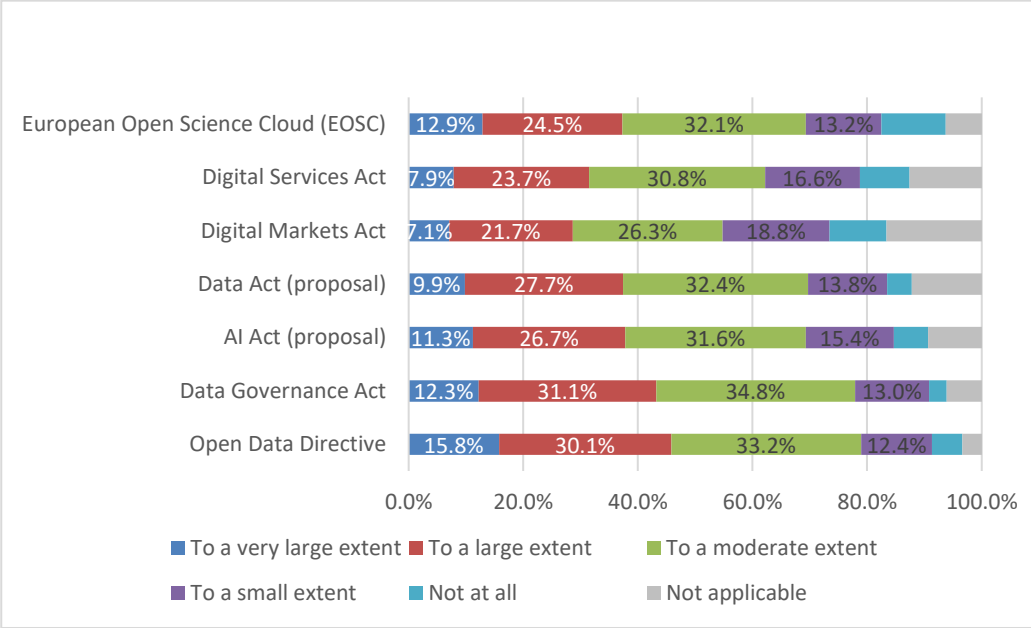
| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data for research purposes | Wider availability of private sector data for research purposes | Promotes trustworthy access and sharing of research data | Total |
|---|---|---|---|---|---|---|
| Open Data Directive | 207 (65.7%) | 219 (69.5%) | 195 (61.9%) | 103 (32.7%) | 168 (53.3%) | 315 |
| Data Governance Act | 157 (59.9%) | 157 (59.9%) | 128 (48.9%) | 75 (28.6%) | 111 (42.4%) | 262 |
| AI Act (proposal) | 125 (59.0%) | 105 (49.5%) | 66 (31.1%) | 43 (20.3%) | 64 (30.2%) | 212 |
| Data Act (proposal) | 135 (61.1%) | 121 (54.8%) | 87 (39.4%) | 64 (29.0%) | 80 (36.2%) | 221 |
| Digital Markets Act | 86 (50.0%) | 77 (44.8%) | 61 (35.5%) | 63 (36.6%) | 46 (26.7%) | 172 |
| Digital Services Act | 99 (52.1%) | 81 (42.6%) | 77 (40.5%) | 50 (26.3%) | 54 (28.4%) | 190 |
| European Open Science Cloud (EOSC) | 124 (43.4%) | 184 (64.3%) | 185 (64.7%) | 99 (34.6%) | 163 (57.0%) | 286 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What aspects of the laws and framework do you expect or consider to be an opportunity for scientific research?"*

**QUESTION 69: To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?**

RPOs anticipate varying degrees of challenges posed by EU laws and frameworks to their organisations. For the Open Data Directive, Data Governance Act, AI Act, Data Act, Digital Markets Act, Digital Services Act, and the European Open Science Cloud (EOSC), the majority generally expects challenges to a moderate extent, ranging from 26.3% to 34.8%. The Digital Services Act and the Data Governance Act have a higher percentage of RPOs (30.8% and 34.8%, respectively), foreseeing challenges to a large extent. However, for all regulations, a considerable percentage believes that challenges will be minimal or non-existent, with percentages ranging from 8.7% to 16.7%.

**Figure 170. The extent to which laws and framework pose challenges to RPOs**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 192 indicates the total count for each of the options.

**Table 192. The extent to which laws and framework pose challenges to RPOs**

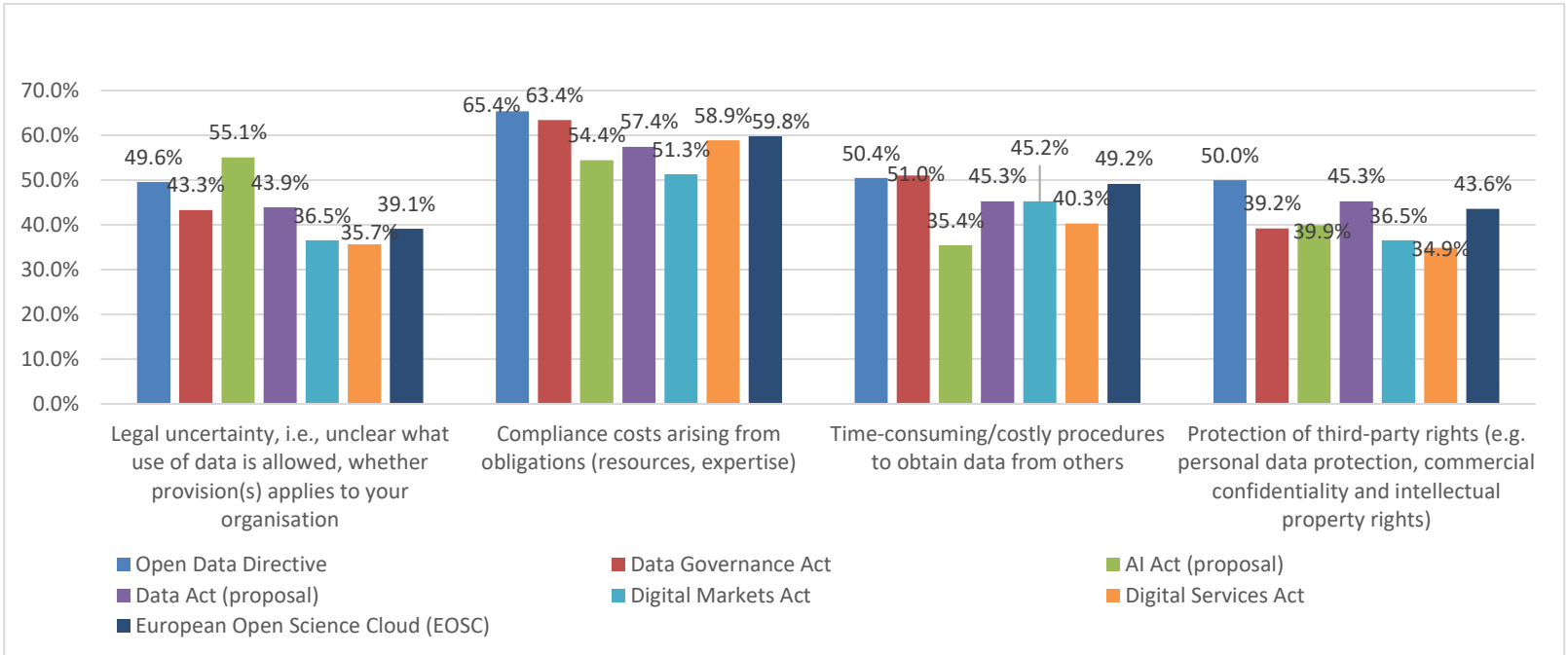
| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 15.8% | 30.1% | 33.2% | 12.4% | 5.3% | 3.4% | 322 |
| Data Governance Act | 12.3% | 31.1% | 34.8% | 13.0% | 3.1% | 6.1% | 293 |
| AI Act (proposal) | 11.3% | 26.7% | 31.6% | 15.4% | 6.0% | 9.4% | 266 |
| Data Act (proposal) | 9.9% | 27.7% | 32.4% | 13.8% | 4.3% | 12.3% | 253 |
| Digital Markets Act | 7.1% | 21.7% | 26.3% | 18.8% | 10.0% | 16.7% | 240 |
| Digital Services Act | 7.9% | 23.7% | 30.8% | 16.6% | 8.7% | 12.6% | 253 |
| European Open Science Cloud (EOSC) | 12.9% | 24.5% | 32.1% | 13.2% | 11.3% | 6.3% | 302 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

### QUESTION 70: What aspects of the laws and framework (are expected to) pose challenges for your organisation the most? (Select all that apply).

RPOs expressed concerns about various aspects of EU laws and frameworks. Across all regulations, legal uncertainty is a common worry, with percentages ranging from 35.4% (AI Act) to 55.1% (Open Data Directive). Compliance costs associated with fulfilling obligations are also a concern, particularly for the Data Governance Act (63.4%) and the European Open Science Cloud (EOSC) (59.8%). Time-consuming and costly procedures to obtain data from others pose challenges, with percentages ranging from 40.3% (Digital Services Act) to 51.0% (Data Governance Act). Additionally, the protection of third-party rights, including personal data protection and intellectual property rights, is seen as challenging, ranging from 34.9% (Digital Services Act) to 50.4% (Open Data Directive).

**Figure 171. Most challenging aspects posed by the law and framework to RPOs**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 156 indicates the total count for each of the options.

**Table 193. Most challenging aspects posed by the law and framework to RPOs**

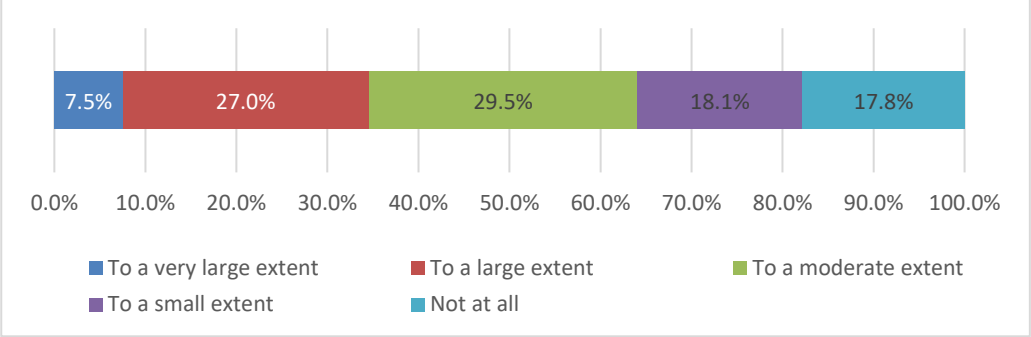
| | Legal uncertainty, i.e. unclear what use of data are allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Total |
|---|---|---|---|---|---|
| Open Data Directive | 49.6% | 65.4% | 50.4% | 50.0% | 228 |
| Data Governance Act | 43.3% | 63.4% | 51.0% | 39.2% | 194 |
| AI Act (proposal) | 55.1% | 54.4% | 35.4% | 39.9% | 158 |
| Data Act (proposal) | 43.9% | 57.4% | 45.3% | 45.3% | 148 |
| Digital Markets Act | 36.5% | 51.3% | 45.2% | 36.5% | 115 |
| Digital Services Act | 35.7% | 58.9% | 40.3% | 34.9% | 129 |
| European Open Science Cloud (EOSC) | 39.1% | 59.8% | 49.2% | 43.6% | 179 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

### QUESTION 71: Does the obligation of Article 10(2) Open data directive to allow the reuse of research data made publicly available in repositories require changes in the way you allow the reuse of research data by others of data produced in your organisation?

The survey indicates that a proportion of RPOs, comprising 7.5% to a very large extent and 27.0% to a large extent, believe that the obligation of Article 10(2) of the Open Data Directive necessitates substantial changes in the way they allow the reuse of research data. Additionally, 29.5% express a moderate extent of impact, while 18.1% see a small extent of required changes. 17.8% consider that no changes are needed in response to this directive.

**Figure 172. Impact of Open Data Directive on data reuse practices (n=281)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Does the obligation of Article 10(2) Open data directive to allow the reuse of research data made publicly available in repositories require changes in the way you allow the reuse of research data by others of data produced in your organisation?"*

**Table 194. Impact of Open Data Directive on data reuse practices (n=281)**

| | Share | Count |
|---|---|---|
| To a very large extent | 7.5% | 21 |
| To a large extent | 27.0% | 76 |
| To a moderate extent | 29.5% | 83 |
| To a small extent | 18.1% | 51 |
| Not at all | 17.8% | 50 |
| Total | 100% | 281 |

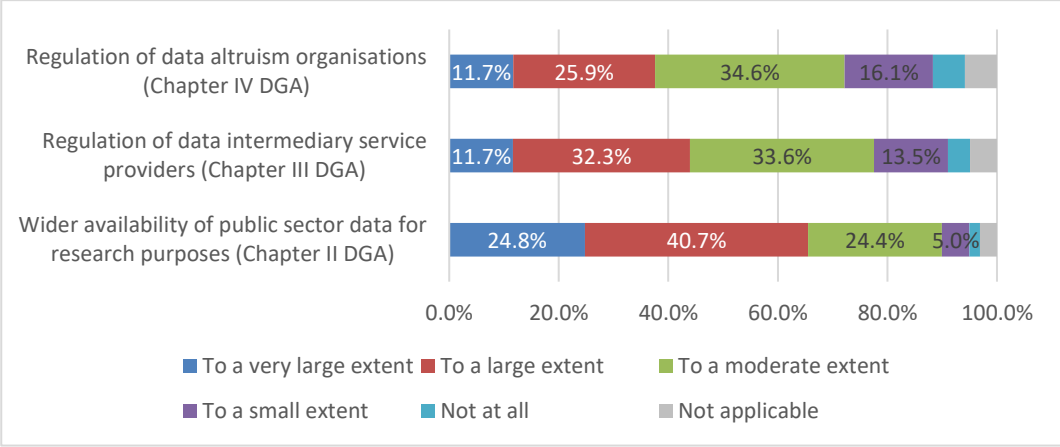
*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Does the obligation of Article 10(2) Open data directive to allow the reuse of research data made publicly available in repositories require changes in the way you allow the reuse of research data by others of data produced in your organisation?"*

### QUESTION 72: How relevant are the following elements of the Data Governance Act (DGA) to your organisation?

The survey reveals varying perceptions among RPOs regarding the relevance of elements in the Data Governance Act (DGA) to their organisations. In response to the wider availability of public sector data for research purposes (Chapter II DGA), 24.8% find it to be of very large relevance, while 40.7% see it as relevant to a large extent. For the regulation of data intermediary service providers (Chapter III DGA), 11.7% find it to be of very large relevance, with 32.3% considering it relevant to a large extent. Regarding the regulation of data altruism organisations (Chapter IV DGA), 11.7% find it to be of very large relevance, and 25.9%

perceive it as relevant to a large extent. These results indicate diverse perspectives on the importance of specific elements within the DGA for different organisations.

**Figure 173. Relevance of the elements of the DGA for RPOs**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "How relevant are the following elements of the Data Governance Act (DGA) to your organisation?"*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 195 indicates the total count for each of the options.

**Table 195. Relevance of the elements of the DGA for RPOs**

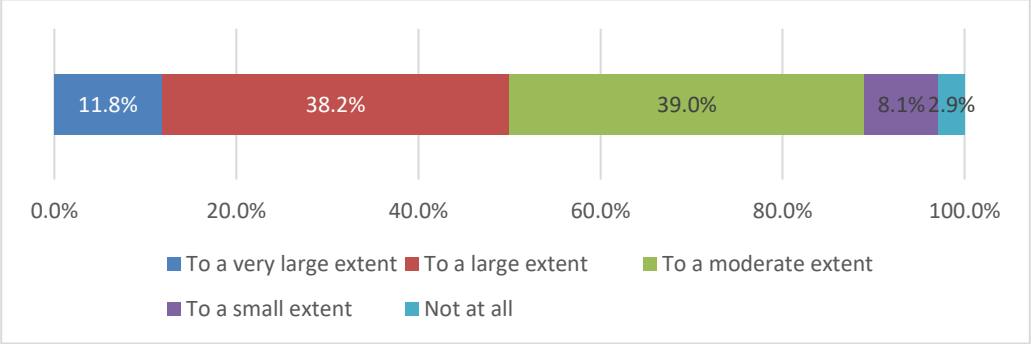
| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Wider availability of public sector data for research purposes (Chapter II DGA) | 24.8% | 40.7% | 24.4% | 5.0% | 1.9% | 3.1% | 258 |
| Regulation of data intermediary service providers (Chapter III DGA) | 11.7% | 32.3% | 33.6% | 13.5% | 4.0% | 4.9% | 223 |
| Regulation of data altruism organisations (Chapter IV DGA) | 11.7% | 25.9% | 34.6% | 16.1% | 5.9% | 5.9% | 205 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "How relevant are the following elements of the Data Governance Act (DGA) to your organisation?"*

### QUESTION 73: To what extent does your organisation expect to make use – through its vetted researchers – of the research data access mechanism introduced by Article 40 DSA (e.g. by supporting researchers in satisfying and proving the requirements to become vetted)

The survey indicates that a large number of RPOs expect their organisations to make use of the research data access mechanism introduced by Article 40 of the Digital Services Act (DSA). Specifically, 11.8% anticipate utilising it to a very large extent, while 38.2% foresee a large extent of utilisation. Additionally, 39.0% expect a moderate extent of use, and only 8.1% anticipate a small extent. A minimal proportion of 2.9% indicated that their organisations do not expect to use this mechanism at all. These results highlight a notable interest and anticipated engagement with the research data access mechanism among surveyed organisations and their vetted researchers.

**Figure 174. Expected utilisation by RPOs of Article 40 DSA on the Research Data Access Mechanism (n=136)**




*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent does your organisation expect to make use – through its vetted researchers - of the research data access mechanism introduced by Article 40 DSA (e.g. by supporting researchers in satisfying and proving the requirements to become vetted)".*

As the question allowed for multiple choices, the overall number of RPOs is not specified. However, Table 196 indicates the total count for each of the options.

**Table 196. Expected utilisation by RPOs of Article 40 DSA on the Research Data Access Mechanism (n=136)**

| | Share | Count |
|---|---|---|
| To a very large extent | 11.8% | 16 |
| To a large extent | 38.2% | 52 |
| To a moderate extent | 39.0% | 53 |
| To a small extent | 8.1% | 11 |
| Not at all | 2.9% | 4 |
| Total | 100% | 136 |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "To what extent does your organisation expect to make use – through its vetted researchers - of the research data access mechanism introduced by Article 40 DSA (e.g. by supporting researchers in satisfying and proving the requirements to become vetted)".*

### QUESTION 74: Would you have to share any other observations that were not covered in this survey?

This open-ended question received 114 responses. A summary of categorised responses is provided in Table 197.

**Table 197. Other observations that were not covered in this survey**

| Policy and Legislative Improvements: | Copyright Framework Harmonisation and Accessibility: | Challenges and Legal Clarity: | Specific Observations and Suggestions: |
|---|---|---|---|
| Some respondents Called for research-centred policymaking, protecting exceptions from contractual and technological overrides, and introducing clear legislation to support education and research. | Advocate for harmonised EU exceptions, clear rules on text and data mining (TDM), and simplification of rights for sharing and reusing content. | Highlight challenges related to unknown copyright owners, data legislation awareness, and the need for clarity in scientific research's legal framework. | Suggestions for improving Open Access, dealing with copyright in digital health and education, concerns about the AI Act's impact, and the call for a more inclusive definition of "reuse" in open data. |

*Source: Compiled by the study team using data from the RPO survey, the question in the survey was "Would you have any other observations that were not covered in this survey to share?"*

## PUBLISHERS' SURVEY

# Copyright

## Status and introduction

The section of the publishers' survey focusing on copyright received a total of 122 replies. This consists of 103 (84.4%) comprehensive responses and 19 (15.6%) partial responses. This implies that publishers either completed the entire set of copyright-related questions, skipped just one question in the copyright section, or offered substantial insights in response to open-ended questions, addressing over 50% of the received questions.

**Table 198. Overview of responses to the publishers' survey (n=122)**

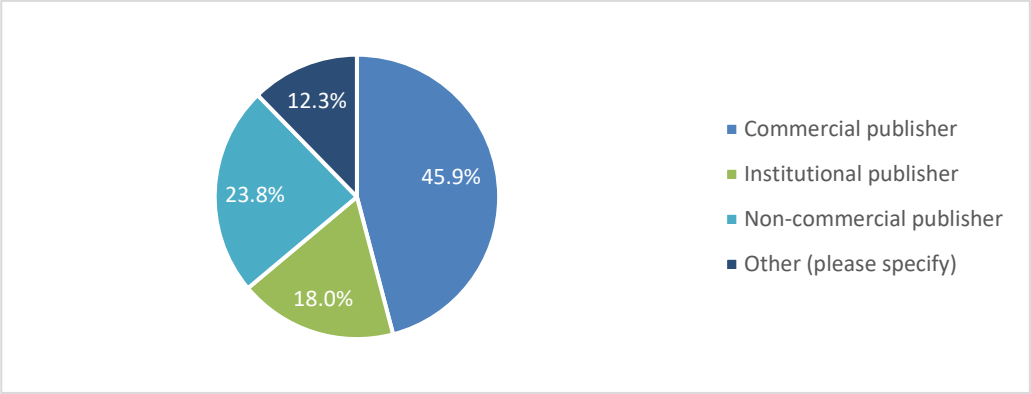
| | Count | Share |
|---|---|---|
| Complete | 103 | 84.4% |
| Partial | 19 | 15.6% |
| Total | 122 | 100% |

*Source: Compiled by the study team using data from the publishers' survey.*

### QUESTION 2: What is the type of your organisation?

In relation to the type of organisation, Figure 175 presents the results. It is evident that a large proportion of publishers belonged to commercial publishers (45.9%), followed by non-commercial publishers (23.8%) and institutional publishers (18.0%). Among publishers who specified an organisation type other than the provided options (n=15), a variety of responses emerged, including university libraries, trade association of publishers, charity, and non-profit publishers.

**Figure 175. Type of publisher (n=122)**




*Source: Compiled by the study team using data from the publishers' survey.*

**Table 199. Type of publisher (n=122)**

| | Count | Share |
|---|---|---|
| Other (please specify) | 15 | 12.3% |
| Institutional publisher | 22 | 18.0% |
| Non-commercial publisher | 29 | 23.8% |
| Commercial publisher | 56 | 45.9% |
| Total | 122 | 100% |

*Source: Compiled by the study team using data from the publishers' survey.*

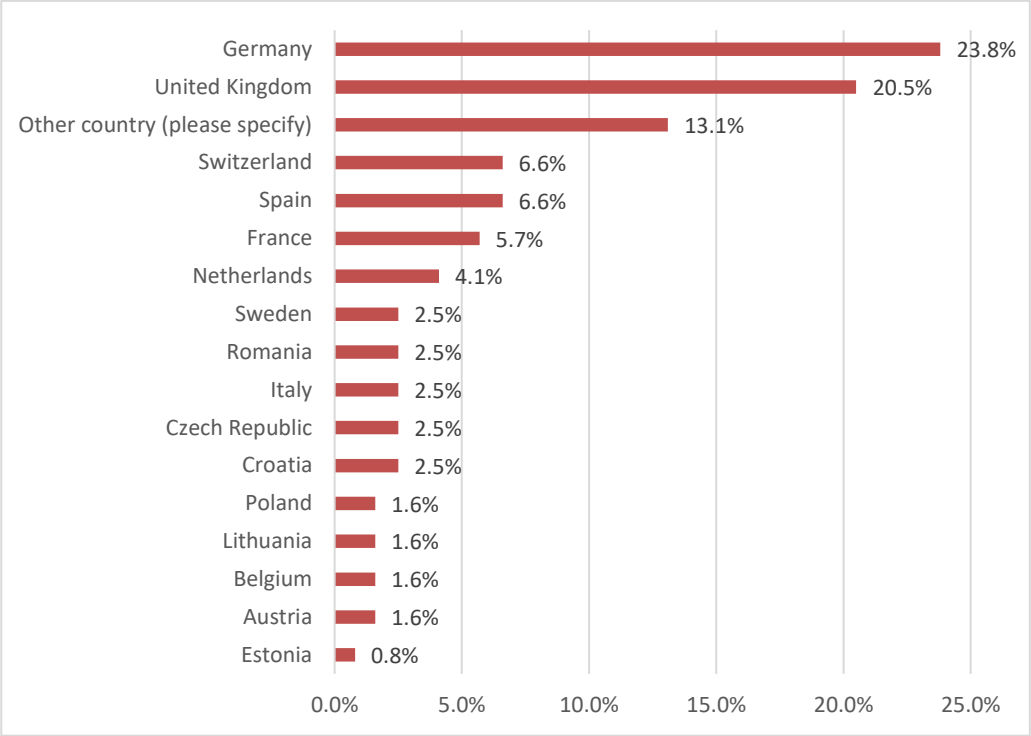
**QUESTION 3:** In which country is the organisation that you represent located?

Regarding the countries in which publishers are established, Figure 175 illustrates the distribution of responses. Germany leads with 23.8% of publishers having completed the survey, closely followed by the United Kingdom at 20.5%. Switzerland and France also feature prominently, accounting for 6.6% and 5.7% of responses, respectively. These figures align with expectations, given that the countries with the highest scientific publication numbers based on 2020 data are the United Kingdom, Germany, Italy and France[1762].

Notably, 13.1% (n=16) of publishers indicated that they represent other countries. Among these, the majority (10) selected the United States, while 5 chose 'global,' and one publisher represented Canada.

1762 https://www.scimagojr.com/countryrank.php?year=2022&order=it&ord=desc

**Figure 176. Country of the surveyed publishers (n=122)**




*Source: Compiled by the study team using data from the publishers' survey.*

**Table 200. Country of the surveyed publishers (n=122)**

| | Count | Share |
|---|---|---|
| Germany | 29 | 23.8% |
| United Kingdom | 25 | 20.5% |
| Other country (please specify) | 16 | 13.1% |
| Spain | 8 | 6.6% |
| Switzerland | 8 | 6.6% |
| France | 7 | 5.7% |
| Netherlands | 5 | 4.1% |
| Croatia | 3 | 2.5% |
| Czechia | 3 | 2.5% |
| Italy | 3 | 2.5% |
| Romania | 3 | 2.5% |
| Sweden | 3 | 2.5% |
| Austria | 2 | 1.6% |
| Belgium | 2 | 1.6% |
| Lithuania | 2 | 1.6% |
| Poland | 2 | 1.6% |
| Estonia | 1 | 0.8% |
| Total | 122 | 100% |

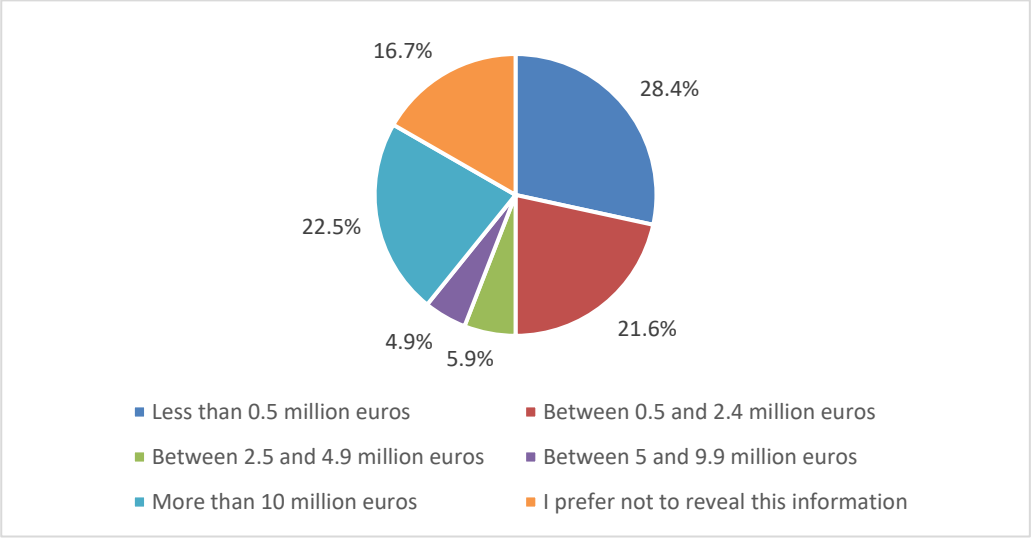
*Source: Compiled by the study team using data from the publishers' survey.*

**QUESTION 4: In 2022, approximately what revenue did you generate from scientific publishing?**

Publishers were surveyed about the revenue generated from scientific publishing in 2022. They were asked to select from five different revenue ranges or to opt not to disclose this information. Subsequently, for questions related to publishers' responses based on revenue, the data are categorised into three sections: low revenue (less than 0.5 million and 2.4 million euro), medium revenue (between 2.5 and 9.9 million euro), and high revenue (more than 10 million euro).

The majority of publishers fell into the low revenue category, with 28.4% reporting revenue less than 0.5 million euro and 21.6% falling in the category ranging between 0.5 and 2.4 million euro. Following this, 22.5% of publishers reported revenues exceeding 10 million euro, while those in the medium revenue range accounted for a total of 10.8%. Additionally, 16.7% of publishers chose not to disclose their revenue information.

**Figure 177. Publishers' revenue generated from scientific publishing (n=102)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In 2022, approximately what revenue did you generate from scientific publishing?"*

**Table 201. Publishers' revenue generated from scientific publishing (n=102)**

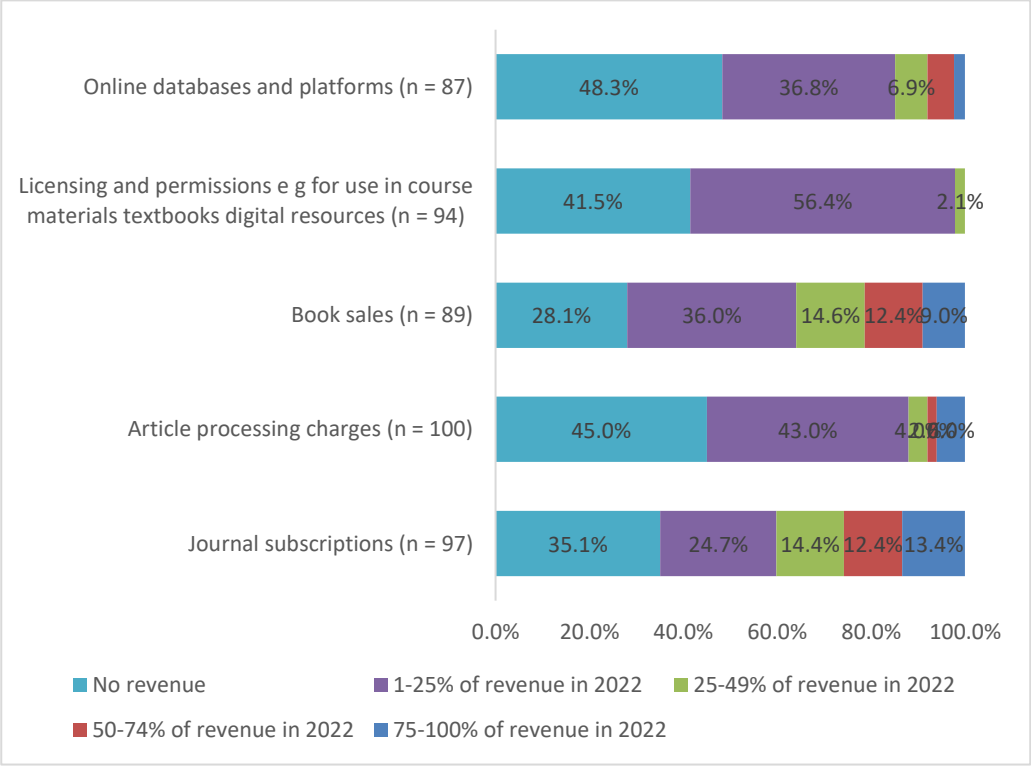
| | Count | Share |
|---|---|---|
| Less than 0.5 million euro | 29 | 28.4% |
| Between 0.5 and 2.4 million euro | 22 | 21.6% |
| Between 2.5 and 4.9 million euro | 6 | 5.9% |
| Between 5 and 9.9 million euro | 5 | 4.9% |
| More than 10 million euro | 23 | 22.5% |
| I prefer not to reveal this information | 17 | 16.7% |
| Total | 102 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In 2022, approximately what revenue did you generate from scientific publishing?"*

**QUESTION 5: Overall, what estimated share of revenue did you generate from the following sources in 2022?**

When publishers were asked about the estimated share of revenue generated from various sources in 2022, they were presented with five options: online databases and platforms, licensing and permissions, book sales, article processing charges, and journal subscriptions. Publishers could select multiple answers, so the total number of responses is not specified overall but is broken down for each option. Figure 178 highlights that book sales emerged as the primary revenue driver, with 9.0% indicating that books constituted 75-100% of their revenue, 12.4% stating it comprised 50-74%, 14.6% falling in the 25-49% range, and 36.0% reporting 1-25%. The second most popular source was journal subscriptions, with 25.8% stating it generated over 50% of revenue and 39.1% contributing 1-49%. Conversely, online databases and platforms (48.3%) and article processing charges (45.0%) were the options where the majority reported no revenue.

**Figure 178. Publishers' estimated share of revenue generated in 2022**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Overall, what estimated share of revenue did you generate from the following sources in 2022?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 202 indicates the total count for each of the options.

**Table 202. Publishers' estimated share of revenue generated in 2022**

| | 75-100% of revenue in 2022 | 50-74% of revenue in 2022 | 25-49% of revenue in 2022 | 1-25% of revenue in 2022 | No revenue | Total |
|---|---|---|---|---|---|---|
| Journal subscriptions | 13 (13.4%) | 12 (12.4%) | 14 (14.4%) | 24 (24.7%) | 34 (35.1%) | 97 |
| Article processing charges | 6 (6.0%) | 2 (2.0%) | 4 (4.0%) | 43 (43.0%) | 45 (45.0%) | 100 |
| Book sales | 8 (9.0%) | 11 (12.4%) | 13 (14.6%) | 32 (36.0%) | 25 (28.1%) | 89 |
| Licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 2 (2.1%) | 53 (56.4%) | 39 (41.5%) | 94 |
| Online databases and platforms | 2 (2.3%) | 5 (5.7%) | 6 (6.9%) | 32 (36.8%) | 42 (48.3%) | 87 |

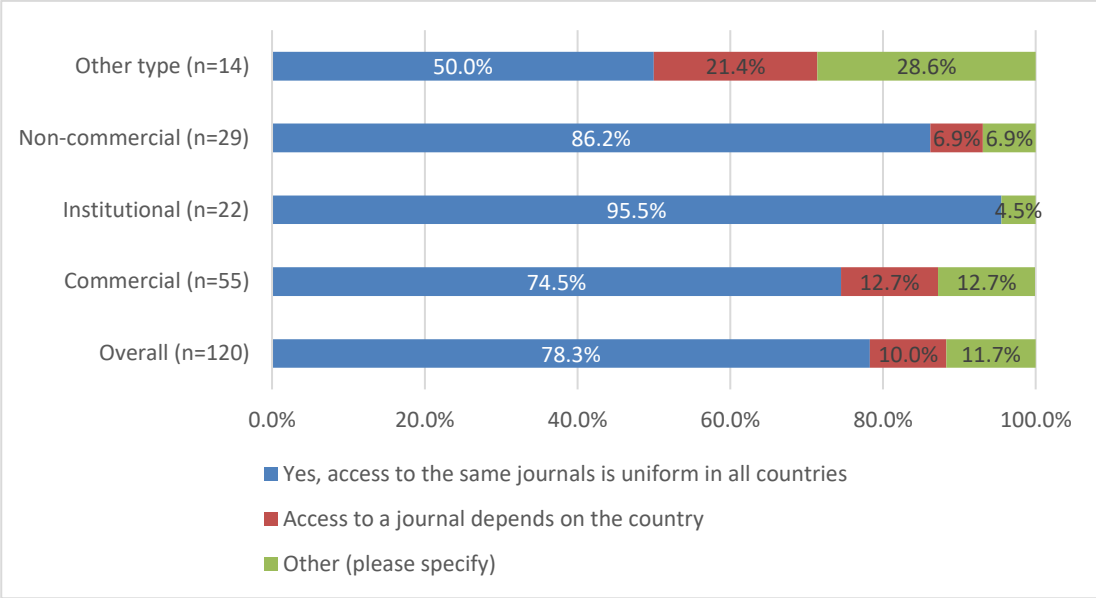
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Overall, what estimated share of revenue did you generate from the following sources in 2022?"*

## QUESTION 6: Is access to your journals uniform in all countries where you offer access to your scientific content?

In response to the inquiry about the uniformity of journal access across countries, publishers were given the option to select multiple answers. While the overall number of responses is not specified, a breakdown for each option is presented. Notably, when looking at the overall result, 78.3% of publishers indicated that access to journals is uniform across all countries, 10.0% mentioned it depends on the country, and 11.7% selected an 'other' option. Among those who chose "other," various responses were provided, including indications that access is global, free access is offered to institutions in 75 countries through an initiative for low and middle-income countries (LMICs), and actual access depends on the customer, journal format, and access model.

When considering different types of publishers, the uniformity of journal access across countries is predominantly provided by institutional publishers (95.5%), followed by non-commercial publishers (86.2%) and commercial publishers (74.5%). Notably, commercial publishers have the highest share (compared to non-commercial and institutional publishers) (12.7%) when access to a journal depends on the country.

**Figure 179. Uniformity of journal access across countries by the type of publisher**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Is access to your journals uniform in all countries where you offer access to your scientific content?"*

**Table 203. Uniformity of journal access across countries by type of publisher**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other type | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| Yes, access to the same journals is uniform in all countries | 94 | 78.3% | 41 | 74.5% | 21 | 95.5% | 25 | 86.2% | 7 | 50.0% |
| Other (please specify) | 14 | 11.7% | 7 | 12.7% | 1 | 4.5% | 2 | 6.9% | 4 | 28.6% |
| Access to a journal depends on the country | 12 | 10.0% | 7 | 12.7% | 0 | 0% | 2 | 6.9% | 3 | 21.4% |
| Total | 120 | 100% | 55 | 100% | 22 | 100% | 29 | 100% | 14 | 100% |

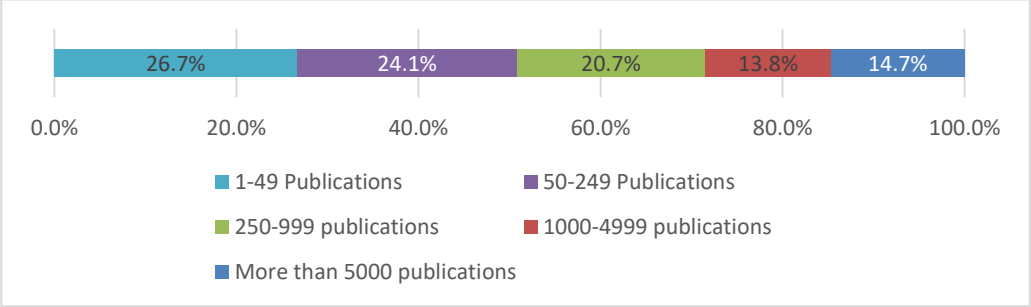
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Is access to your journals uniform in all countries where you offer access to your scientific content?"*

## Your overall publishing model and Open Access policy

### QUESTION 7: How many scientific publications did you publish in 2022?

Regarding the quantity of scientific publications released in 2022, the survey showed that a large share of publishers (26.7%) published 1-49 publications. This was closely followed by 24.1% of publishers who reported publishing 50-249 publications and 20.7% with 250-999 publications. Additionally, 14.7% of publishers indicated that they had an extensive output, exceeding 5 000 publications in 2022, while 13.8% fell within the range of 1 000-4 999 publications.

**Figure 180. Number of scientific publications published by surveyed publishers in 2022 (n=116)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "How many scientific publications did you publish in 2022?"*

**Table 204. Number of scientific publications published by surveyed publishers in 2022 (n=116)**

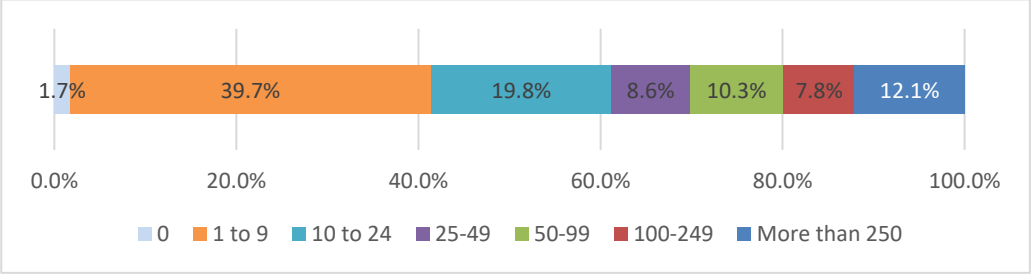
| | Count | Share |
|---|---|---|
| 1000-4999 publications | 16 | 13.8% |
| More than 5000 publications | 17 | 14.7% |
| 250-999 publications | 24 | 20.7% |
| 50-249 Publications | 28 | 24.1% |
| 1-49 Publications | 31 | 26.7% |
| Total | 116 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "How many scientific publications did you publish in 2022?"*

### QUESTION 8: How many scientific journals and/or publishing platforms does your portfolio include?

Regarding the diversity in the number of scientific journals and/or publishing platforms within publishers' portfolios, responses exhibit a wide range. A large share of publishers (39.7%) fall into the smaller category, managing 1 to 9 scientific journals and/or publishing platforms. Following closely, 19.8% of publishers have a moderately sized portfolio comprising 10 to 24 scientific journals and/or platforms. 12.1% of publishers are categorised as large-scale, overseeing more than 250 scientific journals and/or platforms in their portfolio.

**Figure 181. Number of scientific journals and/or publishing platforms included in the portfolio of surveyed publishers (n=116)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "How many scientific journals and/or publishing platforms does your portfolio include?"*

**Table 205. Number of scientific journals and/or publishing platforms included in the portfolio of surveyed publishers (n=116)**

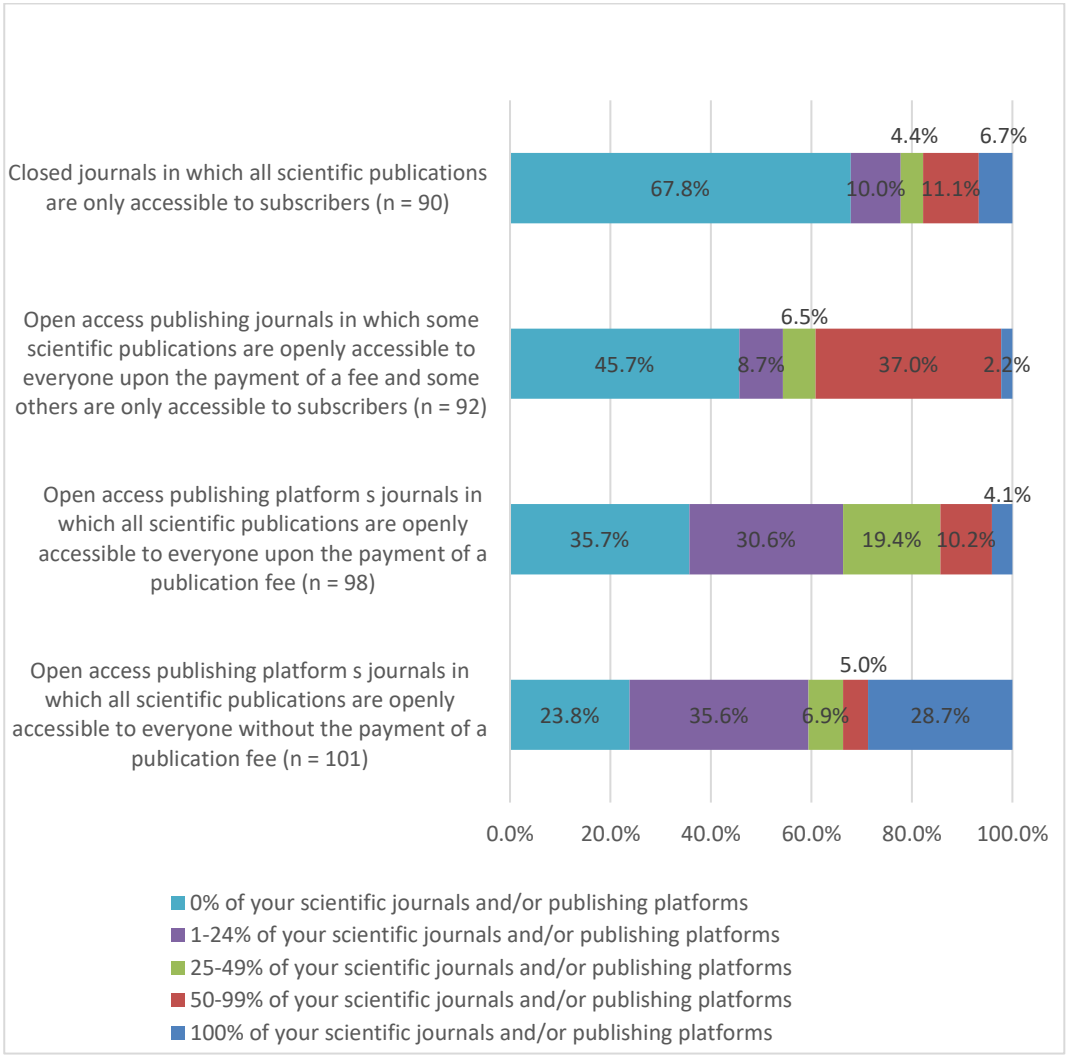
| | Count | Share |
|---|---|---|
| 0 | 2 | 1.7% |
| 1 to 9 | 46 | 39.7% |
| 10 to 24 | 23 | 19.8% |
| 25-49 | 10 | 8.6% |
| 50-99 | 12 | 10.3% |
| 100-249 | 9 | 7.8% |
| More than 250 | 14 | 12.1% |
| Total | 116 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "How many scientific journals and/or publishing platforms does your portfolio include?"*

## QUESTION 9: In the previous question, you indicated that you have at least one scientific journal and/or publishing platform. Could you tell us, out of those, what percentage of them are:

Publishers with at least one scientific journal and/or publishing platform were surveyed regarding the prevalence of Open Access models. The leading model, chosen by 39.2% of publishers, involves making 50% or more of their portfolio openly accessible to everyone upon payment while restricting other content to subscribers. Another model (33.7%) is where over 50% of the portfolio makes all scientific publications openly accessible without a publication fee, with 28.7% of publishers exclusively adopting this approach. Notably, 67.8% of publishers stated that none of their publications follow the closed journal model, where access is restricted to subscribers. Meanwhile, 10.2% have 50-99% of their publications following the closed access model.

**Figure 182. Publishing models used by scientific journals and/or publishing platforms of the surveyed publishers**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In the previous question, you indicated that you have at least one scientific journal and/or publishing platform. Could you tell us, out of those, what percentage of them are:".*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 206. Publishing models used the scientific journals and/or publishing platforms of the surveyed publishers**

| | 0% of your scientific journals and/or publishing platforms | 1-24% of your scientific journals and/or publishing platforms | 25-49% of your scientific journals and/or publishing platforms | 50-99% of your scientific journals and/or publishing platforms | 100% of your scientific journals and/or publishing platforms | Total |
|---|---|---|---|---|---|---|
| Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee | 24 (23.8%) | 36 (35.6%) | 7 (6.9%) | 5 (5.0%) | 29 (28.7%) | 101 |
| Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee | 35 (35.7%) | 30 (30.6%) | 19 (19.4%) | 10 (10.2%) | 4 (4.1%) | 98 |
| Open Access publishing journals in which some scientific publications are openly accessible to everyone upon the payment of a fee, and some others are only accessible to subscribers | 42 (45.7%) | 8 (8.7%) | 6 (6.5%) | 34 (37.0%) | 2 (2.2%) | 92 |
| Closed journals in which all scientific publications are only accessible to subscribers. | 61 (67.8%) | 9 (10.0%) | 4 (4.4%) | 10 (11.1%) | 6 (6.7%) | 90 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In the previous question, you indicated that you have at least one scientific journal and/or publishing platform. Could you tell us, out of those, what percentage of them are:".*

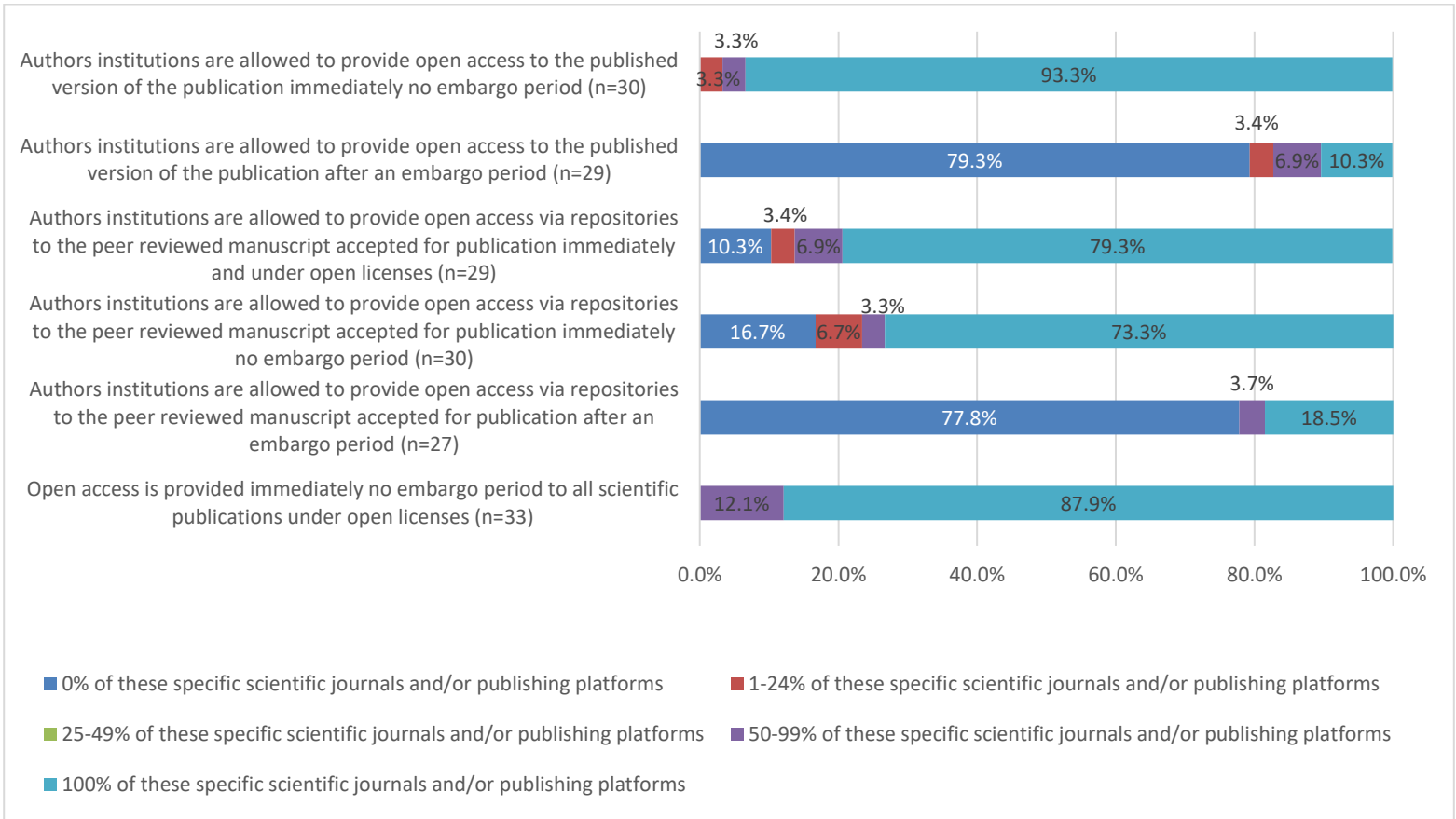
**QUESTION 10: You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which <u>all scientific publications are openly accessible to everyone without the payment of a publication fee.</u> Which of the following provisions apply to <u>these specific journals/and or platforms?</u>**

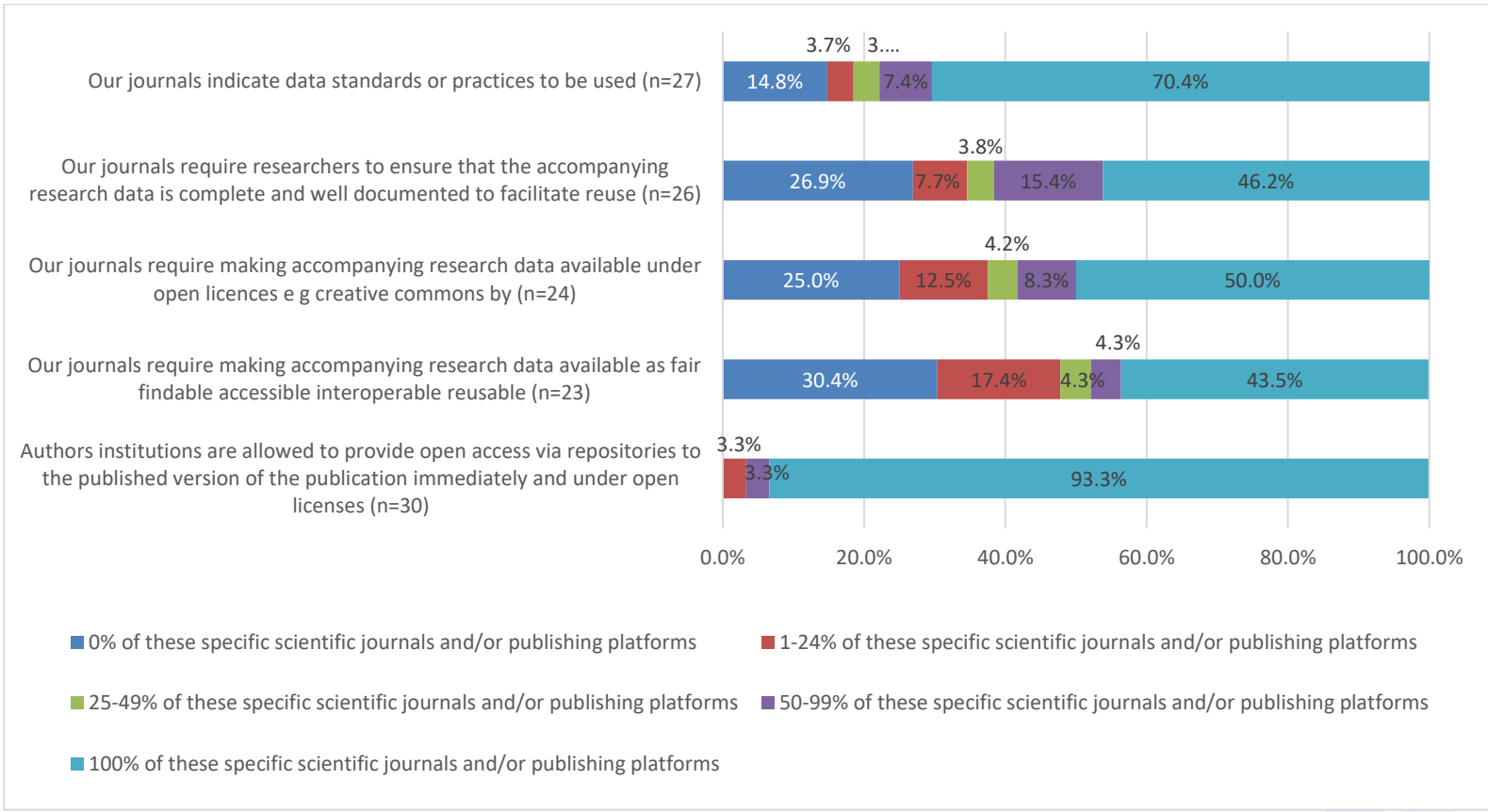
Logic for the question below: question hidden unless question 9 is selected as "50-99%" or "100%: to "Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee".

Publishers whose portfolios include over 50.0% Open Access publishing platforms/journals, where all scientific publications are openly accessible without a publication fee, were surveyed about the provisions applied to these journals and/or platforms. The top three provisions for these specific journals and/or platforms include allowing authors/institutions to provide Open Access to the published version immediately (93.3%), permitting Open Access via repositories to the published version immediately and under open licences (93.3%), and providing Open Access immediately (no embargo period) to all scientific publications under

open licences (87.9%). On the other hand, the least preferred provisions (applied to none of these specific journals and/or publishing platforms) include allowing authors/institutions to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period (77.8%) and allowing Open Access to the published version after an embargo period (79.3%).

**Figure 183. Provisions applying to the Open Access journals/and or platforms of the surveyed publishers**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 207 indicates the total count for each of the options.

**Table 207. Provisions applying to the Open Access journals/and or platforms of the surveyed publishers**

| | 0% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 100% of these specific scientific journals and/or publishing platforms | Total |
|---|---|---|---|---|---|---|
| Open Access is provided immediately (no embargo period) to all scientific publications under open licences | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 4 (12.1%) | 29 (87.9%) | 33 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | 21 (77.8%) | 0 (0.0%) | 0 (0.0%) | 1 (3.7%) | 5 (18.5%) | 27 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | 5 (16.7%) | 2 (6.7%) | 0 (0.0%) | 1 (3.3%) | 22 (73.3%) | 30 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licences | 3 (10.3%) | 1 (3.4%) | 0 (0.0%) | 2 (6.9%) | 23 (79.3%) | 29 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication after an embargo period | 23 (79.3%) | 1 (3.7%) | 0 (0.0%) | 2 (6.9%) | 3 (10.3%) | 29 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication immediately (no embargo period) | 0 (0.0%) | 1 (3.3%) | 0 (0.0%) | 1 (3.3%) | 28 (93.3%) | 30 |
| Authors/institutions are allowed to provide Open Access via repositories to the published version of the publication immediately and under open licences | 0 (0.0%) | 1 (3.3%) | 0 (0.0%) | 1 (3.3%) | 28 (93.3%) | 30 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | 7 (30.4%) | 4 (17.4%) | 1 (4.3%) | 1 (4.3%) | 10 (43.5%) | 23 |
| Our journals require making accompanying research data available under open licences (e.g. Creative Commons By) | 6 (25.0%) | 3 (12.4%) | 1 (4.2%) | 2 (8.3%) | 12 (50.0%) | 24 |
| Our journals require researchers to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 7 (26.9%) | 2 (7.7%) | 1 (3.8%) | 4 (15.4%) | 12 (46.2%) | 26 |
| Our journals indicate data standards or practices to be used | 4 (14.8%) | 1 (3.7%) | 1 (3.7%) | 2 (7.4%) | 19 (70.4%) | 27 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone without the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?"*

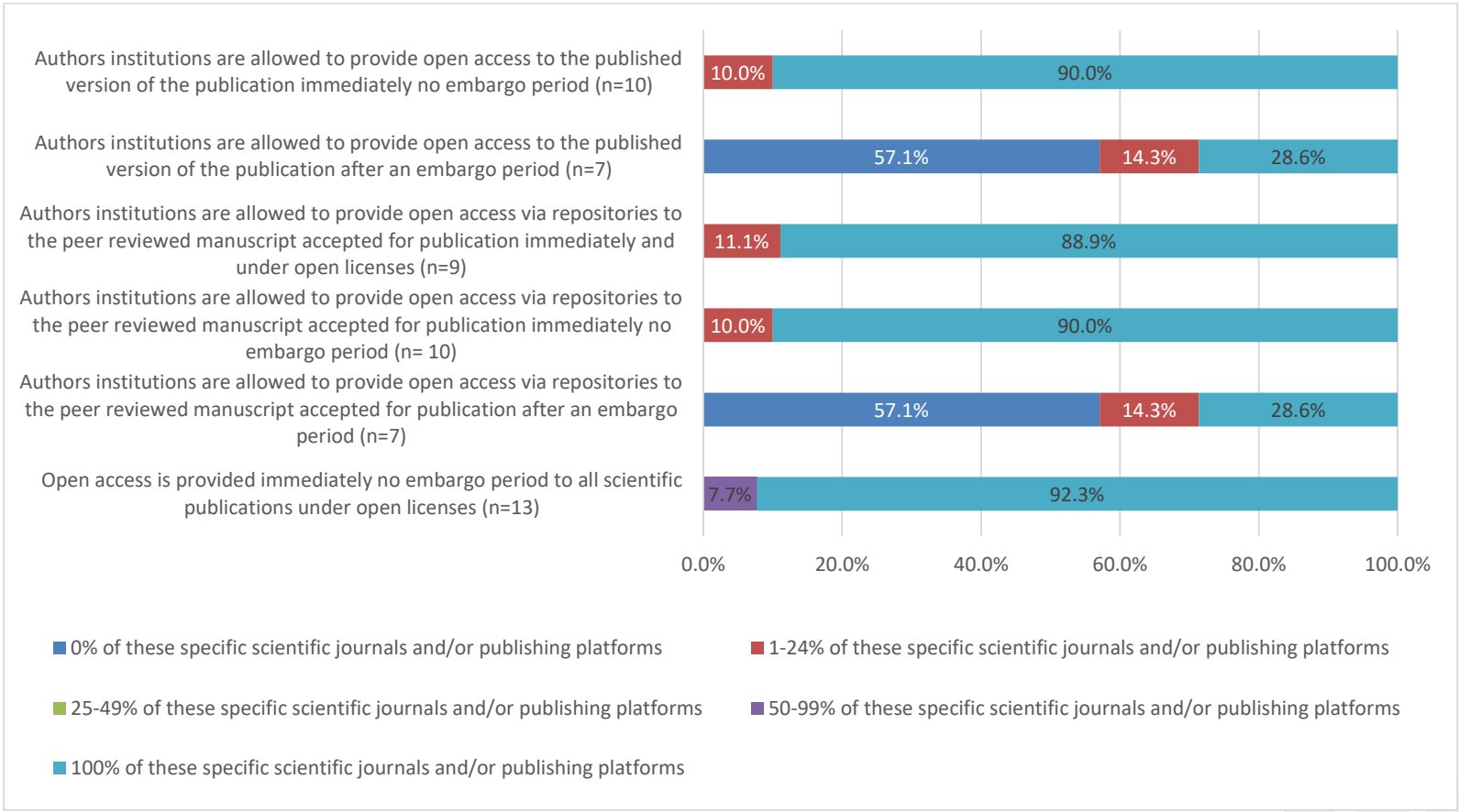
**QUESTION 11: You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?**

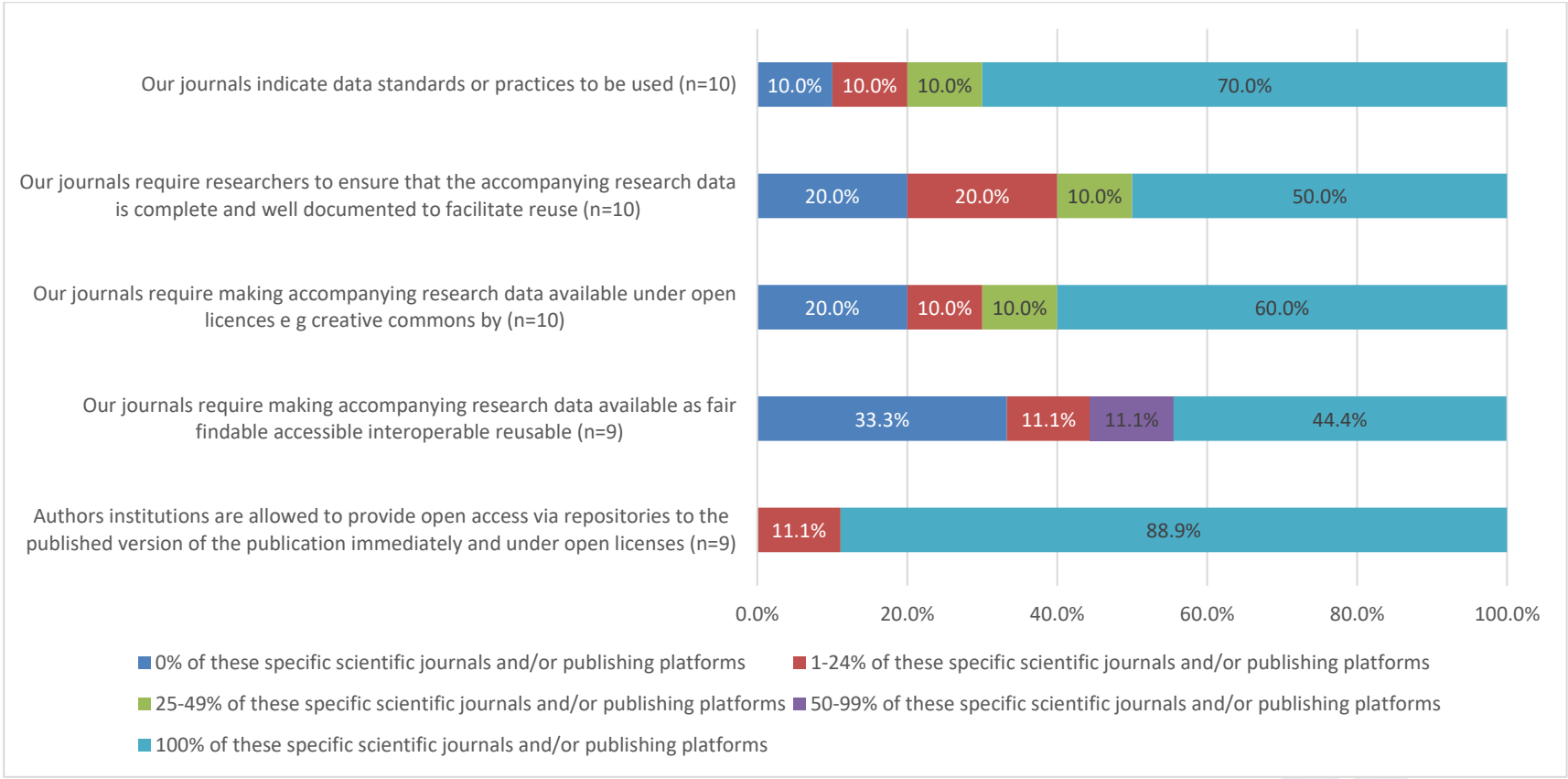
Logic for the question below: question hidden unless question 9 is selected as “50-99%” or “100%: to “Open access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee.”

Publishers whose portfolios include over 50.0% Open Access publishing platforms/journals, where all scientific publications are openly accessible to everyone upon payment of a publication fee, were surveyed regarding the provisions applied to these specific journals and/or platforms. The top five provisions for these publications include allowing authors/institutions to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately (90.0%), permitting Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licences (88.9%), allowing authors/institutions to provide Open Access to the published version of the publication immediately (90.0%), enabling Open Access via repositories to the published version of the publication immediately and under open licences (88.9%), and providing Open Access immediately (no embargo period) to all scientific publications under open licences (92.3%). The least preferred provision, selected by 57.1% of publishers, is that authors/institutions are allowed to provide Open Access to the published version of the publication after an embargo period (applied to 0.0% of these specific journals and/or publishing platforms).

While the total number of responses is unspecified, a detailed breakdown for each option is provided.

**Figure 184. Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100.0% of your portfolio included Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 208 indicates the total count for each of the options.

**Table 208. Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee**

| | 0% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 100% of these specific scientific journals and/or publishing platforms | Total |
|---|---|---|---|---|---|---|
| Open Access is provided immediately (no embargo period) to all scientific publications under open licences | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (7.7%) | 12 (92.3%) | 13 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | 4 (57.1%) | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 2 (28.6%) | 7 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 0 (0.0%) | 9 (90.0%) | 10 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licences | 0 (0.0%) | 1 (11.1%) | 0 (0.0%) | 0 (0.0%) | 8 (88.9%) | 9 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication after an embargo period | 4 (57.1%) | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 2 (28.6%) | 7 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication immediately (no embargo period) | 0 (0.0%) | 1 (10.0%) | 0 (0.0%) | 0 (0.0%) | 9 (90.0%) | 10 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Authors/institutions are allowed to provide Open Access via repositories to the published version of the publication immediately and under open licences | 0 (0.0%) | 1 (11.1%) | 0 (0.0%) | 0 (0.0%) | 8 (88.9%) | 9 |
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | 3 (33.3%) | 1 (11.1%) | 0 (0.0%) | 1 (11.1%) | 4 (44.4%) | 9 |
| Our journals require making accompanying research data available under open licences (e.g. Creative Commons By) | 2 (20.0%) | 1 (10.0%) | 1 (10.0%) | 0 (0.0%) | 6 (60.0%) | 10 |
| Our journals require researchers to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 2 (20.0%) | 2 (20.0%) | 1 (10.0%) | 0 (0.0%) | 5 (50.0%) | 10 |
| Our journals indicate data standards or practices to be used | 1 (10.0%) | 1 (10.0%) | 1 (10.0%) | 0 (0.0%) | 7 (70.0%) | 10 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which all scientific publications are openly accessible to everyone upon the payment of a publication fee. Which of the following provisions apply to these specific journals/and or platforms?"*

**QUESTION 12: You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?**

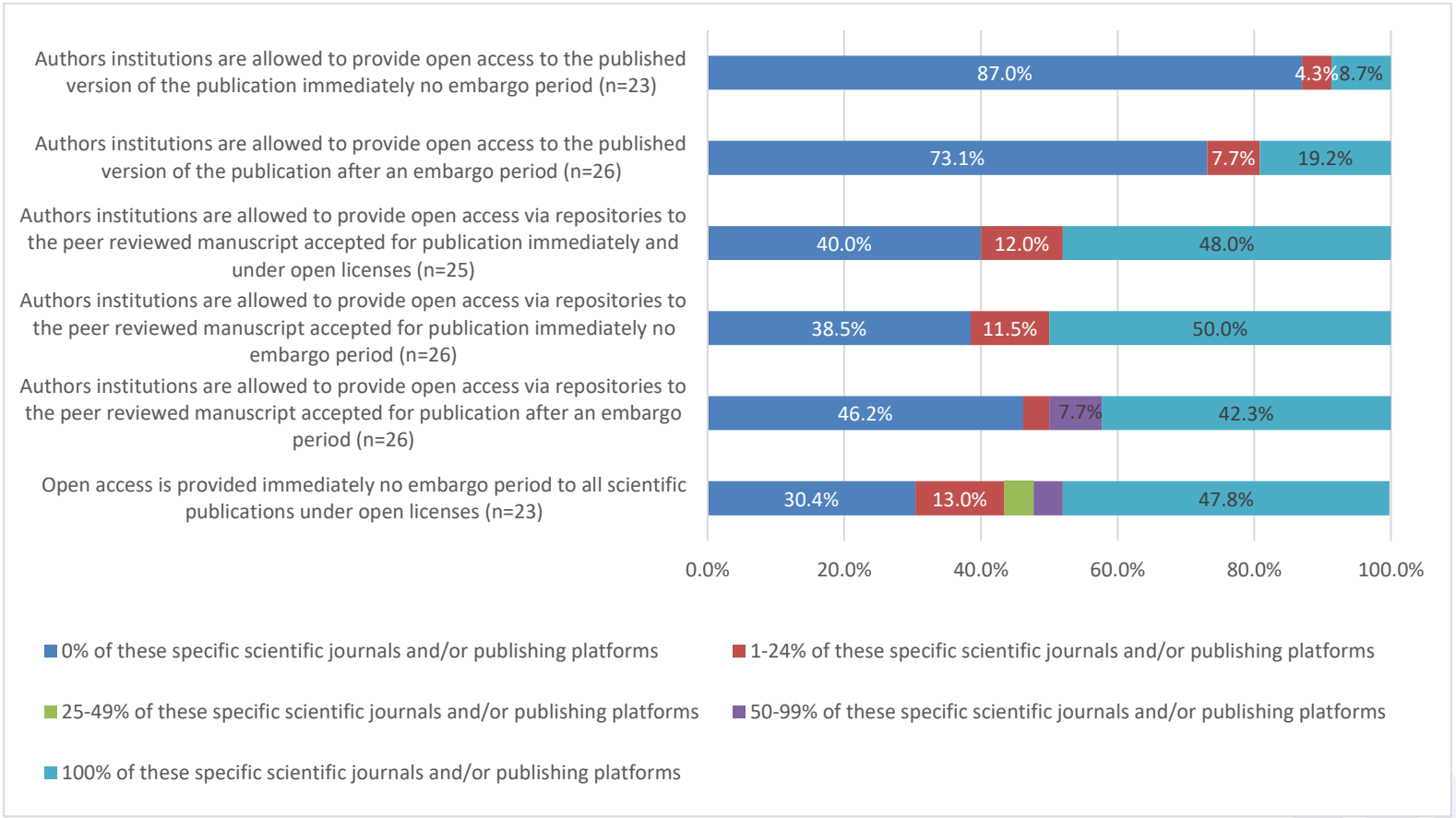
Logic for the question below: question hidden unless question 9 is selected as "50-99%" or "100%: to "Open access publishing journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other are only accessible to subscribers."

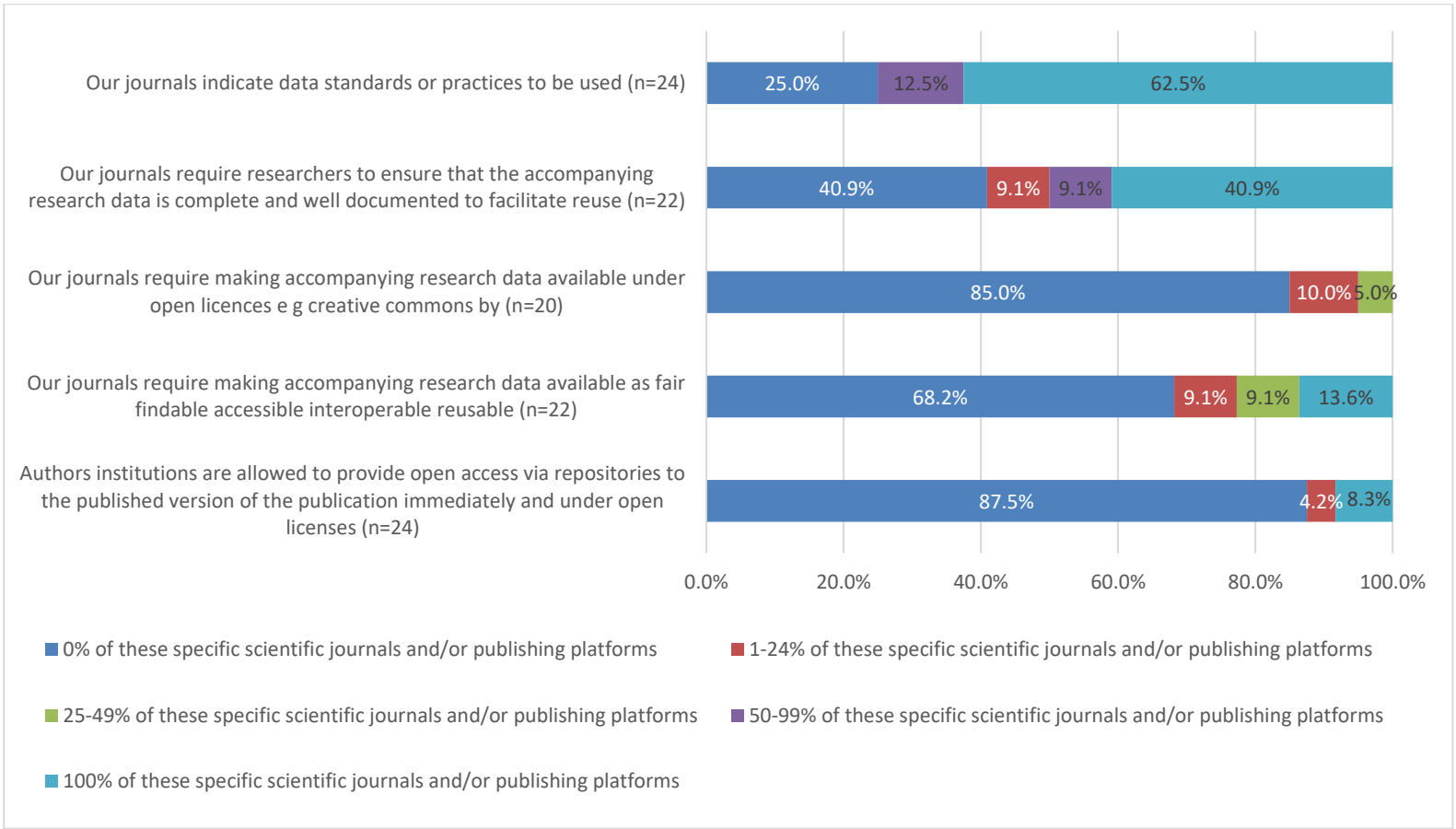
Publishers whose portfolios comprise over 50.0% Open Access publishing platforms/journals, where some scientific publications are openly accessible to everyone upon payment, and others are restricted to subscribers, were surveyed about the provisions applied to these specific journals and/or platforms. The most widely applied provision, employed by 62.5% of publishers for all of these scientific journals and/or platforms, is indicating data standards or practices to be used. In contrast, 87.5% of publishers do not apply the provision that allows

authors/institutions to provide Open Access via repositories to the published version of the publication immediately and under open licences. Additionally, 87.0% do not apply the provision that permits authors/institutions to provide Open Access to the published version of the publication immediately, and 85.0% do not apply the provision that requires making accompanying research data available under open licences (e.g. Creative Commons By).

While the total number of responses is unspecified, a detailed breakdown for each option is provided.

**Figure 185. Open Access publishing platform(s)/journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 209. Open Access publishing platform(s)/journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers.**

| | 0% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 100% of these specific scientific journals and/or publishing platforms | Total |
|---|---|---|---|---|---|---|
| Open Access is provided immediately (no embargo period) to all scientific publications under open licences | 7 (30.4%) | 3 (13.0%) | 1 (4.3%) | 1 (4.3%) | 11 (47.8%) | 23 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | 12 (46.2%) | 1 (3.8%) | 0 (0.0%) | 2 (7.7%) | 11 (42.3%) | 26 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | 10 (38.5%) | 3 (11.5%) | 0 (0.0%) | 0 (0.0%) | 13 (50.0%) | 26 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licences | 10 (40.0%) | 3 (12.0%) | 0 (0.0%) | 0 (0.0%) | 12 (48.0%) | 25 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication after an embargo period | 19 (73.1%) | 2 (7.7%) | 0 (0.0%) | 0 (0.0%) | 5 (19.2%) | 26 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication immediately (no embargo period) | 20 (87.0%) | 1 (4.3%) | 0 (0.0%) | 0 (0.0%) | 2 (8.7%) | 23 |
| Authors/institutions are allowed to provide Open Access via repositories to the published version of the publication immediately and under open licences | 21 (87.5%) | 1 (4.2%) | 0 (0.0%) | 0 (0.0%) | 2 (8.3%) | 24 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | 15 (68.2%) | 2 (9.1%) | 2 (9.1%) | 0 (0.0%) | 3 (13.6%) | 22 |
| Our journals require making accompanying research data available under open licences (e.g. Creative Commons By) | 17 (85.0%) | 2 (10.0%) | 1 (5.0%) | 0 (0.0%) | 0 (0.0%) | 20 |
| Our journals require researchers to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 9 (40.9%) | 2 (9.1%) | 0 (0.0%) | 2 (9.1%) | 9 (40.9%) | 22 |
| Our journals indicate data standards or practices to be used | 6 (25.0%) | 0 (0.0%) | 0 (0.0%) | 3 (12.5%) | 15 (62.5%) | 24 |

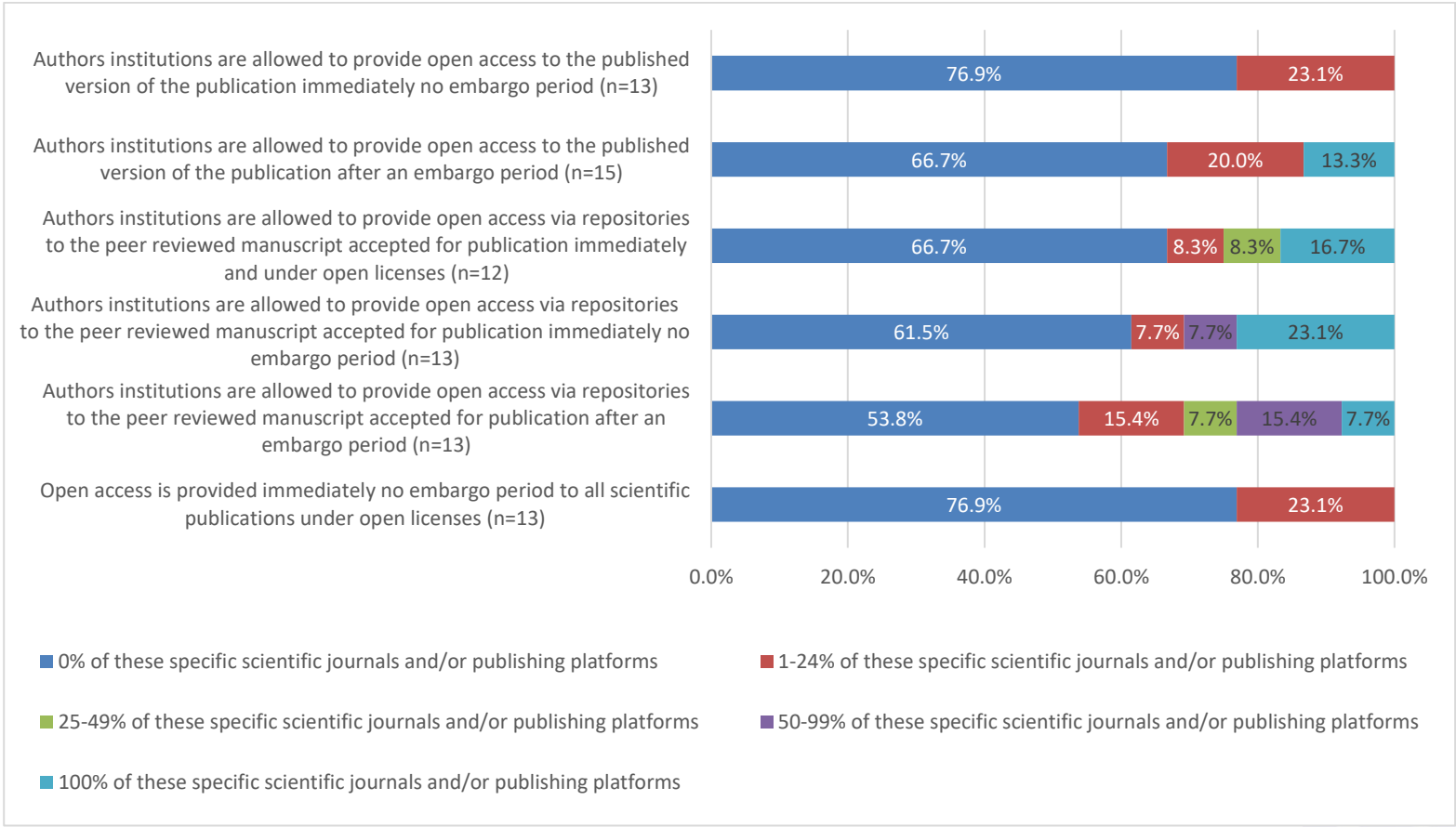
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included Open Access publishing platform(s)/journals in which some scientific publications are openly accessible to everyone upon the payment of a fee and some other scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?"*

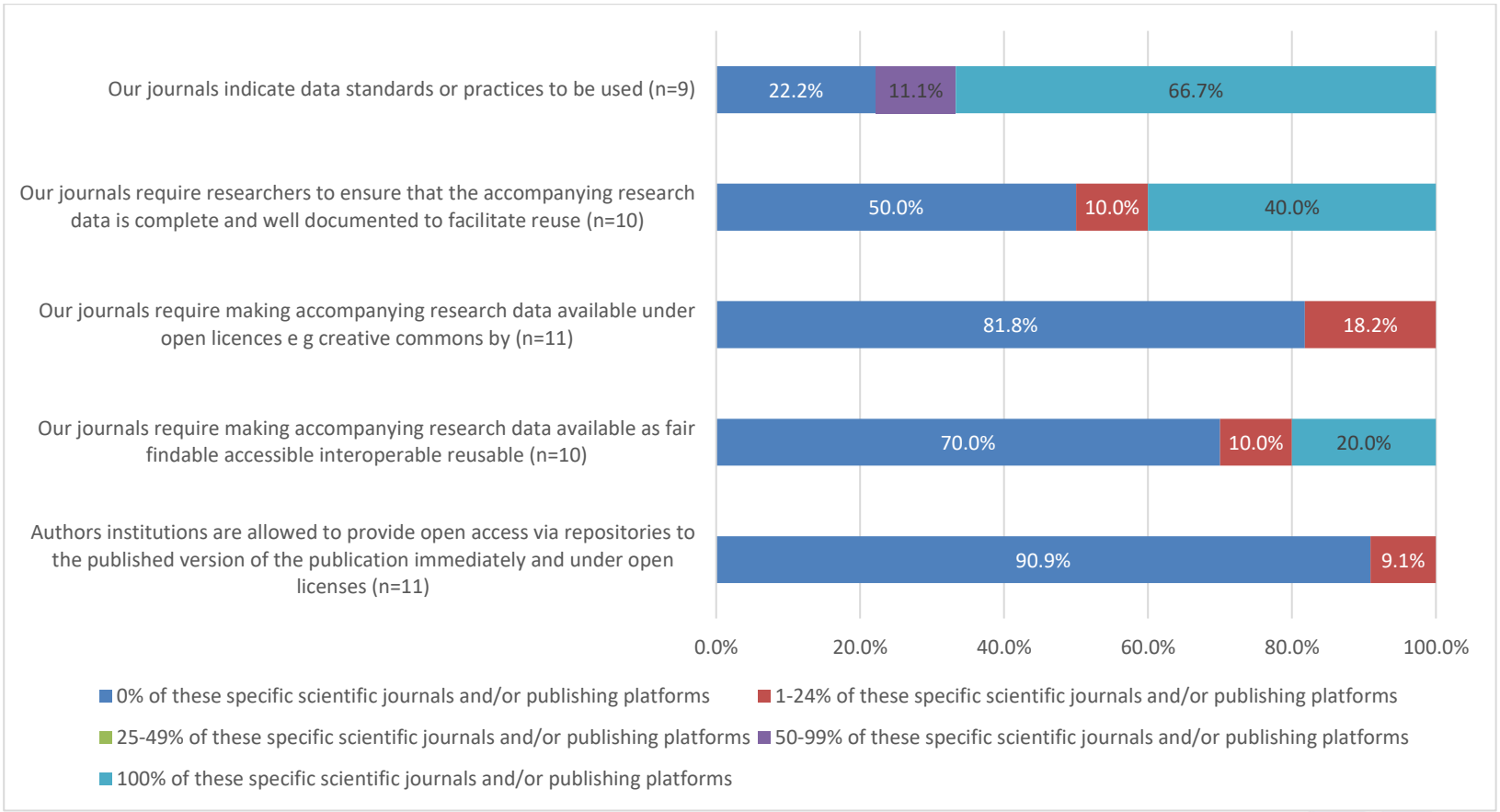
### QUESTION 13: You have indicated that 50-99% or 100% of your portfolio included journals in which all scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?

Logic for the question below: question hidden unless question 9 is selected as "50-99%" or "100%: to "Closed journals in which all scientific publications are only accessible to subscribers."

Publishers whose portfolios primarily consist of scientific publications accessible only to subscribers were surveyed about the provisions applied to these specific journals and/or platforms. The most widely applied provision, utilised by 23.1% of publishers for all these scientific journals and/or platforms, is allowing authors/institutions to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately. On the other hand, the majority of publishers (90.9%) indicated that none of their scientific journals/publishing platforms allow authors/institutions to provide Open Access via repositories to the published version of the publication immediately and under open licences. Additionally, 81.8% of them selected that 0.0% of these scientific journals/publishing platforms use the model where the journals require making accompanying research data available under open licences (e.g. Creative Commons By). Furthermore, 76.9% indicated that none of the scientific journals/publishing platforms apply the model where authors/institutions are allowed to provide Open Access to the published version of the publication immediately (with no embargo period).

**Figure 186. Provisions applying to the specific journals/and or platforms**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included journals in which all scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 210 indicates the total count for each of the options.

**Table 210. Provisions applying to the specific journals/and or platforms**

| | 0% of these specific scientific journals and/or publishing platforms | 1-24% of these specific scientific journals and/or publishing platforms | 25-49% of these specific scientific journals and/or publishing platforms | 50-99% of these specific scientific journals and/or publishing platforms | 100% of these specific scientific journals and/or publishing platforms | Total |
|---|---|---|---|---|---|---|
| Open Access is provided immediately (no embargo period) to all scientific publications under open licences | 10 (76.9%) | 3 (23.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 13 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication after an embargo period | 7 (53.8%) | 2 (15.4%) | 1 (7.7%) | 2 (15.4%) | 1 (7.7%) | 13 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately (no embargo period) | 8 (61.5%) | 1 (7.7%) | 0 (0.0%) | 1 (7.7%) | 3 (23.1%) | 13 |
| Authors/institutions are allowed to provide Open Access via repositories to the peer-reviewed manuscript accepted for publication immediately and under open licences | 8 (66.7%) | 1 (8.3%) | 1 (8.3%) | 0 (0.0%) | 2 (16.7%) | 12 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication after an embargo period | 10 (66.7%) | 3 (20.0%) | 0 (0.0%) | 0 (0.0%) | 2 (13.3%) | 15 |
| Authors/institutions are allowed to provide Open Access to the published version of the publication immediately (no embargo period) | 10 (76.9%) | 3 (23.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 13 |
| Authors/institutions are allowed to provide Open Access via repositories to the published version of the publication immediately and under open licences | 10 (90.9%) | 1 (9.1%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 11 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Our journals require making accompanying research data available as FAIR (Findable, Accessible, Interoperable, reusable) | 7 (70.0%) | 1 (10.0%) | 0 (0.0%) | 0 (0.0%) | 2 (20.0%) | 10 |
| Our journals require making accompanying research data available under open licences (e.g. Creative Commons By) | 9 (81.8%) | 2 (18.2%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 11 |
| Our journals require researchers to ensure that the accompanying research data are complete and well-documented to facilitate reuse | 5 (50.0%) | 1 (10.0%) | 0 (0.0%) | 0 (0.0%) | 4 (40.0%) | 10 |
| Our journals indicate data standards or practices to be used | 2 (22.2%) | 0 (0.0%) | 0 (0.0%) | 1 (11.1%) | 6 (66.7%) | 9 |

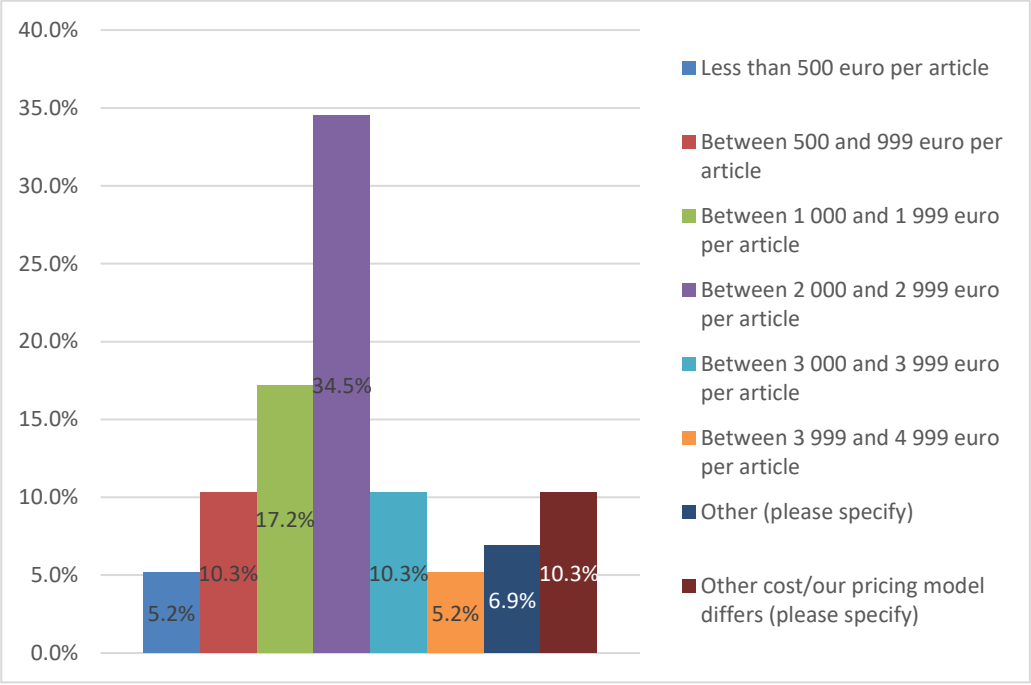
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "You have indicated that 50-99% or 100% of your portfolio included journals in which all scientific publications are only accessible to subscribers. Which of the following provisions apply to these specific journals/and or platforms?"*

**QUESTION 14: What is the approximate article processing cost that you charge per article? If the cost differs by journal, please indicate the most common/frequent price that you charge.**

The survey results show a diverse landscape of article processing charges (APCs) imposed by publishers, reflecting varied pricing models across the industry. A large share of publishers (34.5%) fall within the range of charging between 2 000 and 2 999 euro per article, indicating a prevalent mid-tier pricing strategy. Following closely, 17.2% of publishers charge between 1 000 and 1 999 euro per article, underscoring a significant segment opting for a moderately priced structure. Additionally, 10.3% of publishers each occupy the brackets of 500 to 999 euro, and 3 000 to 3 999 euro per article, showcasing a balanced distribution within these ranges. A smaller fraction (5.2%) of publishers charge either less than 500 euro or between 3 999 and 4 999 euro per article, suggesting a limited but existing presence at the extremes of the pricing spectrum. Meanwhile, 6.9% of publishers cite 'Other' as their pricing model.

Those who answered 'Other' mentioned various models, considerations, and factors influencing the pricing structure. For example, some indicated a range of 1 500 EUR to 2 500 EUR per article as the most common fee charged. Others highlighted that there are no article processing costs associated with their publications. Some acknowledged the complexity and variability in pricing due to different agreements, geographical factors, and market dynamics.

**Figure 187. Approximate article processing cost charged per article by the surveyed publishers (n=58)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What is the approximate article processing cost that you charge per article? If the cost differs by journal, please indicate the most common/frequent price that you charge".*

**Table 211. Approximate article processing cost charged per article by the surveyed publishers (n=58)**

| | Count | Share |
|---|---|---|
| Less than 500 euro per article | 3 | 5.2% |
| Between 500 and 999 euro per article | 6 | 10.3% |
| Between 1 000 and 1 999 euro per article | 10 | 17.2% |
| Between 2 000 and 2 999 euro per article | 20 | 34.5% |
| Between 3 000 and 3 999 euro per article | 6 | 10.3% |
| Between 3 999 and 4 999 euro per article | 3 | 5.2% |
| Other cost/our pricing model differs (please specify) | 6 | 10.3% |
| Other (please specify) | 4 | 6.9% |
| Total | 58 | 100% |

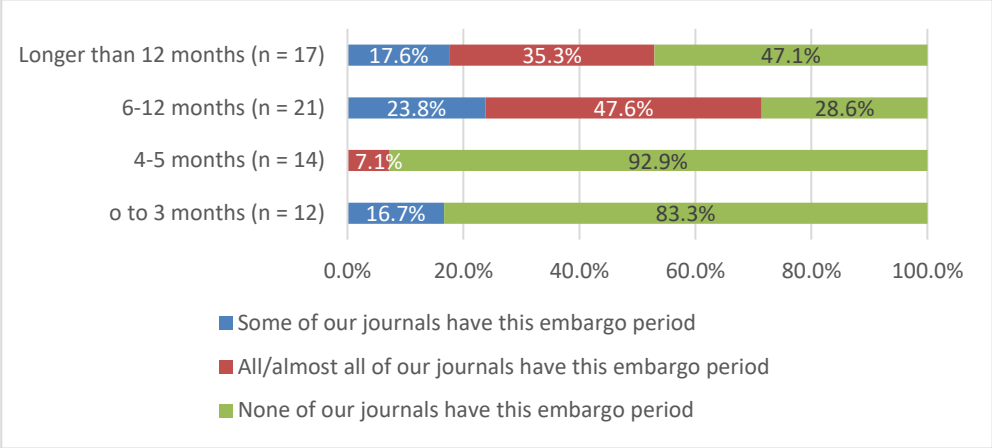
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What is the approximate article processing cost that you charge per article? If the cost differs by journal, please indicate the most common/frequent price that you charge".*

## QUESTION 15: Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?

Overall, the survey responses show a diverse landscape of embargo periods implemented by publishers for journals offering Open Access after a specified waiting period. A significant share of publishers (83.3%) indicates that none of their journals have an embargo period lasting 0-3 months, suggesting a prevailing practice of not allowing immediate Open Access post-publication. For a slightly extended embargo period of 4-5 months, the majority (92.3%) report that none of their journals fall into this category, while 7.1% specify that all or almost all of their journals adhere to this timeframe. Notably, the 6-12 months embargo period emerges as a prevalent approach, with 47.6% stating that all or almost all of their journals have this waiting period. In contrast, 28.6% report no embargo for any of their journals in this timeframe, while 23.8% mention that some of their journals are subject to this embargo duration. Publishers employing embargo periods longer than 12 months showcase a diverse pattern, with 35.3% specifying that all or almost all of their journals follow this extended timeframe, while 47.1% report none of their journals having an embargo period beyond 12 months. Additionally, 23.8% note that some of their journals fall into this lengthier embargo category.

The findings by the different types of publishers are provided below.

**Figure 188. The length of the embargo period in journals where Open Access can be provided after an embargo period (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 212 indicates the total count for each of the options.

**Table 212. The length of the embargo period in journals where Open Access can be provided after an embargo period (all types of publishers)**

| | All/almost all of our journals have this embargo period | Some of our journals have this embargo period | None of our journals have this embargo period | Total |
|---|---|---|---|---|
| 0-3 months | 0 (0.0%) | 2 (16.7%) | 10 (83.3%) | 12 |
| 4-5 months | 1 (7.1%) | 0 (0.0%) | 13 (92.9%) | 14 |
| 6-12 months | 10 (47.6%) | 5 (23.8%) | 6 (28.6%) | 21 |
| Longer than 12 months | 6 (35.3%) | 3 (17.6%) | 8 (47.1%) | 17 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

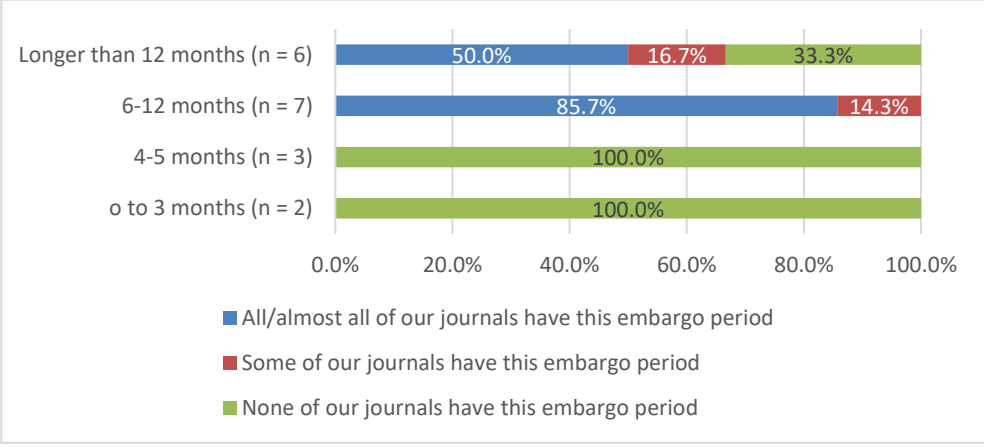
When it comes to the different types of publishers, the survey results reveal distinct patterns in the embargo periods for Open Access availability across commercial, institutional, and non-commercial publishers. Among commercial publishers, none reported having an embargo period of 0-3 months. For the 4-5 months category, no commercial publishers reported having this embargo, aligning with their preference for longer waiting periods. A significant share of commercial publishers (6 out of 9) specifies that all or almost all of their journals have a 6-12 month embargo, underlining a prevalent practice in this duration. Regarding embargo periods longer than 12 months, a mix of responses is evident, with some commercial publishers endorsing this practice for all or almost all journals while others reported none.

In the institutional publishing realm, responses similarly showcase a tendency toward longer embargo periods. None of the institutional publishers reported having a 0-3 month embargo, and for the 4-5 months duration, the majority indicated a lack of such embargo, emphasising a trend toward extended waiting periods. Regarding the 6-12 months category, a combination of responses is evident, with some reporting that some of their journals have this embargo

while some reported that none of their journals have this embargo period. The longer-than-12-months category exhibits a similar mixed pattern.

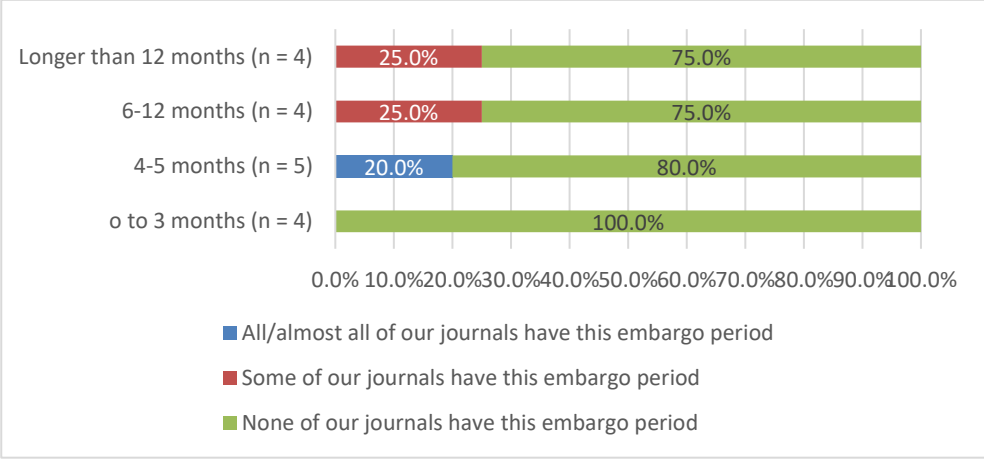
Non-commercial publishers, in contrast, exhibit a more varied approach. For the 0-3 months embargo, there is a mix of responses, with some having this short embargo and others not. In the 4-5 months category, the majority reported no embargo, indicating a preference for immediate or relatively early Open Access. The 6-12 months embargo shows a mixed pattern, with some having this waiting period and others not. For embargo periods longer than 12 months, both "all/almost all" and "some" journals within this category are reported, showcasing a diversity of approaches among non-commercial publishers.

**Figure 189. The length of the embargo period in journals where Open Access can be provided after an embargo period (commercial publishers)**



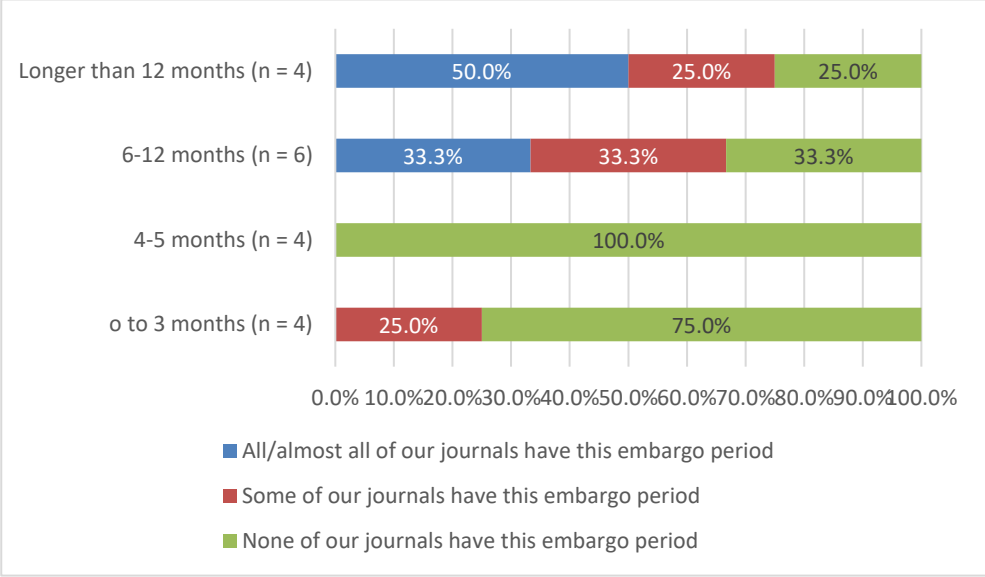

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

**Figure 190. The length of the embargo period in journals where Open Access can be provided after an embargo period (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

**Figure 191. The length of the embargo period in journals where Open Access can be provided after an embargo period (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

The number of responses due to applied logic is low, thus, Table 213 indicates the total number of responses to each question.

**Table 213. The length of the embargo period in journals where Open Access can be provided after an embargo period (breakdown by commercial, institutional, non-commercial publishers)**

| | All/almost all of our journals have this embargo period | Some of our journals have this embargo period | None of our journals have this embargo period | Total |
|---|---|---|---|---|
| Commercial publisher | | | | |
| 0 to 3 months | 0 (0.0%) | 0 (0.0%) | 2 (100.0%) | 2 |
| 4-5 months | 0 (0.0%) | 0 (0.0%) | 3 (100.0%) | 3 |
| 6-12 months | 6 (85.7%) | 1 (14.3%) | 0 (0.0%) | 7 |
| Longer than 12 months | 3 (50.0%) | 1 (16.7%) | 2 (33.3%) | 6 |
| Institutional publisher | | | | |
| 0 to 3 months | 0 (0.0%) | 0 (0.0%) | 4 (100.0%) | 4 |
| 4-5 months | 1 (20.0%) | 0 (0.0%) | 4 (80.0%) | 5 |
| 6-12 months | 0 (0.0%) | 1 (25.0%) | 3 (80.0%) | 4 |
| Longer than 12 months | 0 (0.0%) | 1 (25.0%) | 3 (75.0%) | 4 |
| Non-commercial publisher | | | | |
| 0 to 3 months | 0 (0.0%) | 1 (25.0%) | 3 (75.0%) | 4 |
| 4-5 months | 0 (0.0%) | 0 (0.0%) | 4 (100.0%) | 4 |
| 6-12 months | 2 (33.3%) | 2 (33.3%) | 2 (33.3%) | 6 |
| Longer than 12 months | 2 (50.0%) | 1 (25.0%) | 1 (25.0%) | 4 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Now consider your journals where Open Access can be provided after an embargo period. What is the length of the embargo period in these journals?"*

### QUESTION 16: In the EU Member States where you operate, have you entered into any agreements with institutional users or representative organisations that define Open Access policies/requirements?

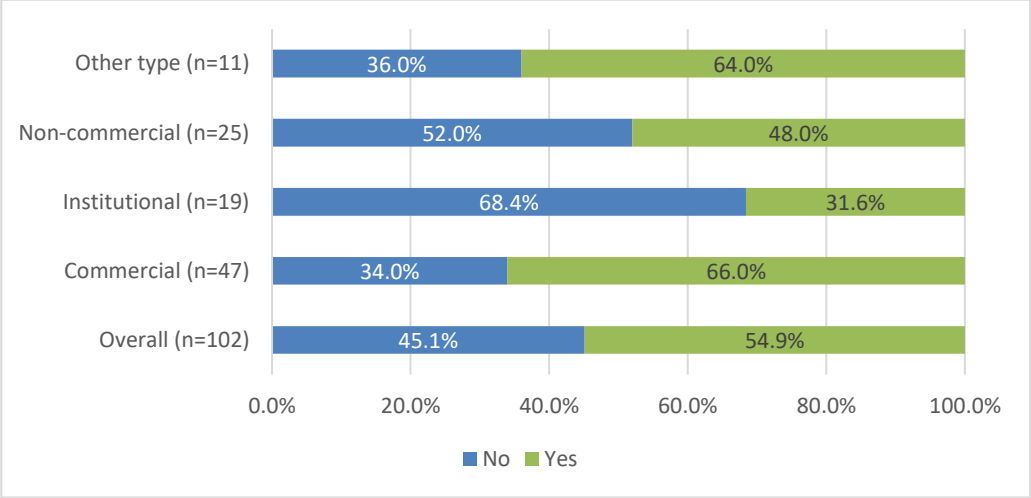
Overall, 54.9% of publishers reported having entered into agreements with institutional users or representative organisations that define Open Access policies, while 45.5% indicated the absence of such agreements. This suggests a notable engagement within the publishing community in establishing specific terms for Open Access.

When examining the results based on publisher types, non-commercial publishers reported a fairly even split, with 48.0% affirming the existence of such agreements and 52.0% indicating a lack thereof. In contrast, institutional publishers showed a higher prevalence of not having agreements, with 68.4% reporting a negative response and only 31.6% confirming the presence of Open Access agreements. Commercial publishers, on the other hand, exhibited a distinct trend, with 66.0% reporting affirmative responses, indicating a higher likelihood of having established agreements compared to the other publisher types. In this category, 34.0% reported not having such agreements.

These findings underscore the varied landscape of Open Access agreements within the EU Member States and suggest a complex interplay of factors influencing the nature and

prevalence of Open Access agreements across different types of publishers operating in the EU.

**Figure 192. Publishers having entered into agreements with institutional users or representative organisations that define Open Access policies/requirements**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In the EU Member States where you operate, have you entered into any agreements with institutional users or representative organisations that define Open Access policies/requirements?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 214 indicates the total count for each of the options.

**Table 214. Publishers having entered into agreements with institutional users or representative organisations that define Open Access policies/requirements**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other type | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| No | 46 | 45.1% | 16 | 34.0% | 13 | 68.4% | 13 | 52.0% | 4 | 36.0% |
| Yes | 56 | 54.9% | 31 | 66.0% | 6 | 31.6% | 12 | 48.0% | 7 | 64.0% |
| Total | 102 | 100% | 47 | 100% | 19 | 100% | 25 | 100% | 11 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In the EU Member States where you operate, have you entered into any agreements with institutional users or representative organisations that define Open Access policies/requirements?"*

In addition to that, 4 responses came from publishers which selected 'Other' as the type of their organisation in Q2.

## QUESTION 17: Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?

Among the challenges encountered by publishers in negotiations with institutional users or representative organisations, the most frequently cited area of difficulty was the cost of Open Access publishing, with 36.0% finding it very challenging. Additionally, 48.0% considered the

cost somewhat challenging. This indicates a prominent concern among publishers regarding the financial aspects of Open Access arrangements.

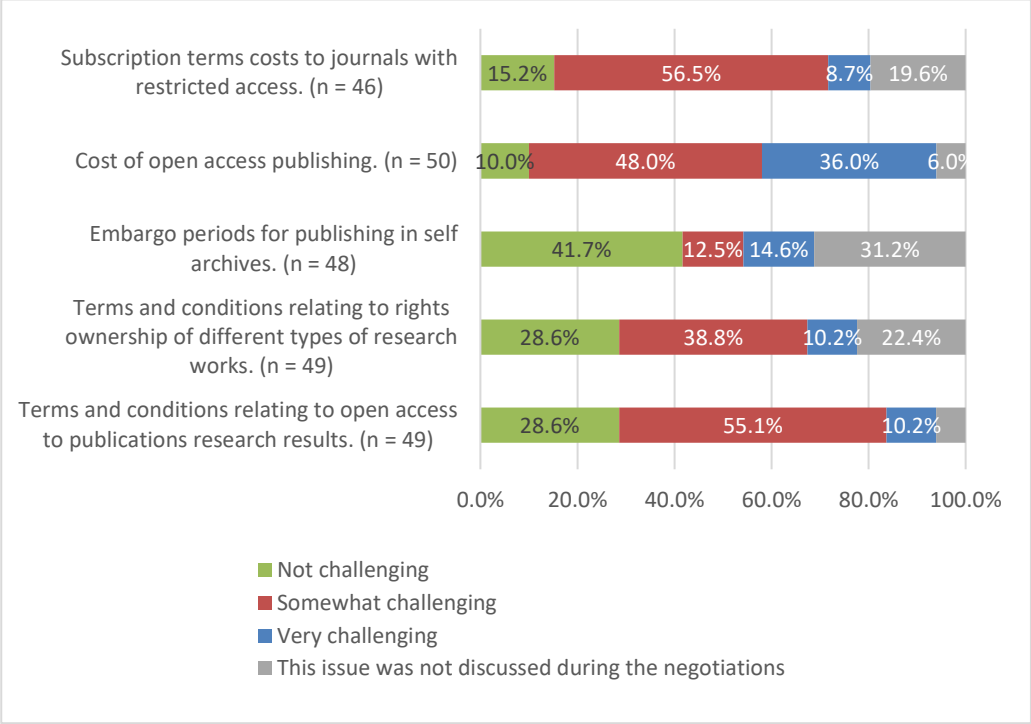
Negotiations around subscription terms and costs for journals with restricted access were also a noteworthy challenge, with 56.5% reporting that they were somewhat challenging and 8.7% finding them very challenging. This suggests that discussions related to subscription models are a substantial point of contention in negotiations.

Embargo periods for publishing in self-archives were perceived as challenging by 14.6%, while 12.5% found them somewhat challenging. Nevertheless, a considerable 41.7% reported that negotiating embargo periods was not challenging, indicating a mixed level of difficulty in this aspect.

Terms and conditions relating to Open Access to publications and research results were considered somewhat challenging by the majority (55.1%), and 10.2% found them very challenging. In contrast, 28.6% did not find this aspect challenging, and 6.1% reported that it was not discussed during negotiations. Similarly, negotiations around terms and conditions related to the rights and ownership of different types of research works were somewhat challenging for 38.8%, while 10.2% found them very challenging. A 28.6% proportion did not find this aspect challenging, and 22.4% reported that the issue was not discussed during negotiations.

In summary, while the cost of Open Access publishing and subscription terms/costs for restricted access journals emerged as the most challenging aspects, negotiations around embargo periods showed a more balanced distribution of perceived difficulty. Terms and conditions related to Open Access and rights/ownership were generally seen as somewhat challenging, with a significant share reporting that these aspects were not challenging or were not discussed during negotiations.

**Figure 193. Challenges during negotiations between publishers and institutional users or representative organisations (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 215. Challenges during negotiations between publishers and institutional users or representative organisations (all types of publishers)**

| | Very challenging | Somewhat challenging | Not challenging | This issue was not discussed during the negotiations | Total |
|---|---|---|---|---|---|
| Overall results | | | | | |
| Terms and conditions relating to Open Access to publications/research results | 5 (10.2%) | 27 (55.1%) | 14 (28.6%) | 3 (6.1%) | 49 |
| Terms and conditions relating to rights/ownership of different types of research works | 5 (10.2%) | 19 (38.8%) | 14 (28.6%) | 11 (22.4%) | 49 |
| Embargo periods for publishing in self-archives | 7 (14.6%) | 6 (12.5%) | 20 (41.7%) | 15 (31.2%) | 48 |
| Cost of Open Access publishing | 18 (36.0%) | 24 (48.0%) | 5 (10.0%) | 3 (6.0%) | 50 |
| Subscription terms/costs to journals with restricted access | 4 (8.7%) | 26 (56.5%) | 7 (15.2%) | 9 (19.6%) | 46 |
| Commercial publishers | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Terms and conditions relating to Open Access to publications/research results | 2 (6.7%) | 19 (63.3%) | 7 (23.3%) | 2 (6.7%) | 30 |
| Terms and conditions relating to rights/ownership of different types of research works | 3 (10.0%) | 10 (33.3%) | 9 (30.0%) | 8 (26.7%) | 30 |
| Embargo periods for publishing in self-archives | 1 (3.3%) | 5 (16.7%) | 13 (43.3%) | 11 (36.7%) | 30 |
| Cost of Open Access publishing | 12 (41.4%) | 16 (55.2%) | 0 (0.0%) | 1 (3.4%) | 29 |
| Subscription terms/costs to journals with restricted access | 1 (3.6%) | 20 (71.4%) | 2 (7.1%) | 5 (17.9%) | 28 |
| Institutional publishers | | | | | |
| Terms and conditions relating to Open Access to publications/research results | 1 (16.7%) | 1 (16.7%) | 4 (66.7%) | 0 (0.0%) | 6 |
| Terms and conditions relating to rights/ownership of different types of research works | 1 (16.7%) | 4 (66.7%) | 1 (16.7%) | 0 (0.0%) | 6 |
| Embargo periods for publishing in self-archives | 1 (20.0%) | 1 (20.0%) | 2 (40.0%) | 1 (20.0%) | 5 |
| Cost of Open Access publishing | 2 (33.3%) | 2 (33.3%) | 1 (16.7%) | 1 (16.7%) | 6 |
| Subscription terms/costs to journals with restricted access | 2 (40.0%) | 0 (0.0%) | 1 (20.0%) | 2 (40.0%) | 5 |
| Non-commercial publishers | | | | | |
| Terms and conditions relating to Open Access to publications/research results | 2 (20.0%) | 4 (40.0%) | 3 (30.0%) | 1 (10.0%) | 10 |
| Terms and conditions relating to rights/ownership of different types of research works | 1 (10.0%) | 4 (40.0%) | 4 (40.0%) | 1 (10.0%) | 10 |
| Embargo periods for publishing in self-archives | 4 (40.0%) | 0 (0.0%) | 5 (50.0%) | 1 (10.0%) | 10 |
| Cost of Open Access publishing | 2 (20.0%) | 3 (30.0%) | 4 (40.0%) | 1 (10.0%) | 10 |
| Subscription terms/costs to journals with restricted access | 1 (11.1%) | 3 (33.3%) | 3 (33.3%) | 2 (22.2%) | 9 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?"*

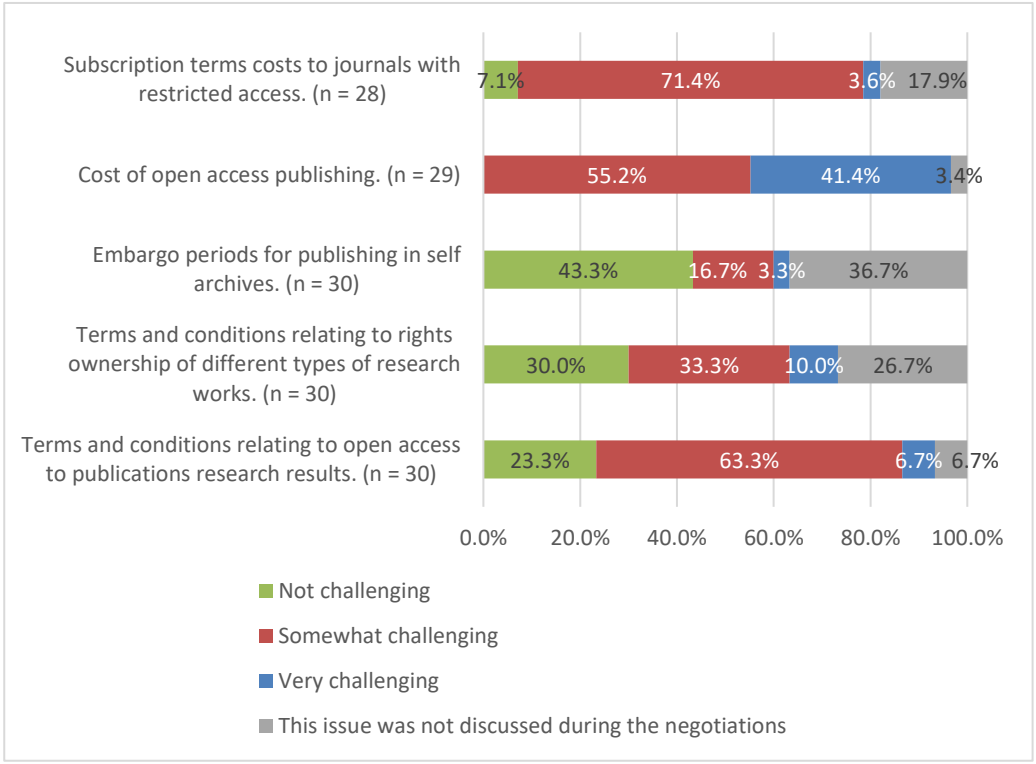
The challenges faced by different types of publishers during negotiations with institutional users or representative organisations on Open Access issues varied across several dimensions. For commercial publishers, negotiating the cost of Open Access publishing emerged as the most relevant challenge, with 41.4% finding it very challenging and an additional 55.2% indicating it was somewhat challenging. Subscription terms and costs for journals with restricted access were also notably challenging for commercial publishers, with 71.4% reporting it as somewhat challenging. Terms and conditions related to rights/ownership of research works were somewhat challenging for 33.3%, while embargo periods for publishing in self-archives showed a more balanced distribution of perceived difficulty.

Institutional publishers faced distinctive challenges, with terms and conditions related to Open Access and rights/ownership being less challenging, with a majority reporting these negotiations as not challenging. However, subscription terms/costs for journals with restricted access proved to be a considerable challenge, with 40.0% finding it very challenging. Embargo periods for publishing in self-archives presented a more evenly distributed set of challenges among institutional publishers.

Non-commercial publishers encountered diverse challenges, with negotiating the cost of Open Access publishing being particularly noteworthy, as 20.0% found it very challenging. Embargo periods for publishing in self-archives also stood out, with 40.0% reporting it as very challenging. Subscription terms/costs for journals with restricted access were another notable challenge, with 33.3% finding it somewhat challenging.

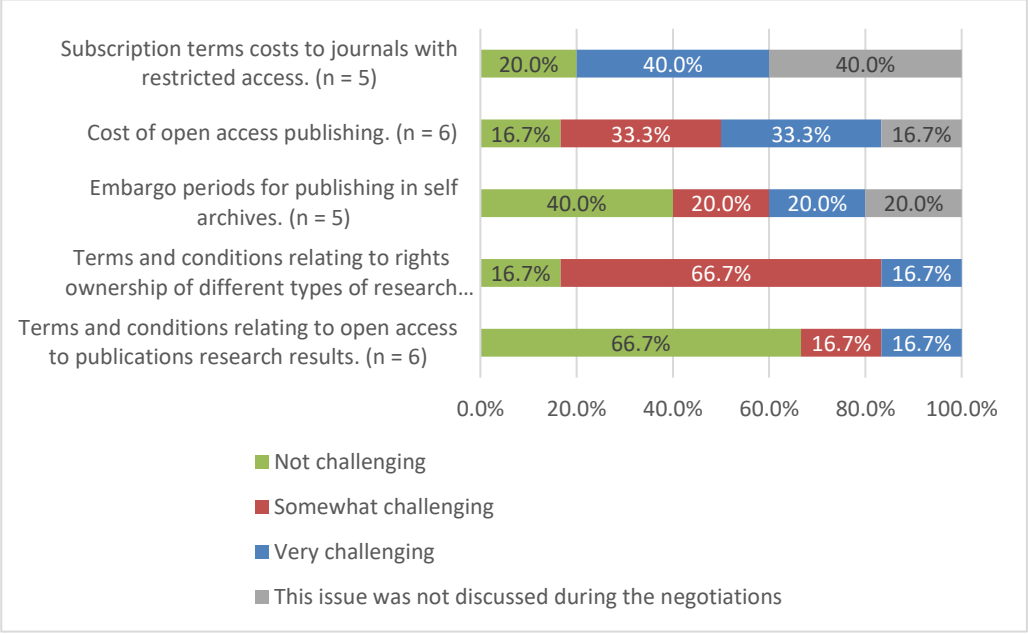
In summary, while the challenges shared some commonalities across different types of publishers, the degree of difficulty varied, showcasing distinct priorities and concerns. Commercial publishers faced significant hurdles with the cost of Open Access, institutional publishers faced challenges in dealing with the negotiation of subscription terms and costs for journals with restricted access, and non-commercial publishers encountered notable challenges with the cost of Open Access and embargo periods for self-archiving.

**Figure 194. Challenges during negotiations between publishers and institutional users or representative organisations (commercial publishers)**



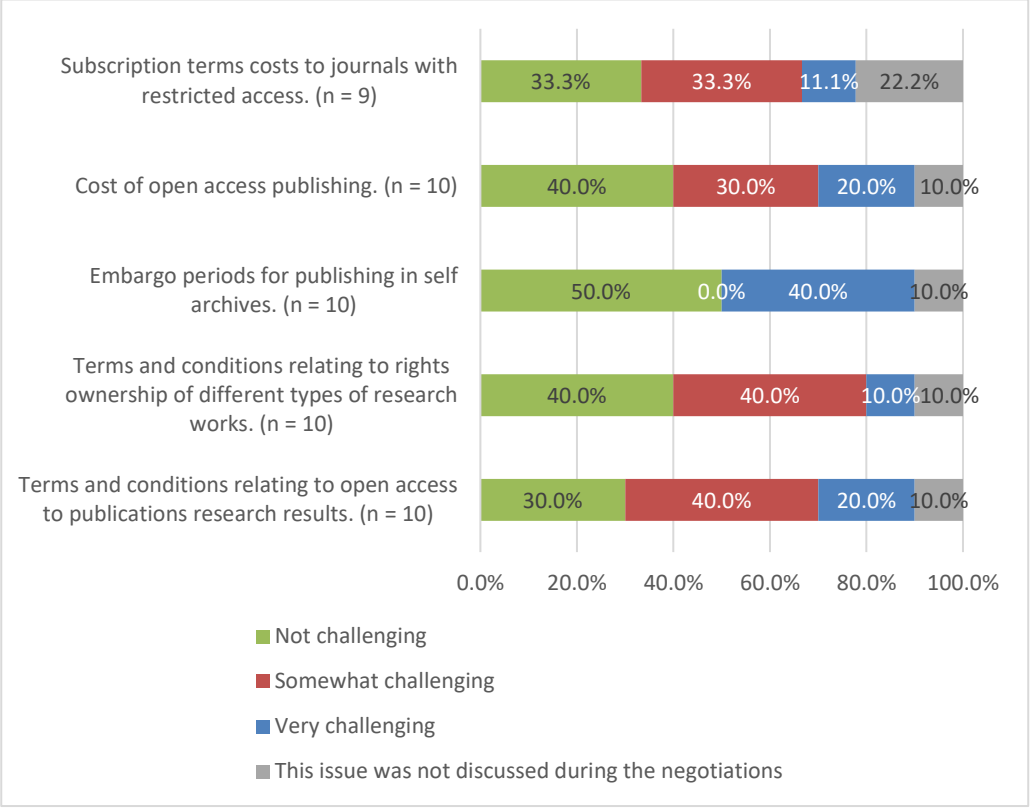

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?"*

**Figure 195. Challenges during negotiations between publishers and institutional users or representative organisations (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?"*

**Figure 196. Challenges during negotiations between publishers and institutional users or representative organisations (non-commercial publishers)**



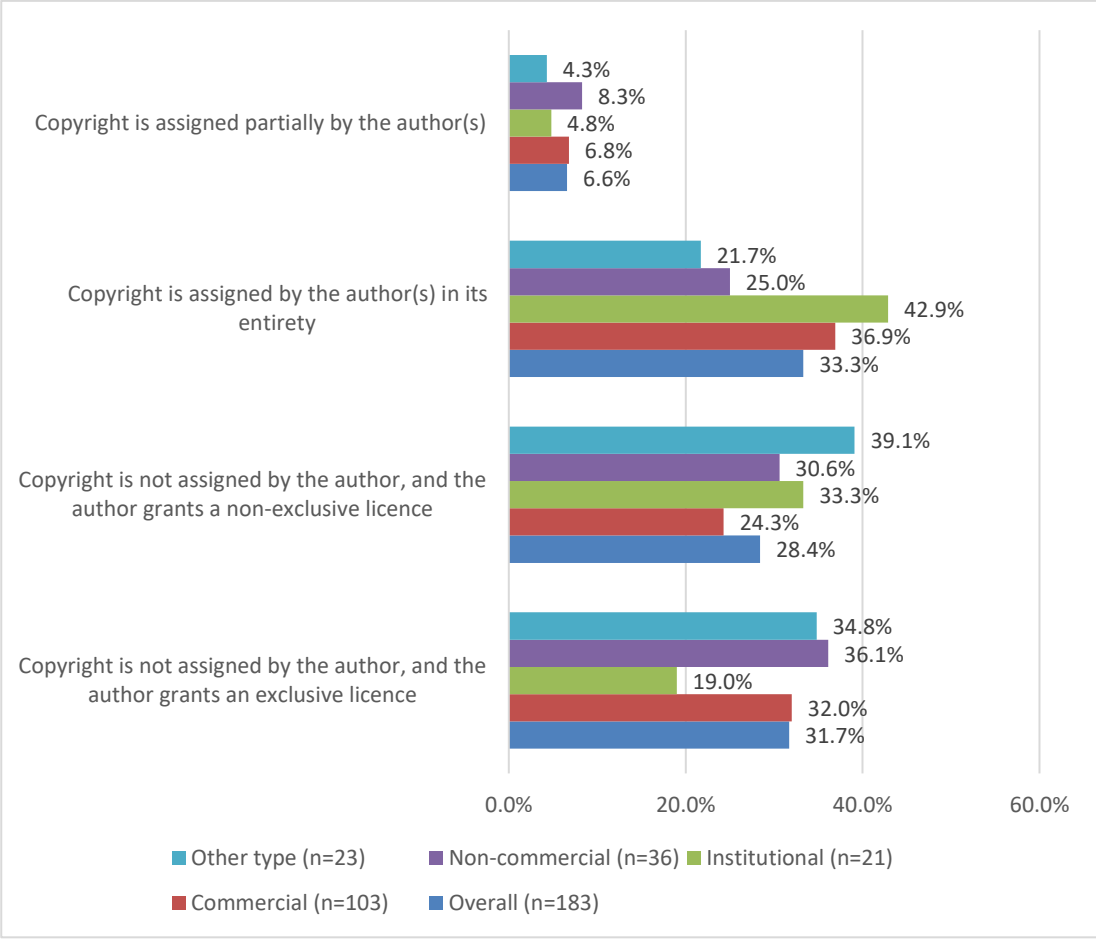

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, how challenging were the following issues during your negotiations with institutional users or representative organisations?"*

## QUESTION 18: Which contractual practice identifies your organisation's approach to publishing agreements? If more than one practice applies to your journals, please mark them all.

The survey results shed light on the prevailing contractual practices adopted by publishers in their approach to publishing agreements. Overall, a diversified landscape emerges, with copyright practices distributed as follows: 33.3% of publishers selected the option of copyright being assigned by the authors in its entirety, 28.4% do not assign copyright but instead have the author granting a non-exclusive licence, 31.7% adopt a model where copyright is not assigned, and an exclusive licence is granted by the author, and 6.6% request authors to assign copyright partially.

Distinctions arise when examining these practices across different types of publishers. Commercial publishers predominantly favour the model where copyright is not assigned, and an exclusive licence is granted by the author, with 32.0% adopting this approach. On the other hand, institutional publishers show a lower inclination (19.0%) towards the practice where copyright is not assigned, and the author grants an exclusive licence.

**Figure 197. Contractual practices 'applied by publishers to publishing agreements**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Which contractual practice identifies your organisation's approach to publishing agreements?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 216. Contractual practice applied by publishers to publishing agreements**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other type | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| Copyright is assigned by the author(s) in its entirety | 61 | 33.3% | 38 | 36.9% | 9 | 42.9% | 9 | 25.0% | 5 | 21.7% |
| Copyright is not assigned by the author, and the author grants a non-exclusive licence | 52 | 28.4% | 25 | 24.3% | 7 | 33.3% | 11 | 30.6% | 9 | 39.1% |
| Copyright is not assigned by the author, and the author grants an exclusive licence | 58 | 31.7% | 33 | 32.0% | 4 | 19.0% | 13 | 36.1% | 8 | 34.8% |
| Copyright is assigned partially by the author(s) | 12 | 6.6% | 7 | 6.8% | 1 | 4.8% | 3 | 8.3% | 1 | 4.3% |
| Total | 183 | 100% | 103 | 100% | 21 | 100% | 36 | 100% | 23 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Which contractual practice identifies your organisation's approach to publishing agreements?"*

## QUESTION 19: If your organisation employs multiple contractual practices for publishing agreements, please specify the approximate percentage breakdown for each of the selected practices.

The survey results provide insights into the distribution of contractual practices employed by publishers for publishing agreements. On average, across all publishers, the predominant practice is where copyright is not assigned by the author, and a non-exclusive licence is granted, with a higher mean percentage of 47.4%. The second most common practice involves the author(s) assigning copyright in its entirety, constituting a mean percentage of 42.1%. Interestingly, none of the publishers reported the practice of requiring the grant of an

exclusive license by authors. Finally, a smaller mean percentage of 10.5% represents cases where copyright is assigned partially by the author(s). This breakdown highlights the varied approaches publishers take in structuring their publishing agreements, with a notable reliance on non-exclusive licensing arrangements and author(s) assigning copyright in its entirety being the most prevalent practices.

**Table 217. The approximate percentage breakdown for each of the multiple contractual practices for publishing agreements (n=38)**

| | Share | Total |
|---|---|---|
| Copyright is assigned partially by the author(s) | 10.5% | 4 |
| Copyright is assigned by the author(s) in its entirety | 42.1% | 16 |
| Copyright is not assigned by the author, and the author grants a non-exclusive licence | 47.4% | 18 |
| Copyright is not assigned by the author, and the author grants an exclusive licence | 0.0% | 0 |
| Total | 100% | 38 |

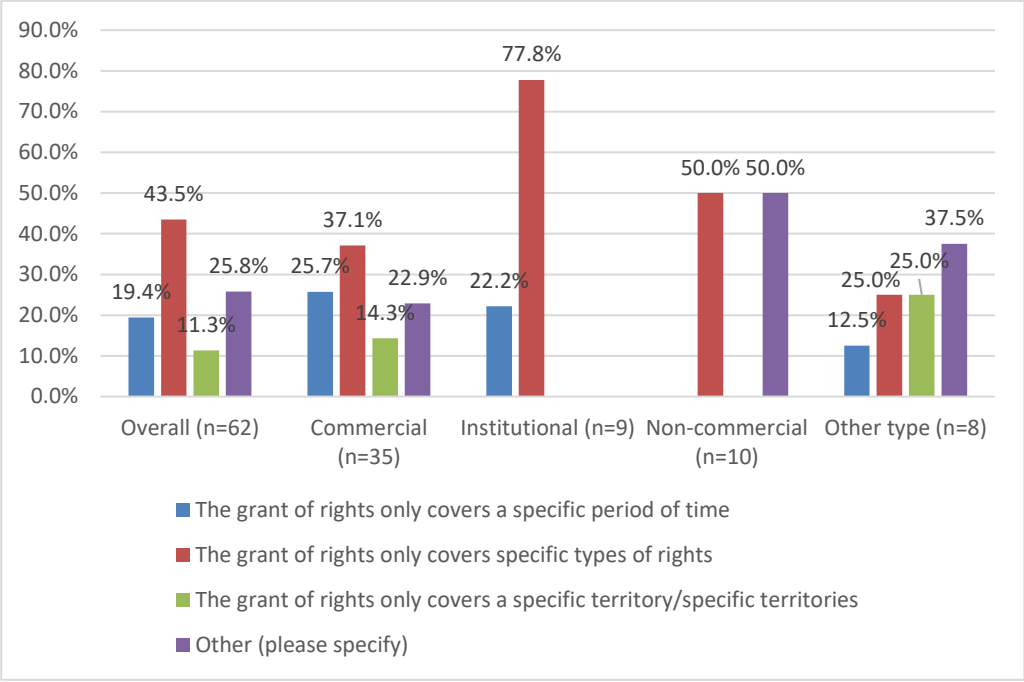
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "If your organisation employs multiple contractual practices for publishing agreements, please specify the approximate percentage breakdown for each of the selected practices".*

## QUESTION 20: In case the grant of rights from the author to your organisation remains limited, please specify in which instance(s) the author retains rights. Please select all that apply

Publishers revealed varied practices across the publishing landscape, encompassing commercial, institutional, non-commercial, and other types of publishers. A large proportion of respondents (43.5%) indicated that the grant of rights from authors to their organisations is often limited to specific types of rights, with institutional publishers showing the highest agreement to this approach (77.8%), followed by non-commercial (50.0%), commercial (37.1%), and other types of publishers (25.0%).

When it comes to time-specific rights grants, 19.4% of overall respondents noted this limitation, with commercial publishers (25.7%) and institutional publishers (22.2%) acknowledging it more than others; notably, no non-commercial publishers reported time-limited rights grants. Territorial limitations on rights were less commonly reported, with only 11.3% overall noting such restrictions. Commercial publishers were the most likely to report territorial limitations (14.3%), while institutional and non-commercial publishers did not report any territorial restrictions.

**Figure 198. Instance(s) where the author retains rights**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In case the grant of rights from the author to your organisation remains limited, please specify in which instance(s) the author retains rights".*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 218. The instance(s) the author retains rights**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other type | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| The grant of rights only covers specific types of rights | 27 | 43.5% | 13 | 37.1% | 7 | 77.8% | 5 | 50.0% | 2 | 25% |
| The grant of rights only covers a specific period of time | 12 | 19.4% | 9 | 25.7% | 2 | 22.2% | 0 | 0.0% | 1 | 12.5% |
| The grant of rights only covers a specific territory/specific territories | 7 | 11.3% | 5 | 14.3% | 0 | 0.0% | 0 | 0.0% | 2 | 25% |
| Other (please specify) | 16 | 25.8% | 8 | 22.9% | 0 | 0.0% | 5 | 50.0% | 3 | 37.5% |
| Total | 62 | 100% | 35 | 100% | 9 | 100% | 10 | 100% | 8 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In case the grant of rights from the author to your organisation remains limited, please specify in which instance(s) the author retains rights".*

## QUESTION 21: Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?

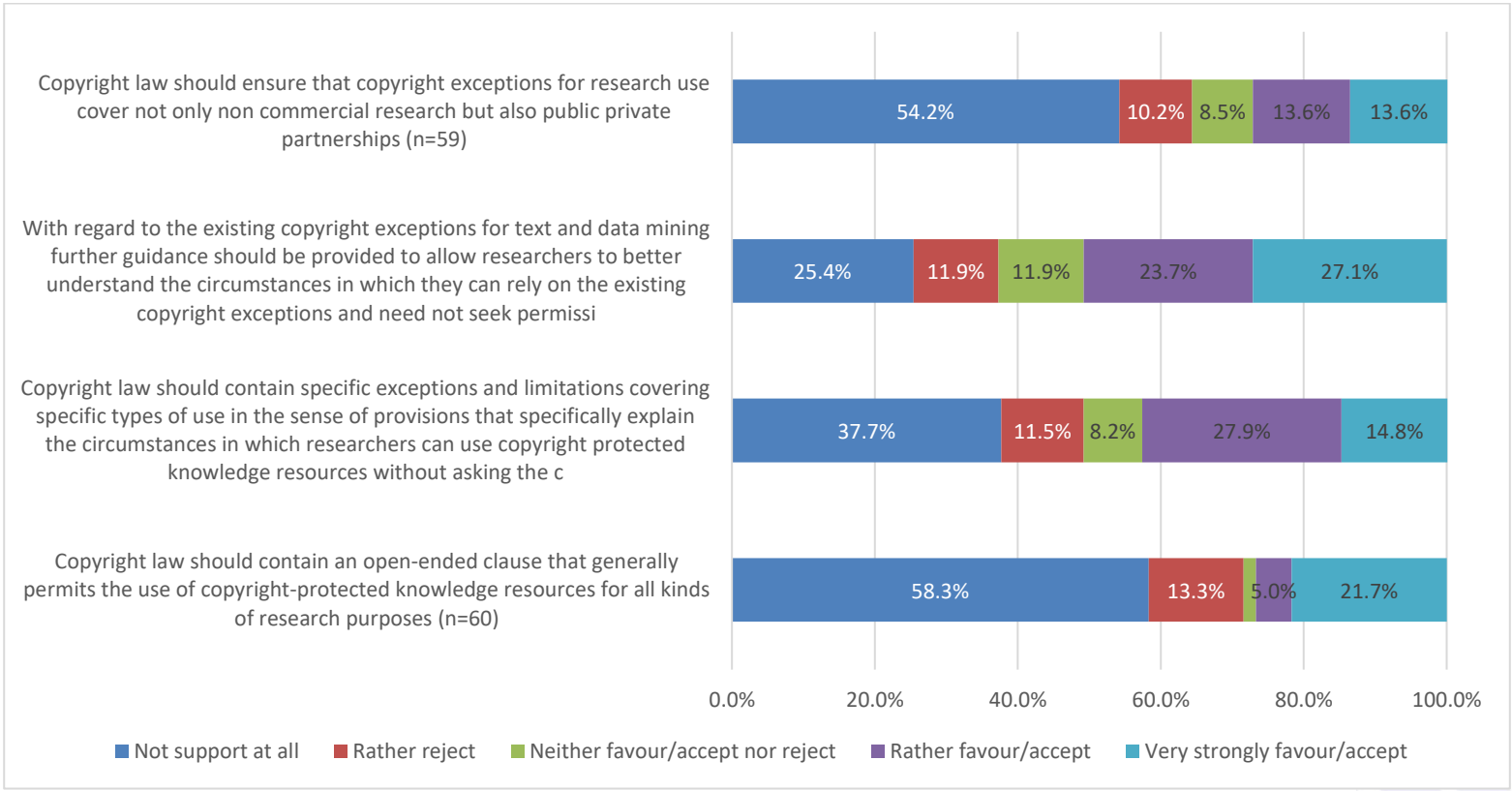
**Overall (all types of publishers)**

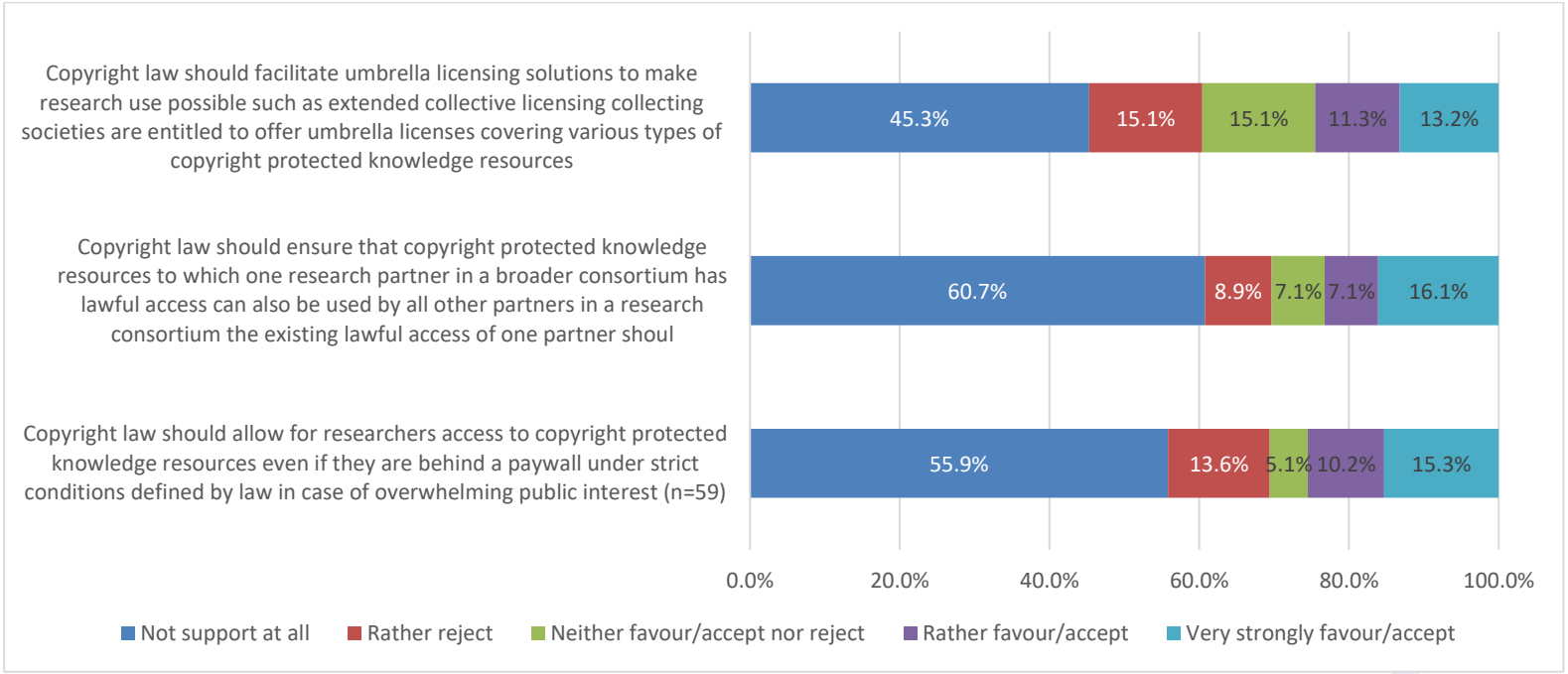
The survey results show diverse perspectives among publishers regarding public policy changes to support the use of copyright-protected knowledge resources for research purposes. Notably, a large share of publishers (58.3%, n=35) indicated that they would not support at all the inclusion of an open-ended clause in copyright law permitting the use of such resources for all research purposes while 21.7%, (n=13) would strongly favour this policy option.

When the policy option includes further guidance to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions, 51% (n=30) of publishers would very strongly or rather accept this change while 25.4%, (n=15) would not support it at all. Furthermore, 27.2% very strongly or rather support extending exceptions to include public-private research partnerships, not limiting to non-commercial research (n=16), while 54.2% (n=33) would not support this policy change at all. Another policy option concerned the facilitation of umbrella licencing solutions, such as extended collective licencing or lump sum remuneration regimes. This policy option would be supported or rather supported by 24.5% (n=13) of publishers, and 45.3% (n=24) would not support it at all.

Figure below provides the full picture of the suggested policy changes and of the answers provided by publishers.

**Figure 199. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (all types of publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1763]

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

1763 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 219. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (all types of publishers)**

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 13 (21.7%) | 3 (5.0%) | 1 (1.7%) | 8 (13.3%) | 35 (58.3%) | 60 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 9 (14.8%) | 17 (27.9%) | 5 (8.2%) | 7 (11.5%) | 23 (37.7%) | 61 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 16 (27.1%) | 14 (23.7%) | 7 (11.9%) | 7 (11.9%) | 15 (25.4%) | 59 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 8 (13.6%) | 8 (13.6%) | 5 (8.5%) | 6 (10.2%) | 32 (54.2%) | 59 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 9 (15.3%) | 6 (10.2%) | 3 (5.1%) | 8 (13.6%) | 33 (55.9%) | 59 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 9 (16.1%) | 4 (7.1%) | 4 (7.1%) | 5 (8.9%) | 34 (60.7%) | 56 |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 7 (13.2%) | 6 (11.3%) | 8 (15.1%) | 8 (15.1%) | 24 (45.3%) | 53 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (Breakdown by commercial, institutional, and non-commercial publishers)**

The survey reveals nuanced perspectives among commercial, institutional, and non-commercial publishers regarding proposed policy changes to support the use of copyright-protected knowledge resources for research.

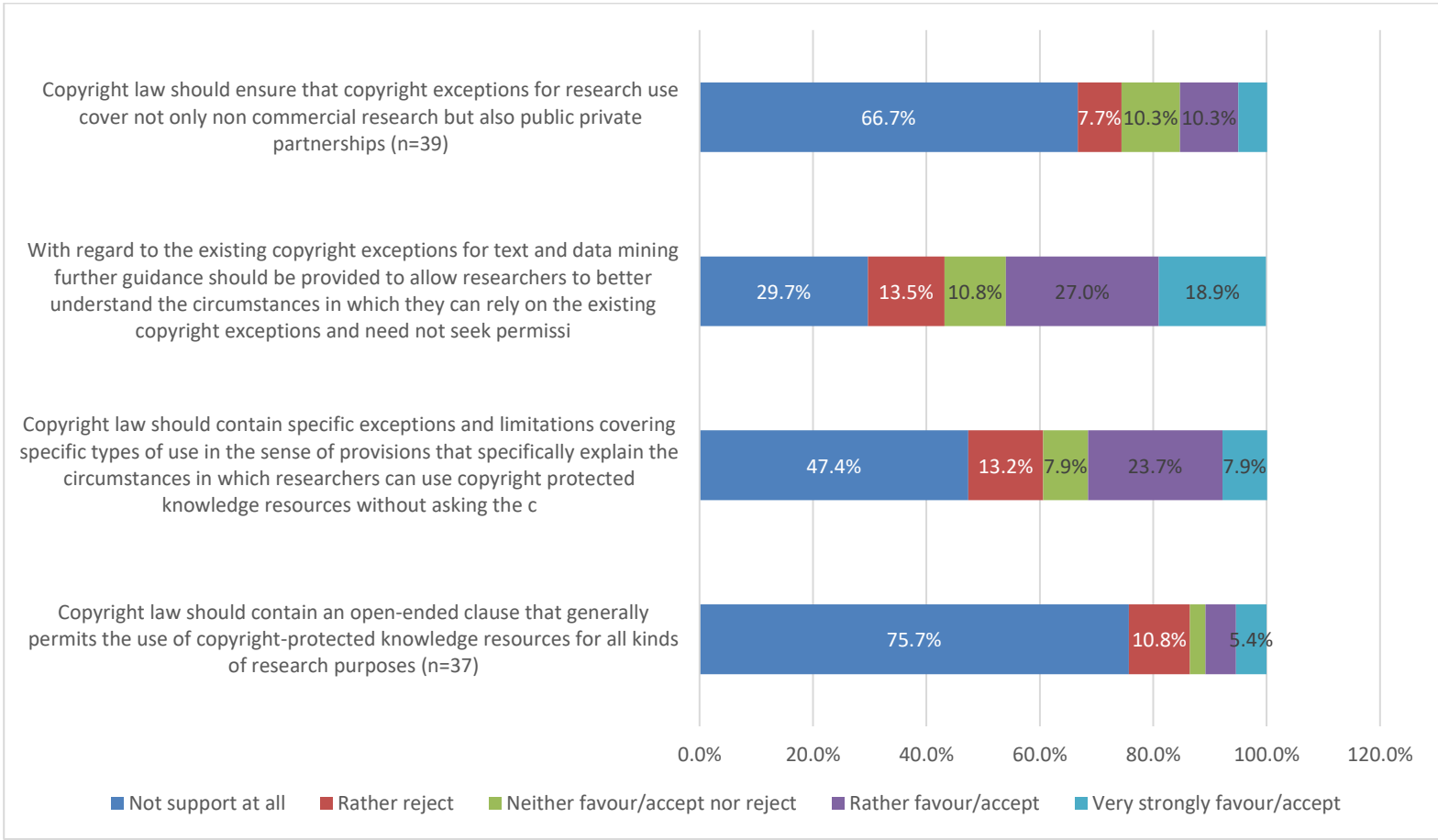
Commercial publishers predominantly express reservations about embracing an open-ended clause in copyright law that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes, with 75.7% not supporting such a provision. 47.4% also would not support the policy change at all on the specific exceptions and limitations covering specific types of use in the sense of provisions that would specifically explain the circumstances in which researchers can use the copyright-protected knowledge resources. With regards to the further guidance on the TDM, 45.9% (n=17) would strongly or rather support this change, and 29.7% (n=11) would not support it at all. Furthermore, regarding the proposed change to facilitate umbrella licencing solutions, 55.9% (n=19) would not support it at all, while only 2.9% (n=1) would be very strongly favour this option.In contrast, 85.7% (n=6) of the institutional publishers would support an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. Moreover, 71.4 % (n=5) of the institutional publishers claimed that they would very strongly or strongly support a policy change in copyright law to include specific exceptions and limitations covering specific types of use. Institutional publishers emphasised the importance of clear provisions for researchers and expressed strong support for additional guidance on text and data mining exceptions, with 71.4% (n=5) strongly supporting such potential change. Similarly, 83.3% (n=5) of the institutional publishers would strongly support that copyright exceptions cover also public-private partnerships. As for extended collective licencing or lump sum remuneration, 79.7 % (n=6) of the institutional publishers would support that copyright law facilitates these licensing solutions.

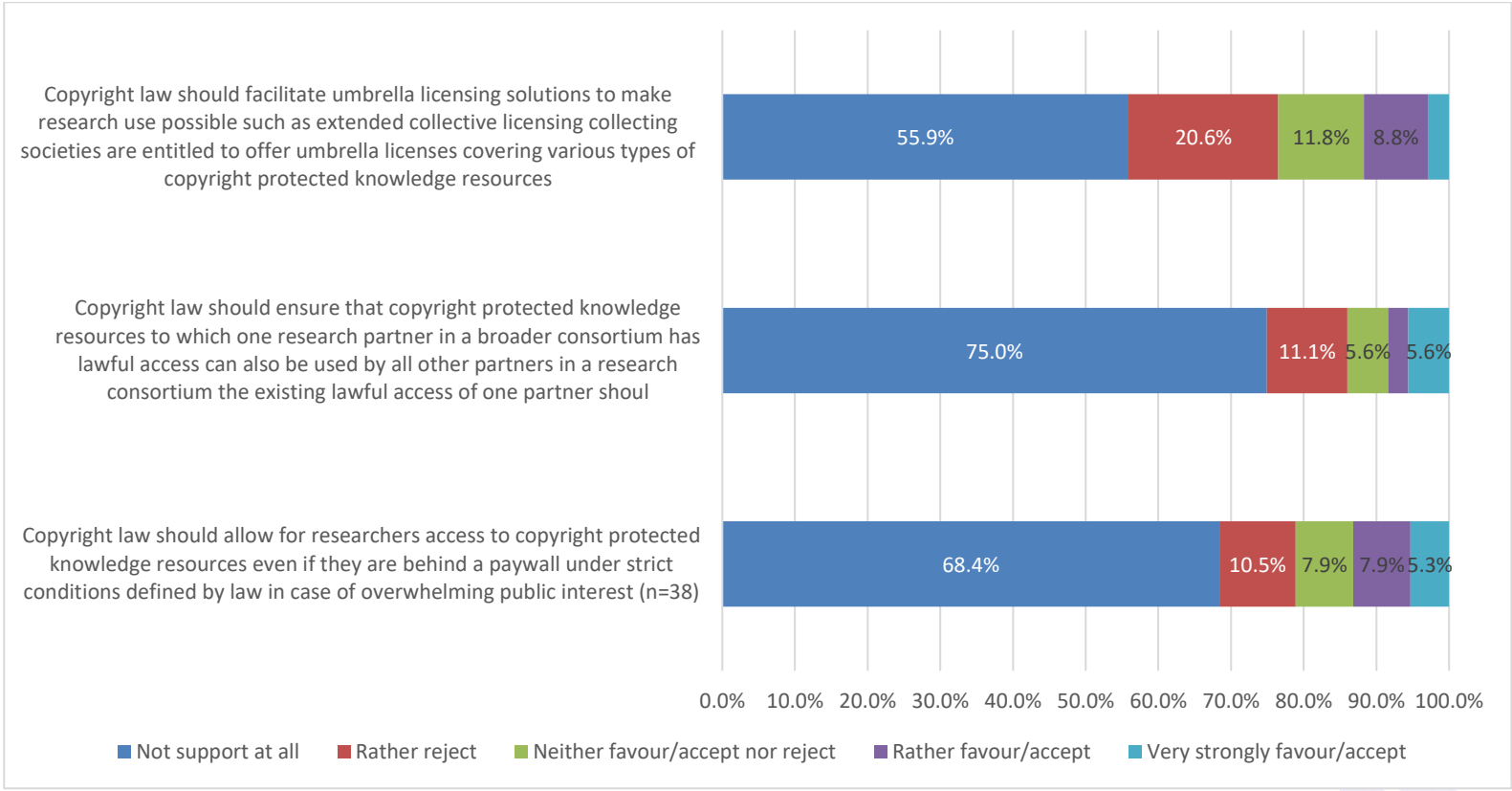
Non-commercial publishers displayed diverse views. For example, 54.6% (n=6) of non-commercial publishers would support or strongly support an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. 63.6% (n=7) of the non-commercial publishers rather support or very strongly support the specific exceptions and limitations covering specific types of use. 50.0% (n=3) of the non-commercial publishers would either accept or strongly accept that further guidance is provided for the current text and data mining exceptions. However, 42.9% (n=3) would not support a policy change to facilitate umbrella licencing such as extended collective licencing and lump sum remuneration.

Regarding specific proposals, institutional publishers stand out with unanimous support for allowing one research partner's lawful access to extend to the entire consortium and strong support for facilitating umbrella licensing solutions. Commercial and non-commercial publishers demonstrate more varied responses to these specific proposals, reflecting the differing priorities and perspectives within each category.

**Commercial publishers**

**Figure 200. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (commercial publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1764]

1764 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 220. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (commercial publishers)**

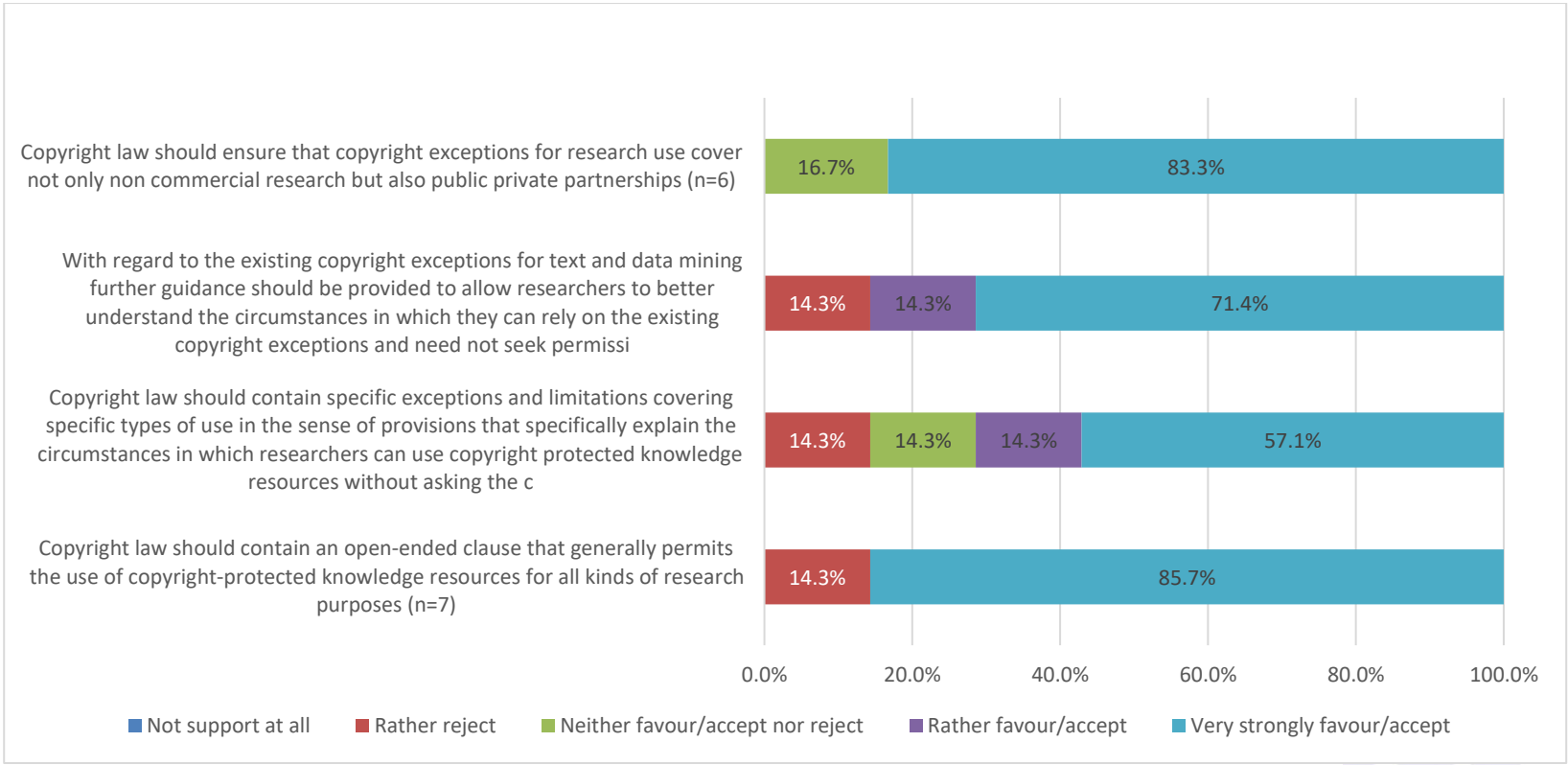
| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 2 (5.4%) | 2 (5.4%) | 1 (2.7%) | 4 (10.8%) | 28 (75.7%) | 37 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 3 (7.9%) | 9 (23.7%) | 3 (7.9%) | 5 (13.5%) | 18 (47.4%) | 38 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 7 (18.9%) | 10 (27.0%) | 4 (10.8%) | 5 (13.5%) | 11 (29.7%) | 37 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 2 (5.1%) | 4 (10.3%) | 4 (10.3%) | 3 (7.7%) | 26 (66.7%) | 39 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 2 (5.3%) | 3 (7.9%) | 3 (7.9%) | 4 (10.5%) | 26 (68.4%) | 38 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 2 (5.6%) | 1 (2.8%) | 2 (5.6%) | 4 (11.1%) | 27 (75.0%) | 36 |

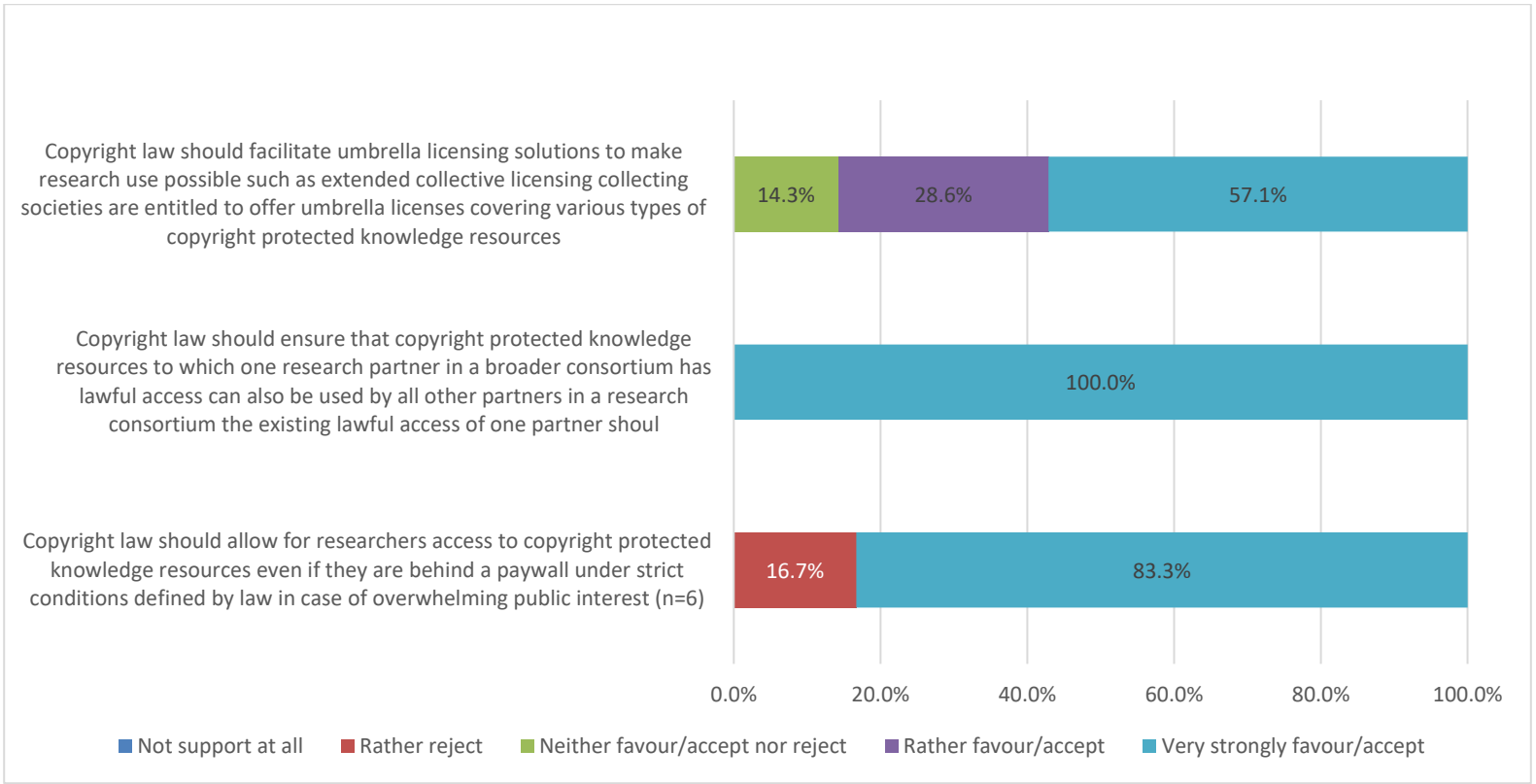
| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 1 (2.9%) | 3 (8.8%) | 4 (11.8%) | 7 (20.6%) | 19 (55.9%) | 34 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**Institutional publishers**

**Figure 201. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (institutional publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1765]

1765 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 221. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (institutional publishers)**

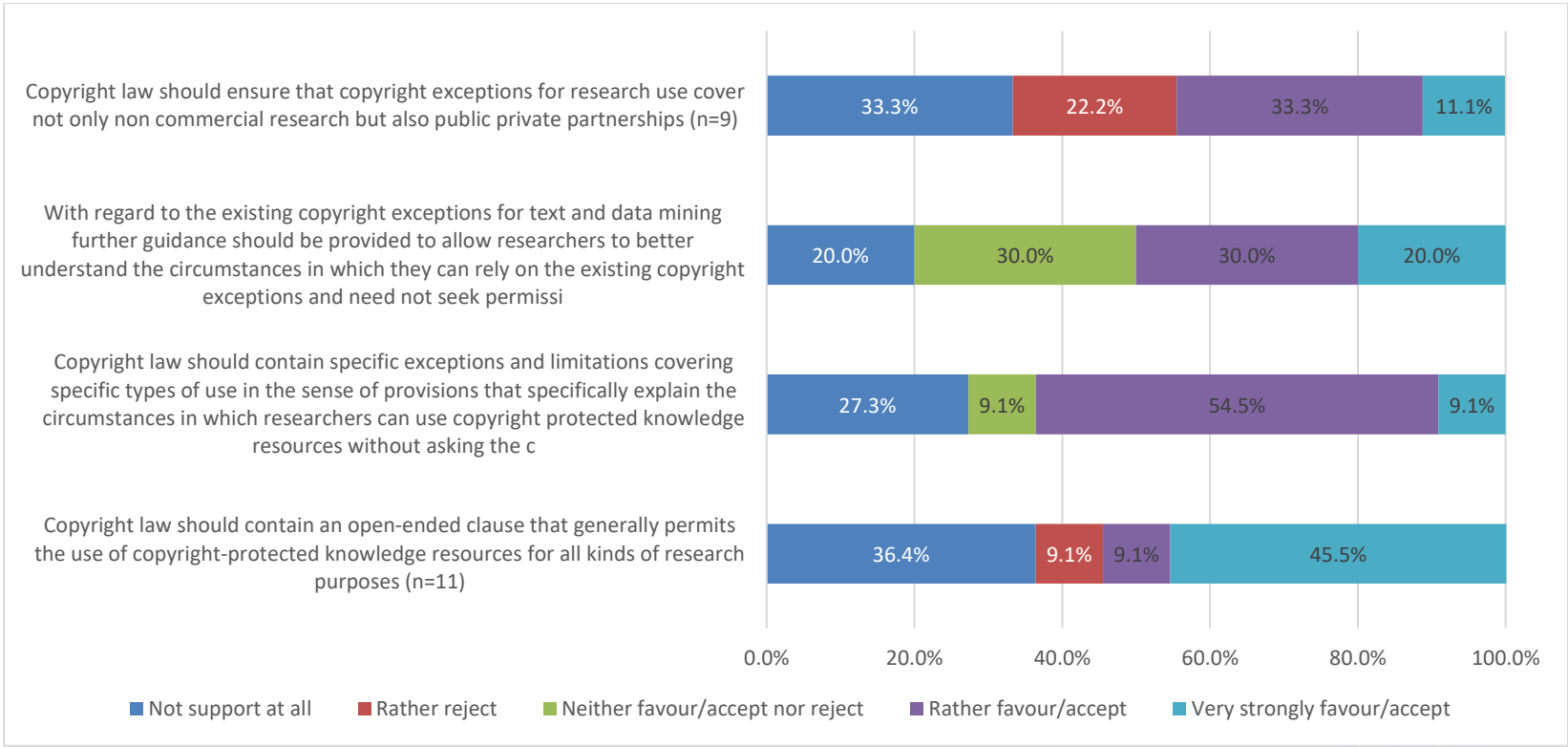
| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 6 (85.7%) | 0 (0.0%) | 0 (0.0%) | 1 (14.3%) | 0 (0.0%) | 7 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 4 (57.1%) | 1 (14.3%) | 1 (14.3%) | 1 (14.3%) | 0 (0.0%) | 7 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 5 (71.4%) | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 0 (0.0%) | 7 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 5 (83.3%) | 0 (0.0%) | 1 (16.7%) | 0 (0.0%) | 0 (0.0%) | 6 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 5 (83.3%) | 0 (0.0%) | 0 (0.0%) | 1 (16.7%) | 0 (0.0%) | 6 |

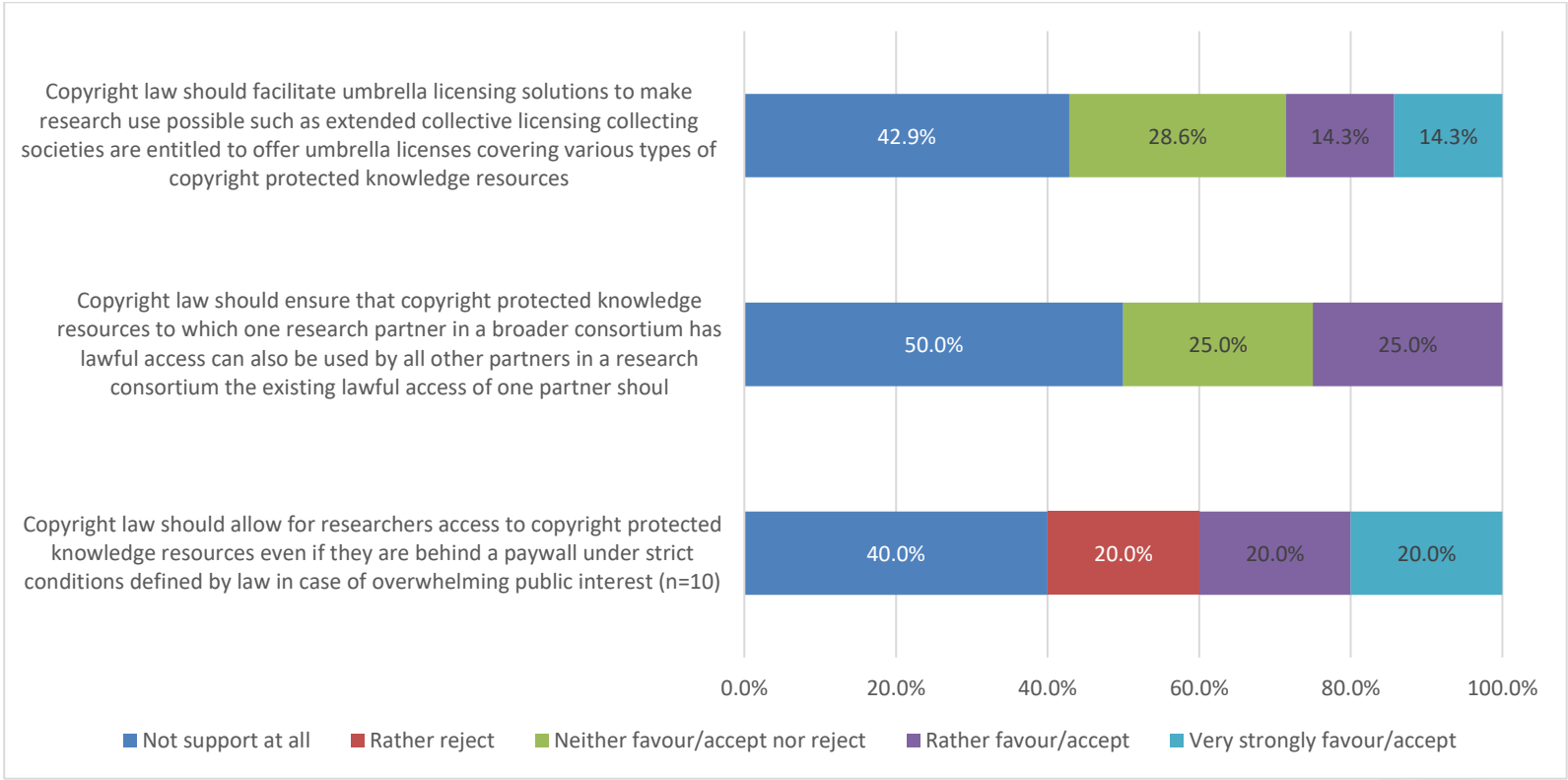
| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 7 (100.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 7 |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 4 (57.1%) | 2 (28.6%) | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 7 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**Non-commercial publishers**

**Figure 202. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (non-commercial publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1766]

1766 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 222. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (non-commercial publishers)**

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 5 (45.5%) | 1 (9.1%) | 0 (0.0%) | 1 (9.1%) | 4 (36.4%) | 11 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 1 (9.1%) | 6 (54.5%) | 1 (9.1%) | 0 (0.0%) | 3 (27.3%) | 11 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 2 (20.0%) | 3 (30.0%) | 3 (30.0%) | 0 (0.0%) | 2 (20.0%) | 10 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 1 (11.1%) | 3 (33.3%) | 0 (0.0%) | 2 (22.2%) | 3 (33.3%) | 9 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 2 (20.0%) | 2 (20.0%) | 0 (0.0%) | 2 (20.0%) | 4 (40.0%) | 10 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 0 (0.0%) | 2 (25.0%) | 0 (0.0%) | 2 (25.0%) | 4 (50.0%) | 8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 1 (14.3%) | 1 (14.3%) | 2 (28.6.0%) | 0 (0.0%) | 3 (42.9%) | 7 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) (Breakdown by publishers' revenue - low, medium, high)**

The survey data reveals distinct preferences among low-, medium-, and high-revenue publishers regarding the proposed policy changes aimed at supporting the use of copyright-protected knowledge resources for research.

Low-revenue publishers exhibited strong support for an open-ended clause in copyright law that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes, with 42.1% (n=8) very strongly accepting or rather accepting this provision. They also expressed a need for specific exceptions and limitations in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation, with 52.7% (n=10) very strongly accepting or rather accepting the idea. Furthermore, low-revenue publishers would very strongly accept or rather accept partnerships (53.0% , n=9) additional guidance on text and data mining exceptions and support extending exceptions to public-private partnerships.

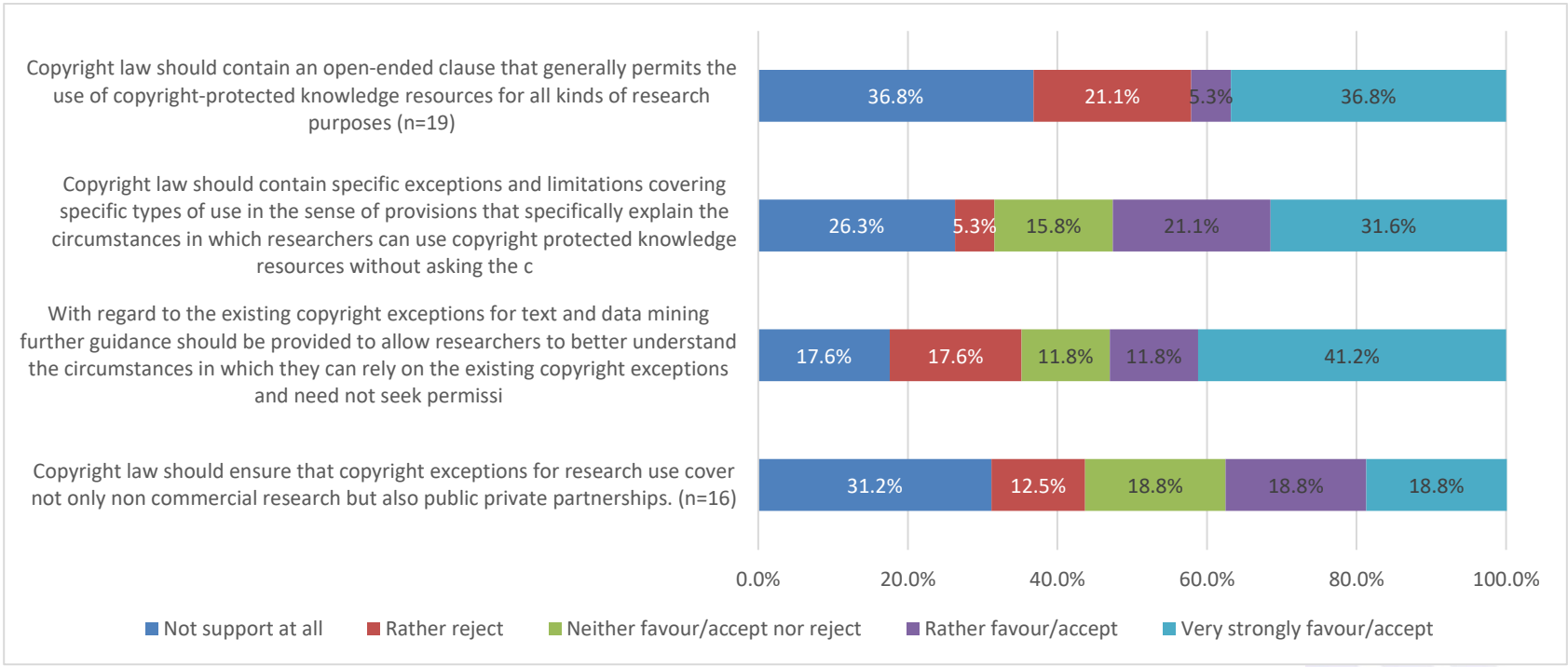
Medium-revenue publishers display more mixed views. For example, 42.9 % (n=3) of the medium-revenue publishers would not support at all an open-ended clause in copyright law that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes. The medium-revenue publishers showed a preference for specific exceptions and limitations, with 50.0% (n=4) claiming that they would strongly or rather accept such a change. Similarly, the medium-revenue publishers showed a preference for further guidance on text and data mining, with 75.0% (n=6) claiming that they would strongly or rather accept this change. However, 62.5% (n=5) of medium-revenue publishers would not support access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest.

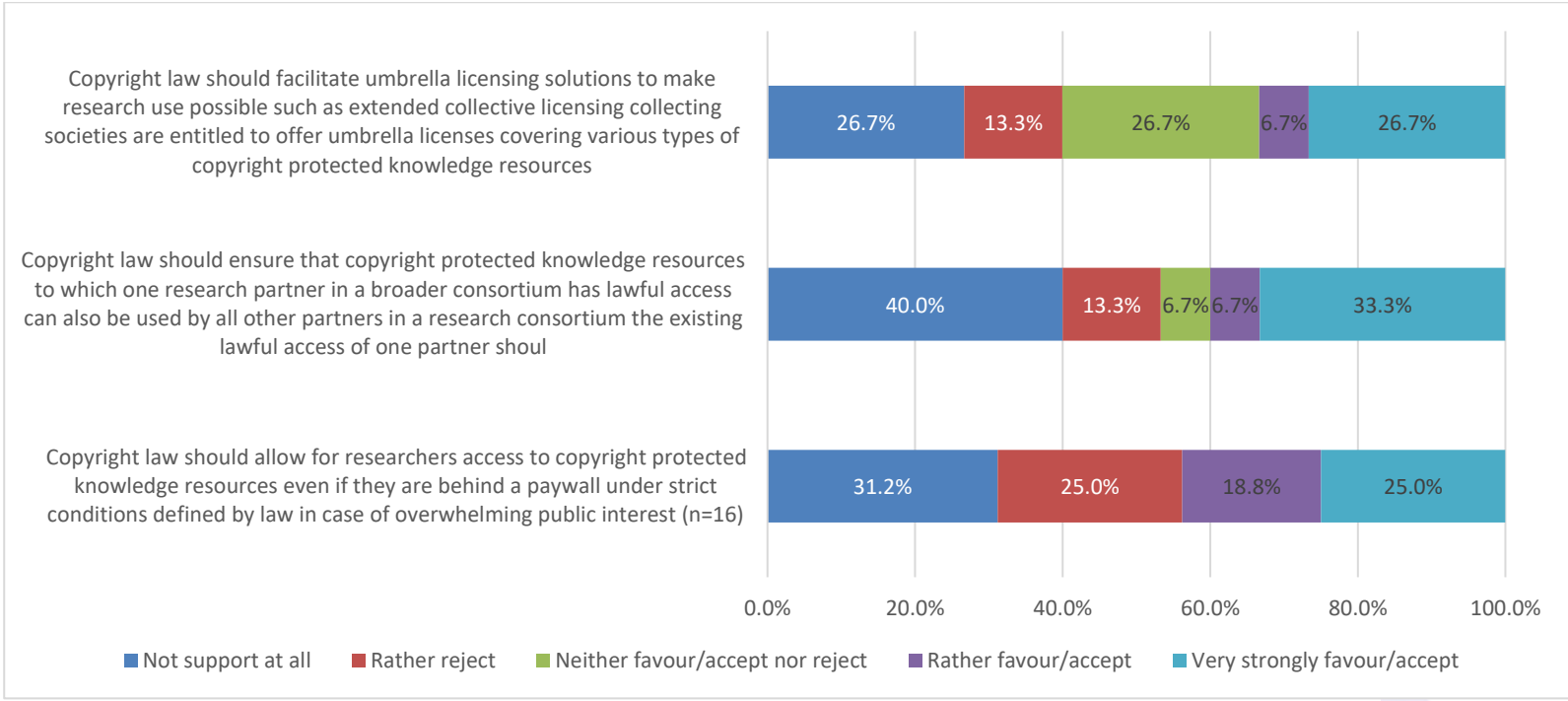
High-revenue publishers demonstrated minimal support toward a copyright law that would contain specific exceptions and limitations covering specific types of use, with 7.1% (n=1) claiming that they would strongly accept such a change, 14.3% (n=2) would rather reject and 57.1% (n=8) would not support this change at all. Moreover, high-revenue publishers expressed a lack of support for the introduction in copyright law of an open-ended clause

that would permit the use of copyright-protected knowledge resources for all kind of research purposes, with 71.4% (n=10) claiming that they would not support such a change; similarly, 71.4% (n=10) and 75.0% (n=9) of high-revenue publishers would not support that copyright exceptions for research use covers also public-private partnerships and umbrella licensing solutions either respectively.

**Low-revenue publishers**

**Figure 203. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (low-revenue publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1767]

1767 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 223. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (low-revenue publishers publishers)**

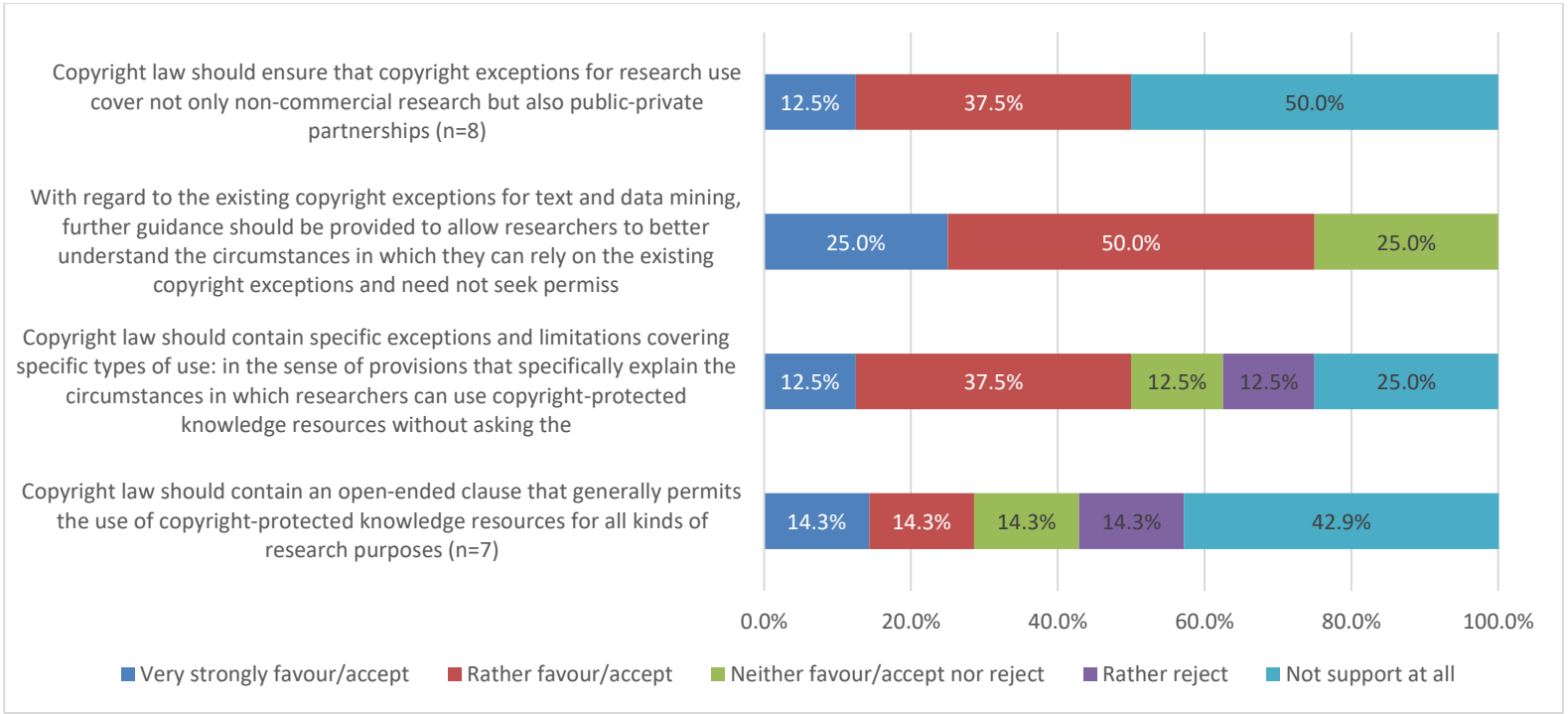
| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 7 (36.8%) | 1 (5.3%) | 0 (0.0%) | 4 (21.1%) | 7 (36.8%) | 19 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 6 (31.6%) | 4 (21.1%) | 3 (15.8%) | 1 (5.3%) | 5 (26.3%) | 19 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 7 (41.2%) | 2 (11.8%) | 2 (11.8%) | 3 (17.6%) | 3 (17.6%) | 17 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 3 (18.8%) | 3 (18.8%) | 3 (18.8%) | 2 (12.5%) | 5 (31.2%) | 16 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 4 (25.0%) | 3 (18.8%) | 0 (0.0%) | 4 (25.0%) | 5 (31.2%) | 16 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 5 (33.3%) | 1 (6.7%) | 1 (6.7%) | 2 (13.3%) | 6 (40.0%) | 15 |

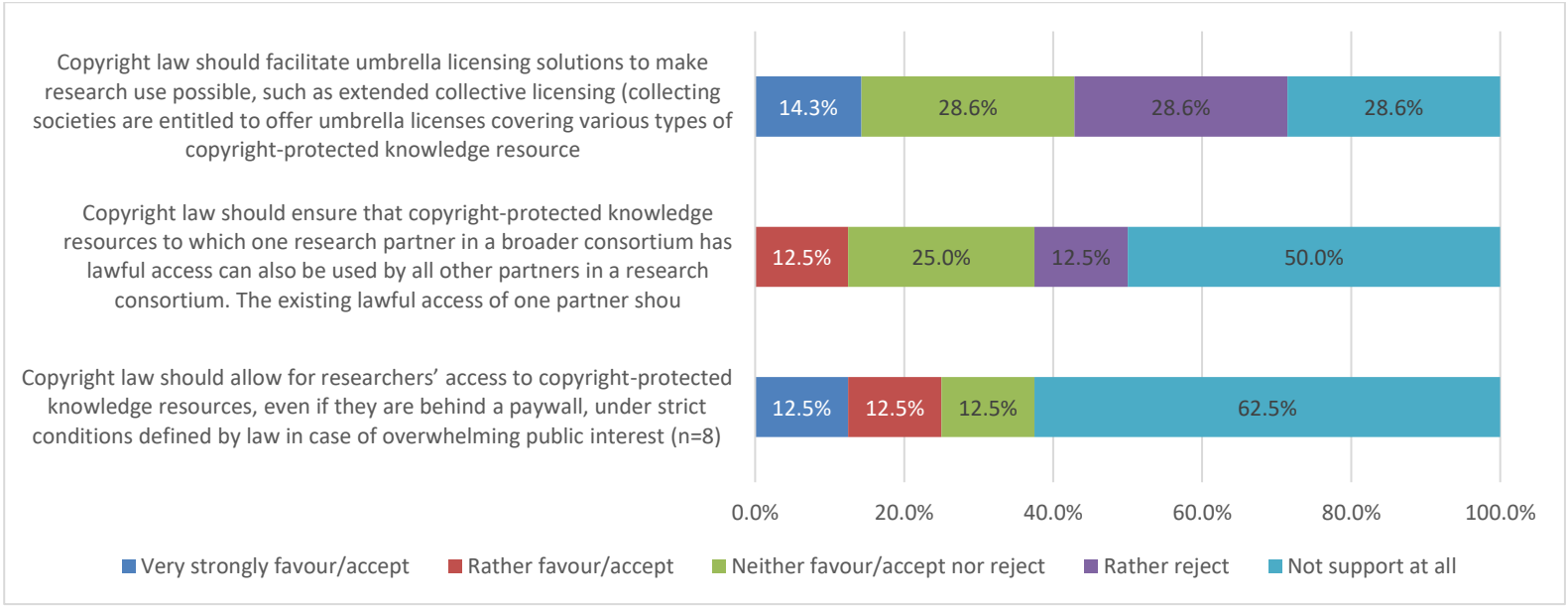
| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 4 (26.7%) | 1 (6.7%) | 4 (26.7%) | 2 (13.3%) | 4 (26.7%) | 15 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**Medium-revenue publishers**

**Figure 204. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (medium-revenue publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*[1768]

1768 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 224. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (medium-revenue publishers)**

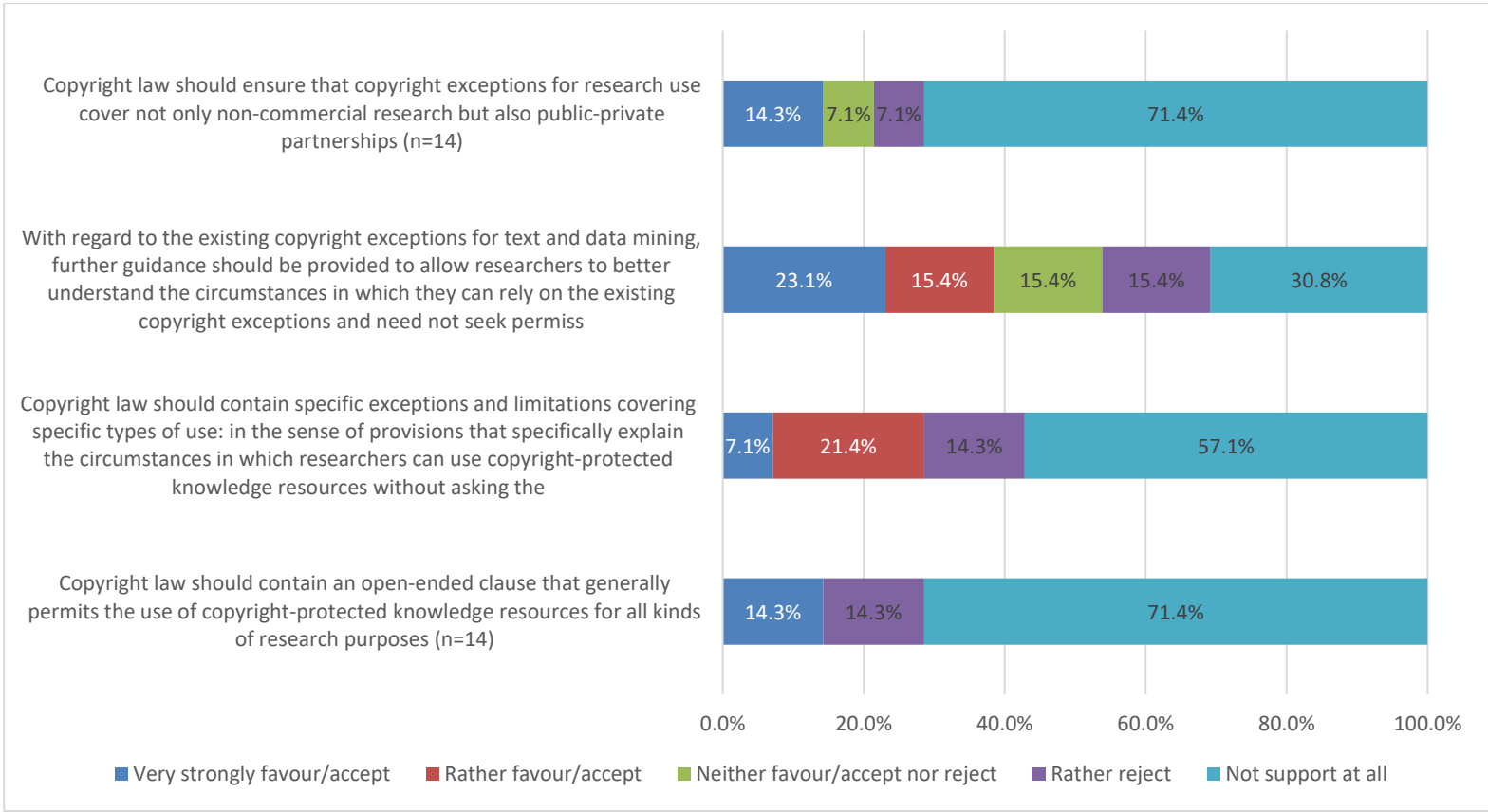
| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 1 (14.3%) | 1 (14.3%) | 1 (14.3%) | 1 (14.3%) | 3 (42.9%) | 7 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 1 (12.5%) | 3 (37.5%) | 1 (12.5%) | 1 (12.5%) | 1 (25.0%) | 7 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 2 (25.0%) | 4 (50.0%) | 2 (25.0%) | 0 (0.0%) | 0 (0.0%) | 8 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 1 (12.5%) | 3 (37.5%) | 0 (0.0%) | 0 (0.0%) | 4 (50.0%) | 8 |

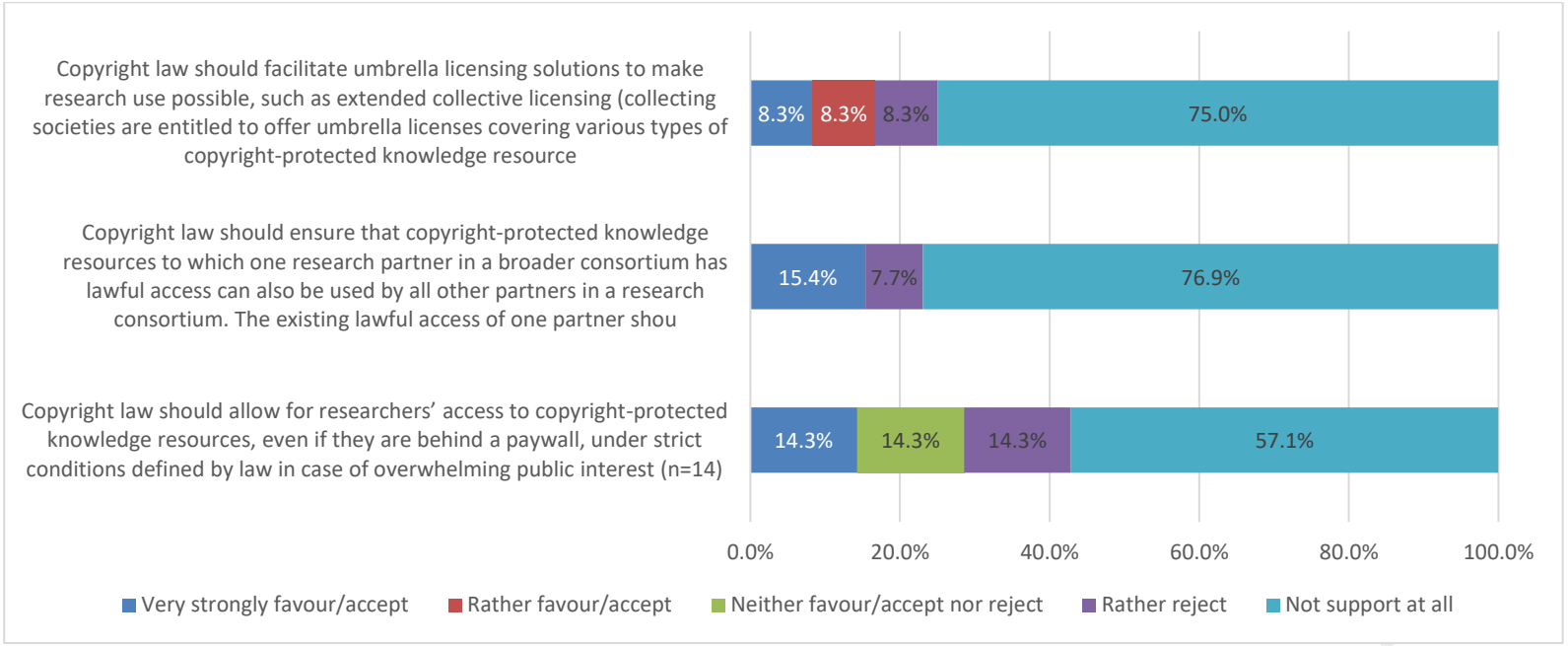
| | | | | | | |
|---|---|---|---|---|---|---|
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, under strict conditions defined by law in case of overwhelming public interest | 1 (12.5%) | 1 (12.5%) | 1 (12.5%) | 0 (0.0%) | 5 (62.5%) | 8 |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 0 (0.0%) | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 4 (50.0%) | 8 |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 1 (14.3%) | 0 (0.0%) | 2 (28.6%) | 2 (28.6%) | 2 (28.6%) | 7 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

**High-revenue publishers**

**Figure 205. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (high-revenue publishers)**






*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?*[1769]*"*

1769 Please note that some formulation of answer options were too long to fit in the figure provided. For full formulations refer to the table below.

**Table 225. Public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research (high-revenue publishers)**

| | Very strongly favour/accept | Rather favour/accept | Neither favour/accept nor reject | Rather reject | Not support at all | Total |
|---|---|---|---|---|---|---|
| Copyright law should contain an open-ended clause that generally permits the use of copyright-protected knowledge resources for all kinds of research purposes | 2 (14.3%) | 0 (0.0%) | 0 (0.0%) | 2 (14.3%) | 10 (71.4%) | 14 |
| Copyright law should contain specific exceptions and limitations covering specific types of use: in the sense of provisions that specifically explain the circumstances in which researchers can use copyright-protected knowledge resources without asking the copyright holder for prior authorisation | 1 (7.1%) | 3 (21.4%) | 0 (0.0%) | 2 (14.3%) | 8 (57.1%) | 14 |
| With regard to the existing copyright exceptions for text and data mining, further guidance should be provided to allow researchers to better understand the circumstances in which they can rely on the existing copyright exceptions and need not seek permission from copyright holders | 3 (23.1%) | 2 (15.4%) | 2 (15.4%) | 2 (15.4%) | 4 (30.8%) | 13 |
| Copyright law should ensure that copyright exceptions for research use cover not only non-commercial research but also public-private partnerships | 2 (14.3%) | 0 (0.0%) | 1 (7.1%) | 1 (7.1%) | 10 (71.4%) | 14 |
| Copyright law should allow for researchers' access to copyright-protected knowledge resources, even if they are behind a paywall, | 2 (14.3%) | 0 (0.0%) | 2 (14.3%) | 2 (14.3%) | 8 (57.1%) | 14 |

| | | | | | | |
|---|---|---|---|---|---|---|
| under strict conditions defined by law in case of overwhelming public interest | | | | | | |
| Copyright law should ensure that copyright-protected knowledge resources to which one research partner in a broader consortium has lawful access can also be used by all other partners in a research consortium. The existing lawful access of one partner should be sufficient for the whole consortium | 2 (15.4%) | 0 (0.0%) | 0 (0.0%) | 1 (7.7%) | 10 (76.9%) | 13 |
| Copyright law should facilitate umbrella licensing solutions to make research use possible, such as extended collective licensing (collecting societies are entitled to offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (copyright holders receive a pre-determined lump sum payment for research use) | 1 (8.3%) | 1 (8.3%) | 0 (0.0%) | 1 (8.3%) | 9 (75.0%) | 12 |

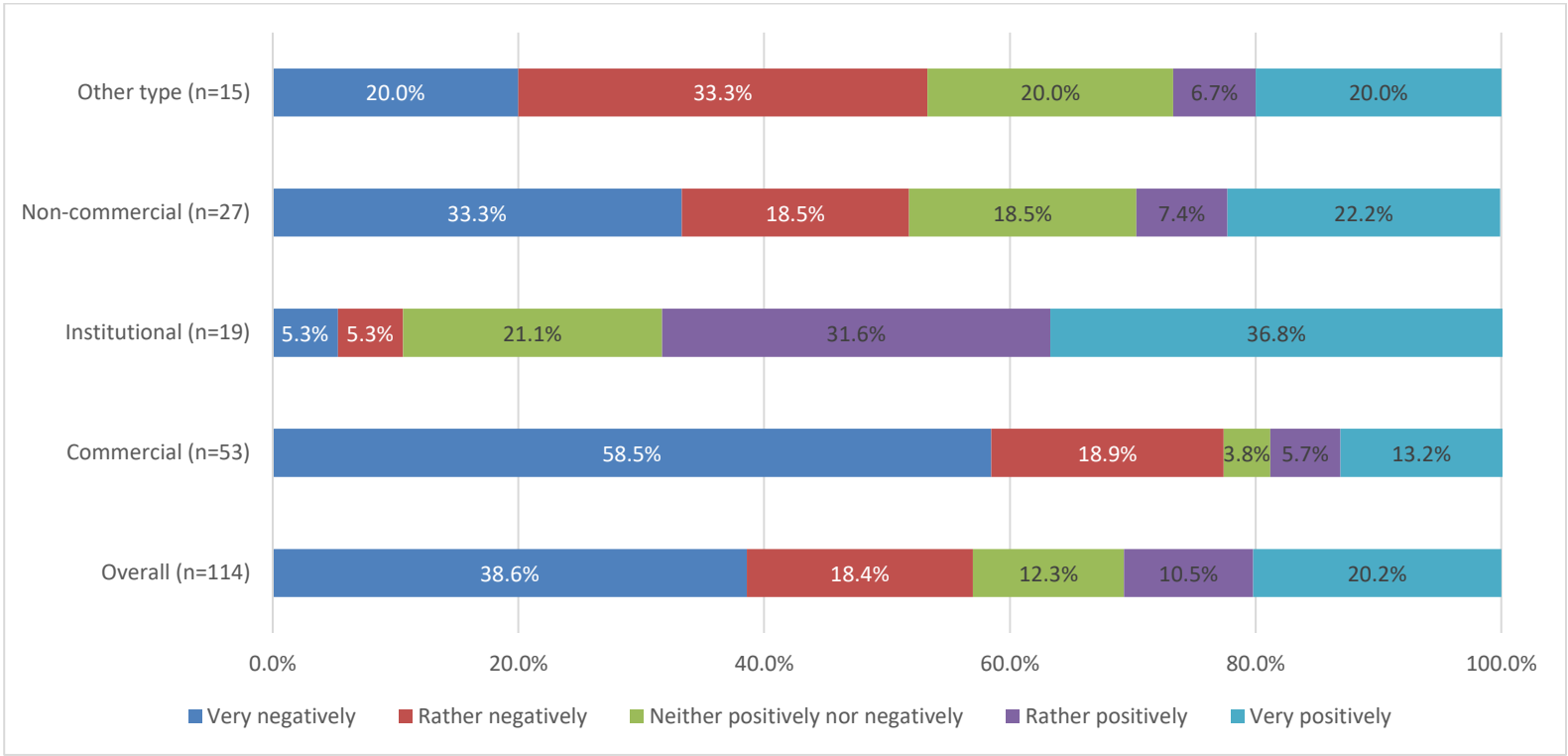
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Would you be in favour of the following public policy changes to support the use of copyright-protected knowledge resources (such as books, articles and other texts, images, pictures, videos and films, music) for research?"*

## Tell us about your views on the provisions of a potential EU-wide Secondary Publication Right legislation

### QUESTION 22: In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?

Across all publishers, 20.2% view the introduction of EU-wide SPR legislation very positively, while 38.6% view it very negatively. Commercial publishers are mostly against the introduction of an EU-wide SPR legislation, with 58.5% viewing it very negatively. Only 13.2% see it very positively. Institutional publishers are more favourable toward the introduction of an EU-wide SPR legislation, with 36.8% viewing it very positively and another 31.6% rather positively. Non-commercial publishers' views are mixed but lean towards negative, with 33.3% viewing it very negatively and 22.2% very positively. Other types of publishers show an opposition toward the SPR, with 33.3% considering rather negatively and 20.0% very negatively the possible introduction of an EU-wide SPR legislation. However, 20.0% of them have a more neutral (considering the introduction of an EU-wide SPR legislation neither positively nor negatively) or very positive stance, indicating diverse opinions within this group.

**Figure 206. Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (breakdown by commercial, institutional, and non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 226. Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (breakdown by commercial, institutional, and non-commercial publishers)**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other type | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| Very positively | 23 | 20.2% | 7 | 13.2% | 7 | 36.8% | 6 | 22.2% | 3 | 20.0% |
| Rather positively | 12 | 10.5% | 3 | 5.7% | 6 | 31.6% | 2 | 7.4% | 1 | 6.7% |
| Neither positively nor negatively | 14 | 12.3% | 2 | 3.8% | 4 | 21.1% | 5 | 18.5% | 3 | 20.0% |
| Rather negatively | 21 | 18.4% | 10 | 18.9% | 1 | 5.3% | 5 | 18.5% | 5 | 33.3% |
| Very negatively | 44 | 38.6% | 31 | 58.5% | 1 | 5.3% | 9 | 33.3% | 3 | 20.0% |
| Total | 114 | 100% | 53 | 100% | 19 | 100% | 27 | 100% | 15 | 100% |

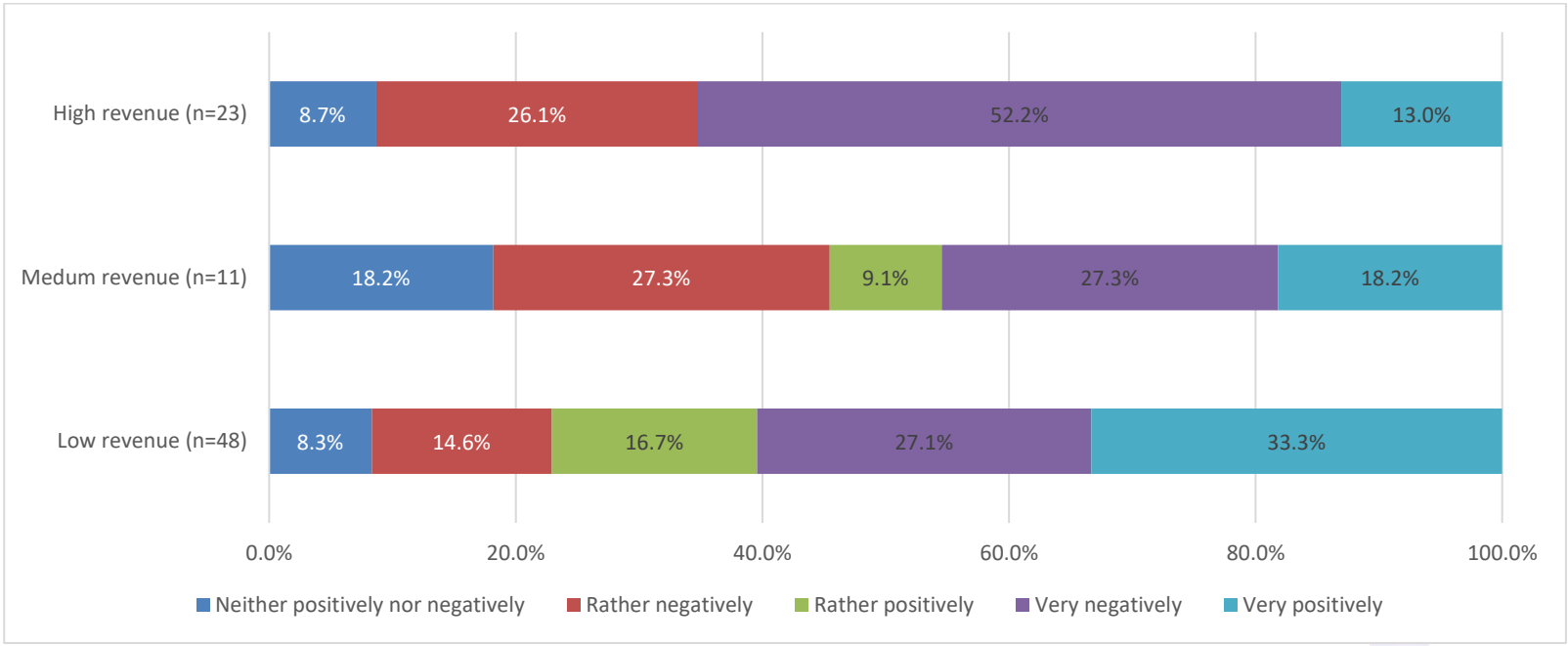
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

**Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (Breakdown by publishers' revenue – low, medium, high)**

The survey results on the potential introduction of an EU-wide Secondary Publication Right legislation, categorised by the revenue levels of publishers, provide nuanced insights into the diverse perspectives within each group.

Low-revenue publishers demonstrate varied opinions, with 50% being very or rather positive and 41.7% being rather or very negative on the potential introduction of an EU-wide SPR legislation. As for medium-revenue publishers, 27.3% are very or rather positive with the introduction of the EU-wide SPR, and 54.6% are rather or very negative. High-revenue publishers are mostly against this introduction, with 78.3% being rather or very negative and 13% very positive.

**Figure 207. Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (Breakdown by publishers' revenue – low, medium, high)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

**Table 227. Publishers' views on the potential introduction of an EU-wide Secondary Publication Right legislation (Breakdown by publishers' revenue - low, medium, high)**

| | Overall result | I prefer not to reveal | | Low revenue | | Medium revenue | | High revenue | |
|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| Very positively | 22 | 22.9% | 1 | 7.1% | 16 | 33.3% | 2 | 18.2% | 3 | 13.0% |
| Rather positively | 11 | 11.5% | 2 | 14.3% | 8 | 16.7% | 1 | 9.1% | 0 | 0.0% |
| Neither positively nor negatively | 10 | 10.4% | 2 | 14.3% | 4 | 8.3% | 2 | 18.2% | 2 | 8.7% |
| Rather negatively | 20 | 20.8% | 4 | 28.6% | 7 | 14.6% | 3 | 27.3% | 6 | 26.1% |
| Very negatively | 33 | 34.4% | 5 | 35.7% | 13 | 27.1% | 3 | 27.3% | 12 | 52.2% |
| Total | 96 | 100.0% | 14 | 100.0% | 48 | 100.0% | 11 | 100.0% | 23 | 100.0% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In principle, how positively or negatively do you view the potential introduction of an EU-wide Secondary Publication Right legislation?"*

**QUESTION 23: Could you explain why you view the potential introduction of an EU-wide Secondary Publication Right legislation negatively?**

This open-ended question received 62 responses.

The open-ended responses from scientific publishers reveal a range of concerns and negative views regarding the potential introduction of EU-wide Secondary Publication Right (SPR) legislation. One major concern is the perceived threat to the publisher's ability to maintain exclusivity of content, leading to potential confusion about versioning. Publishers argue that the SPR, as a model, is not sustainable for Open Access and relies on the continuation of the subscription model to fund publication. They emphasise that it does not guarantee access to the final version of record (VoR), impacting the quality and trust in scientific publishing.

Publishers expressed apprehensions about the impact on their ability to recoup investments in the services they offer, such as peer review processes, ethical and scientific integrity checks, and content curation. The potential shift toward immediate Open Access on a large scale is seen as a threat to the subscription, affecting publishers' ability to choose a business model that meets the community's needs.

Concerns are raised about legal complexities, potential conflicts with existing copyright agreements, and the lack of consideration for market context in different countries. Publishers argue that legislative intervention is unnecessary, citing evidence of significant uptake in Open Access through existing models and agreements.

Additionally, publishers highlight the potential harm to specific disciplines, such as mathematics, where funding for gold Open Access is limited. Some argue that SPR legislation would be aggressive, unconstitutional in some cases, and could disrupt existing publishing business models, potentially leading to a collapse of the research publication world.

Overall, publishers express a preference for flexible and sustainable models, emphasising the importance of funding and collaboration to achieve Open Access goals. They contend that SPR may not be a viable solution and could have unintended consequences for the scholarly publishing ecosystem.

**QUESTION 24: To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?**

Publishers were surveyed regarding their perspectives on the potential features of a harmonised Secondary Publication Right and the envisaged impact on their current business models if implemented across the EU.

For the scenario where the Secondary Publication Right would encompass a broad spectrum of scientific output, 61.9% of publishers indicated that such a change would necessitate a fundamental reshaping of their business models, while 11.9% foresaw some adjustments would be needed without fundamental changes, and 26.2% believed no substantial alterations would be required. Similarly, when considering an SPR that will extend to publications from projects with a lower threshold of public funding, 57% foresaw that this change would require a fundamental reshaping of their business model, 16.3% envisioned some changes would be needed without being fundamental, and 26.7% expected no substantial shifts. The feature of covering the version of record without limitations to earlier versions prompted 66.3% to anticipate a fundamental reshaping, with 5.8% foreseeing some non-fundamental changes and 27.9% predicting no substantial modifications. In the context of an embargo-free or short embargo period for publication, 62.1% foresaw a fundamental

reshaping, 11.5% envisioned non-fundamental changes, and 26.4% believed no substantial alterations would be needed. Lastly, with regard to Open Access encompassing all types of uses, 70.1% anticipated a fundamental reshaping, 10.3% foresaw some non-fundamental changes, and 19.5% expected no substantial adjustments.

**Figure 208. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (all types of publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 228. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (all types of publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 52 (61.9%) | 10 (11.9%) | 22 (26.2%) | 84 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding | 49 (57.0%) | 14 (16.3%) | 23 (26.7%) | 86 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 57 (66.3%) | 5 (5.8%) | 24 (27.9%) | 86 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months | 54 (62.1%) | 10 (11.5%) | 23 (26.4%) | 87 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 61 (70.1%) | 9 (10.3%) | 17 (19.5%) | 87 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (breakdown by commercial, institutional and non-commercial publishers)**

Publishers' perspectives on the potential features of a harmonised EU-wide Secondary Publication Right, and their anticipated impact on business models vary across commercial, institutional, and non-commercial publishers.

The option of a Secondary Publication Right covering a broad range of scientific output received mixed responses. As for commercial publishers, 76.9% would need a fundamental reshaping of their business model, 7.7% would require some changes, and 15.4% would not require any substantial changes to their business model. When it comes to institutional publishers, only 14.3% would need to fundamentally reshape their business model if the broad range of scientific output were to be covered, with 57.1% not requiring any substantial changes. Non-commercial publishers see this feature more negatively than positively, with 63.2% saying it would require fundamental business reshaping, 10.5% saying some changes would be needed, and 26.3% saying no changes in their business model would be necessary.

An SPR extending to publications from projects with a lower threshold of public funding would require a fundamental business reshaping for 65.9% of commercial publishers, 15.4% of institutional publishers, and 60.0% of non-commercial publishers.

When it comes to covering the version of record, 82.9% of commercial publishers would need a fundamental reshaping of their business model. For institutional publishers, only 15.4% would require fundamental reshaping, while 76.9% would not need to undergo any substantial changes. As for non-commercial publishers, 65.0% would need fundamental reshaping, while 25% would need no structural changes to their business models.

The SPR allowing no, or very short (6 months) embargo period would require fundamental business models reshaping for 71.4% of commercial publishers. For 69.2% of institutional publishers, removing or having a very short embargo period would not require any substantial changes, while 23.1% would need fundamental business reshaping. A total 65% of non-commercial publishers would require fundamental reshaping, and 30% would require substantial changes.

Finally, an SPR legislation covering of all types of uses would require substantial changes across all three publisher groups: 83.7% of commercial publishers, 33.3% of institutional publishers and 65% of non-commercial publishers claim that they would need fundamental reshaping of their business model.

**Commercial publishers**

**Figure 209. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (commercial publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Table 229. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (commercial publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 30 (76.9%) | 3 (7.7%) | 6 (15.4%) | 39 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | 27 (65.9%) | 8 (19.5%) | 6 (14.6%) | 41 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions. | 34 (82.9%) | 1 (2.4%) | 6 (14.6%) | 41 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months. | 30 (71.4%) | 7 (16.7%) | 5 (11.9%) | 42 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes. | 36 (83.7%) | 4 (9.3%) | 3 (7.0%) | 43 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Institutional publishers**

**Figure 210. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (institutional publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Table 230. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (institutional publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 2 (14.3%) | 4 (28.6%) | 8 (57.1%) | 14 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding | 2 (15.4%) | 2 (15.4%) | 9 (69.2%) | 13 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 2 (15.4%) | 1 (7.7%) | 10 (76.9%) | 13 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months | 3 (23.1%) | 1 (7.7%) | 9 (69.2%) | 13 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 4 (33.3%) | 2 (16.7%) | 6 (50.0%) | 12 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Non-commercial publishers**

**Figure 211. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (non-commercial publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Table 231. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (non-commercial publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 12 (63.2%) | 2 (10.5%) | 5 (26.3%) | 19 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding. | 12 (60.0%) | 3 (15.0%) | 5 (25.0%) | 20 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 13 (65.0%) | 2 (10.0%) | 5 (25.0%) | 20 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months | 13 (65.0%) | 1 (5.0%) | 6 (30.0%) | 20 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 13 (65.0%) | 1 (5.0%) | 6 (30.0%) | 20 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (Breakdown by publishers' revenue – low, medium, high)**

The responses from publishers regarding the potential features of a harmonised EU-wide Secondary Publication Right, categorised by revenue levels, highlight distinct perspectives among low-, medium-, and high-revenue publishers.

The feature of covering a broad range of scientific output would require a fundamental reshaping of the business model for 42.1% of low-revenue publishers, 66.7% medium-revenue publishers, and 81.3% high-revenue publishers. The same feature would not require any substantial changes for 42.1% of low-revenue publishers, 22.2% of medium-revenue publishers, and 12.5% of high-revenue publishers.

An SPR extending to publications from projects with a lower threshold of public funding would require a fundamental reshaping of the business model for 45% of low-revenue publishers, 55.6% of medium-revenue publishers, and 76.5% of high-revenue publishers. The introduction of this feature would not require any substantial changes for 45% of low-revenue publishers, 33.3% of medium-revenue publishers, and 11.8% of high-revenue publishers.

Moreover, the publishers were asked about the changes in their business model if the harmonised SPR were to cover the version of record. Low-revenue publishers indicated that for 45%, it would result in fundamental business reshaping, and for 45%, it would not result in substantial changes. As for medium-revenue publishers, 66.7% of the version of record would result in fundamental business reshaping, and 33.3% would not require any substantial changes. When it comes to high-revenue publishers, 88.2% would need a fundamental business reshaping.

The feature on the embargo period (a harmonised SPR permitting publication without any embargo period or only contain a short embargo period, such as 6 months) would require fundamental business reshaping for 41.5% of low-revenue publishers (43.9% would not need any substantial business reshaping). As for medium-revenue and high-revenue publishers, 66.7% and 81.3%, respectively, would require fundamental business reshaping.

Finally, the feature on publication covering all types of uses (a harmonised SPR allowing Open Access publication covering all types of use; not being confined to specific forms of use, such as use for non-commercial purposes), would require a fundamental business reshaping of business models for 47.5% of low-revenue publishers, 77.8% of medium-revenue publishers, and 93.8% of high-revenue publishers.

**Low-revenue publishers**

**Figure 212. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (low-revenue publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

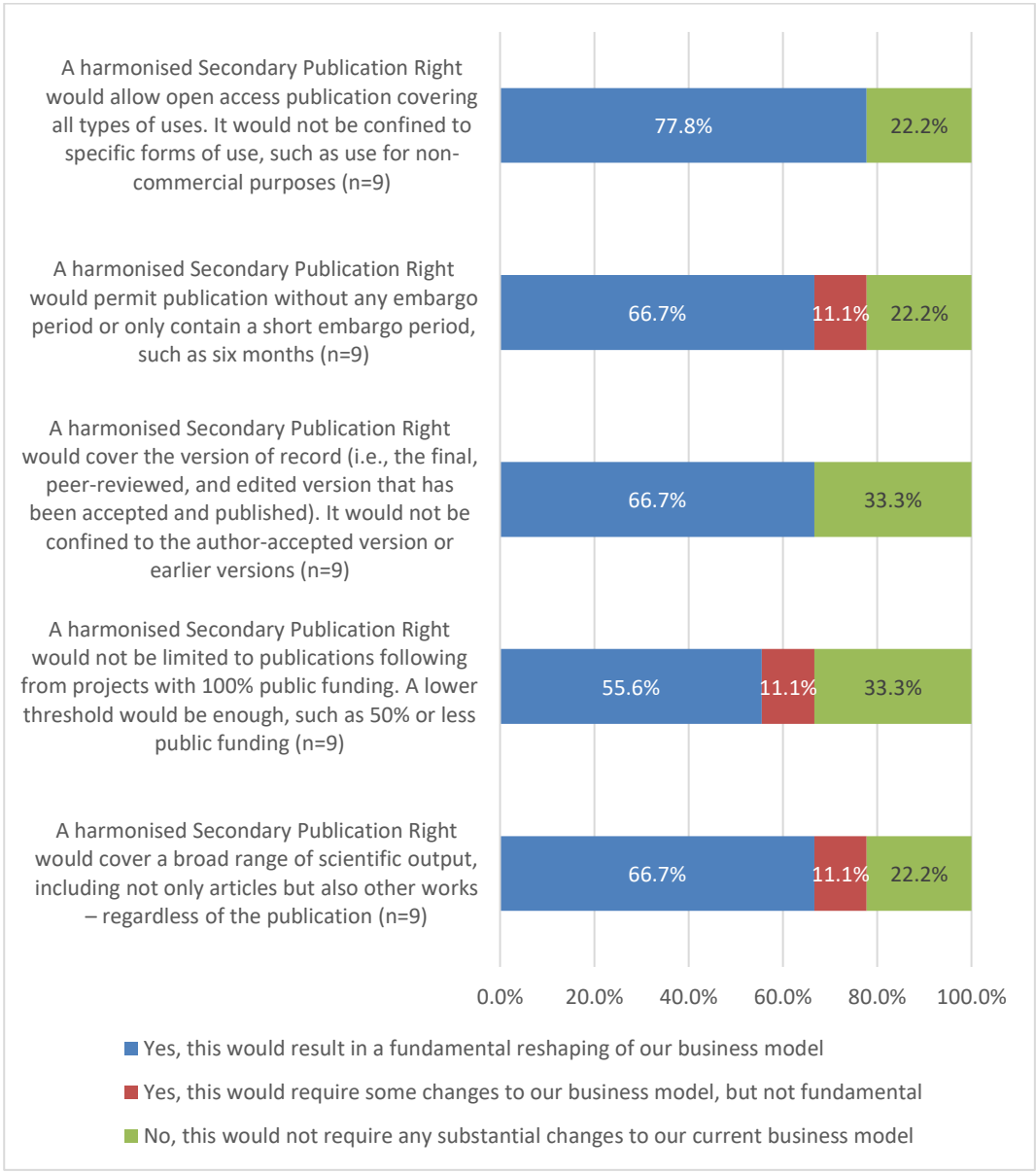
**Table 232. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (low-revenue publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 16 (42.1%) | 6 (15.8%) | 16 (42.1%) | 38 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding | 16 (41.0%) | 7 (17.9%) | 16 (41.0%) | 39 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 18 (45.0%) | 4 (10.0%) | 18 (45.0%) | 40 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months | 17 (41.5%) | 6 (14.6%) | 18 (43.9%) | 41 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 19 (47.5%) | 8 (20.0%) | 13 (32.5%) | 40 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Medium-revenue publishers**

**Figure 213. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (medium-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

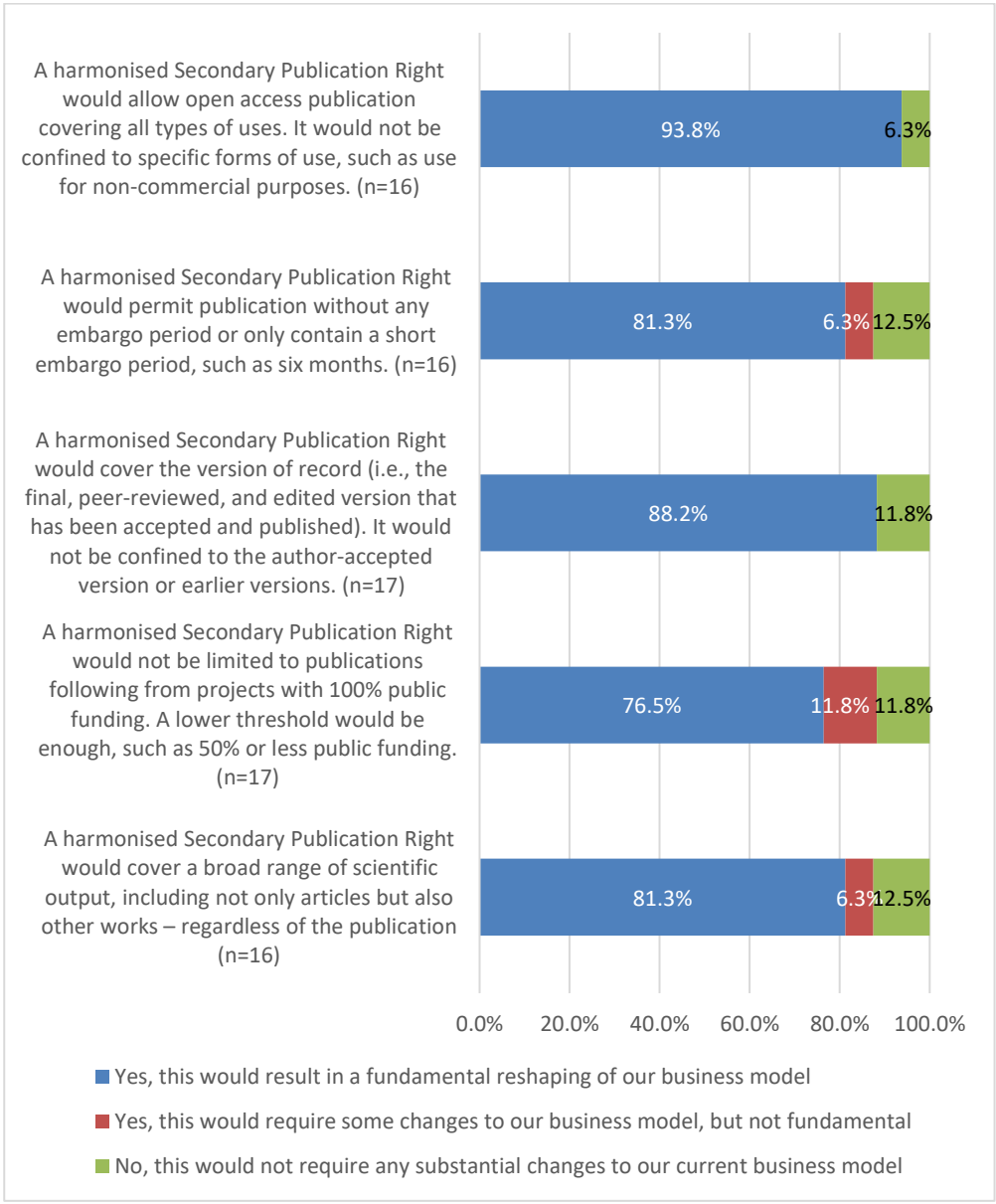
**Table 233. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (medium-revenue publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 6 (66.7%) | 1 (11.1%) | 2 (22.2%) | 9 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding | 5 (55.6%) | 1 (11.1%) | 3 (33.3%) | 9 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 6 (66.7%) | 0 (0.0%) | 3 (33.3%) | 9 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months. | 6 (66.7%) | 1 (11.1%) | 2 (22.2%) | 9 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 7 (77.8%) | 0 (0.0%) | 2 (22.2%) | 9 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**High-revenue publishers**

**Figure 214. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (high-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU?"*

**Table 234. Potential features of an EU-wide Secondary Publication Right and their impact on publishers' current business models (high-revenue publishers)**

| | Yes, this would result in a fundamental reshaping of our business model | Yes, this would require some changes to our business model, but not fundamental | No, this would not require any substantial changes to our current business model | Total |
|---|---|---|---|---|
| A harmonised Secondary Publication Right would cover a broad range of scientific output, including not only articles but also other works – regardless of the publication | 13 (81.3%) | 1 (6.3%) | 2 (12.5%) | 16 |
| A harmonised Secondary Publication Right would not be limited to publications following from projects with 100% public funding. A lower threshold would be enough, such as 50% or less public funding | 13 (76.5%) | 2 (11.8%) | 2 (11.8%) | 17 |
| A harmonised Secondary Publication Right would cover the version of record (i.e. the final, peer-reviewed, and edited version that has been accepted and published). It would not be confined to the author-accepted version or earlier versions | 15 (88.2%) | 0 (0.0%) | 2 (11.8%) | 17 |
| A harmonised Secondary Publication Right would permit publication without any embargo period or only contain a short embargo period, such as 6 months | 13 (81.3%) | 1 (6.3%) | 2 (12.5%) | 16 |
| A harmonised Secondary Publication Right would allow Open Access publication covering all types of uses. It would not be confined to specific forms of use, such as use for non-commercial purposes | 15 (93.8%) | 0 (0.0%) | 1 (6.3%) | 16 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent would the following potential features of a Secondary Publication Right affect your current business model, assuming that they were implemented across the EU ?"*

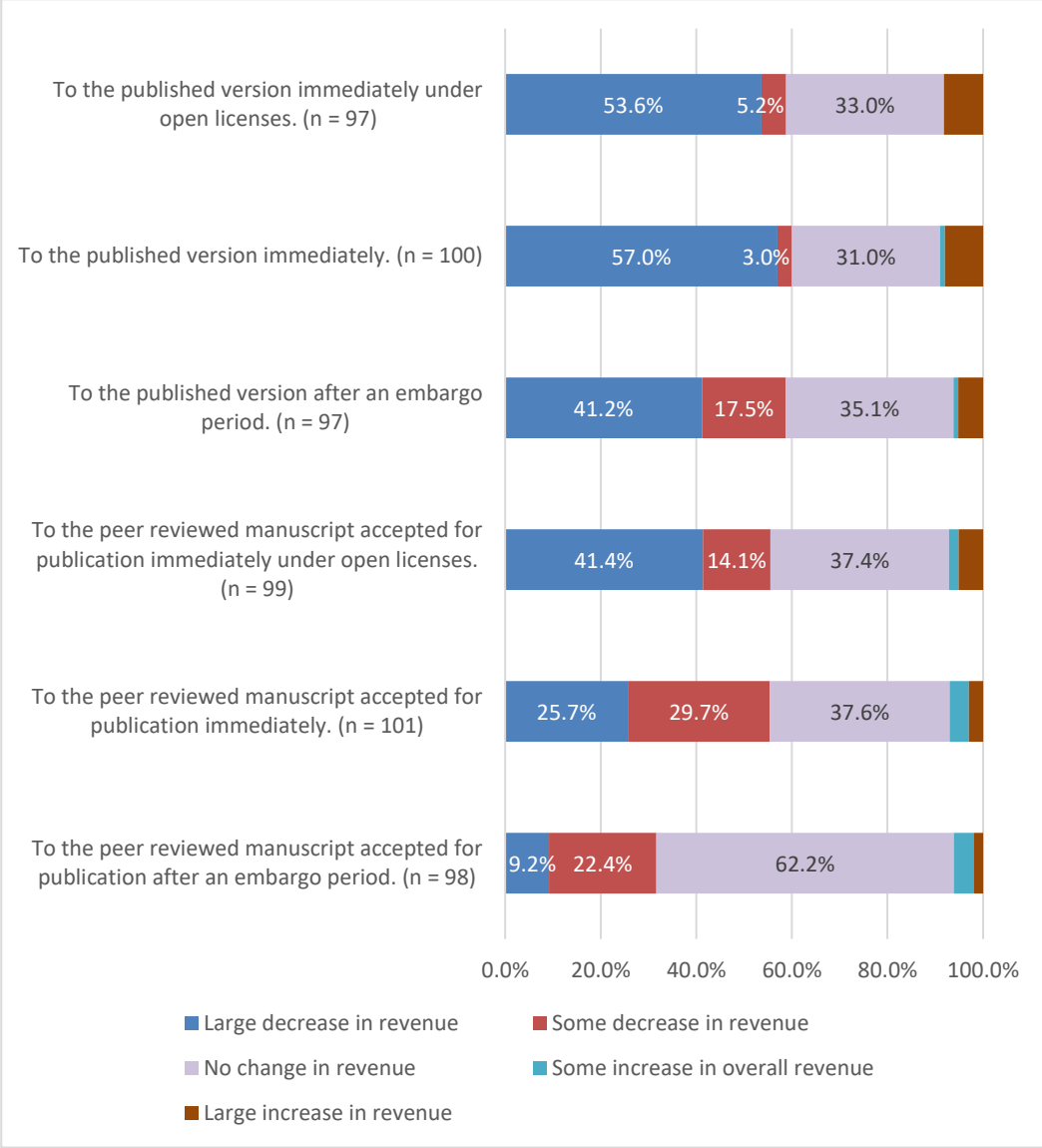
### QUESTION 25: What change of revenue would you expect for your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways:

Publishers' expectations of revenue changes vary across different scenarios of Open Access for scientific publications resulting from public funding.

**Regarding the peer-reviewed manuscript**, the survey reveals that the majority (62.2%) of publishers foresee no significant change in their revenue when access is allowed after an embargo period, while a few publishers anticipate increases (2.0% large, 4.1% some) or decreases (22.4% some, 9.2% large) in revenue. When open access is provided immediately, 37.6% of publishers foresee no change in revenue, while 29.7% foresee some decrease and 25.7% large decrease. If Open Access is allowed immediately under open licences, 37.4% think it would have no change in revenue, 14.1% think it would have some impact on their revenue, and 41.4% think it would result in a large decrease on their revenue.

**Regarding the published version,** if access is allowed after an embargo period, 35.1% foresee no change, 17.5% some decrease in revenue, and 41.2% a large decrease in revenue. If the access is allowed immediately, 31% foresee no change, 3% foresee some decrease, and 57% think it would result in a large decrease in revenue. Finally, if access is allowed immediately under open licences, 33% see no change, 5.2% see some decrease, and 53.6% see a large decrease in revenue.

**Figure 215. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 235. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (all types of publishers)**

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 2 (2.0%) | 4 (4.1%) | 61 (62.2%) | 22 (22.4%) | 9 (9.2%) | 98 |
| To the peer-reviewed manuscript accepted for publication immediately | 3 (3.0%) | 4 (4.0%) | 38 (37.6%) | 30 (29.7%) | 26 (25.7%) | 101 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 5 (5.1%) | 2 (2.0%) | 37 (37.4%) | 14 (14.1%) | 41 (41.4%) | 99 |
| To the published version after an embargo period | 5 (5.2%) | 1 (1.0%) | 34 (35.1%) | 17 (17.5%) | 40 (41.2%) | 97 |
| To the published version immediately | 8 (8.0%) | 1 (1.0%) | 31 (31.0%) | 3 (3.0%) | 57 (57.0%) | 100 |
| To the published version immediately under open licences | 8 (8.2%) | 0 (0.0%) | 32 (33.0%) | 5 (5.2%) | 52 (53.6%) | 97 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways*?"

**Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (breakdown by commercial, institutional, non-commercial publishers)**

**When Open Access is granted to the peer-reviewed manuscript,** commercial publishers' revenue would most likely be the least affected when Open Access is allowed after an embargo period (41.9% of commercial publishers declared they foresee no change in revenue, 32.6% expect some decrease in revenue and 16.3% estimate a large decrease in revenue). Other options, in particular when Open Access is provided immediately or immediately under open licences, would result in a higher decrease in revenue (39.1% and 54.5% large decrease in revenue, respectively). Regarding institutional publishers, all three options – after an embargo period, when Open Access is allowed for publication immediately, and accepted for publication immediately under open licences would most likely result in no changes in revenue (73.7%, 76.5% and 77.8%, respectively). As for non-commercial publishers, allowing publication after an embargo period would result in no change in revenue, as claimed by 83.3%. Allowing immediate Open Access would result in no change in revenue for 34.6%, some decrease in revenue for 46.2%, and a large decrease in revenue for 15.4% of publishers. Allowing Open Access under open licences would result in no change in revenue for 34.6%, some decrease in revenue for 23.1%, and a large decrease in revenue for 34.6% of publishers.

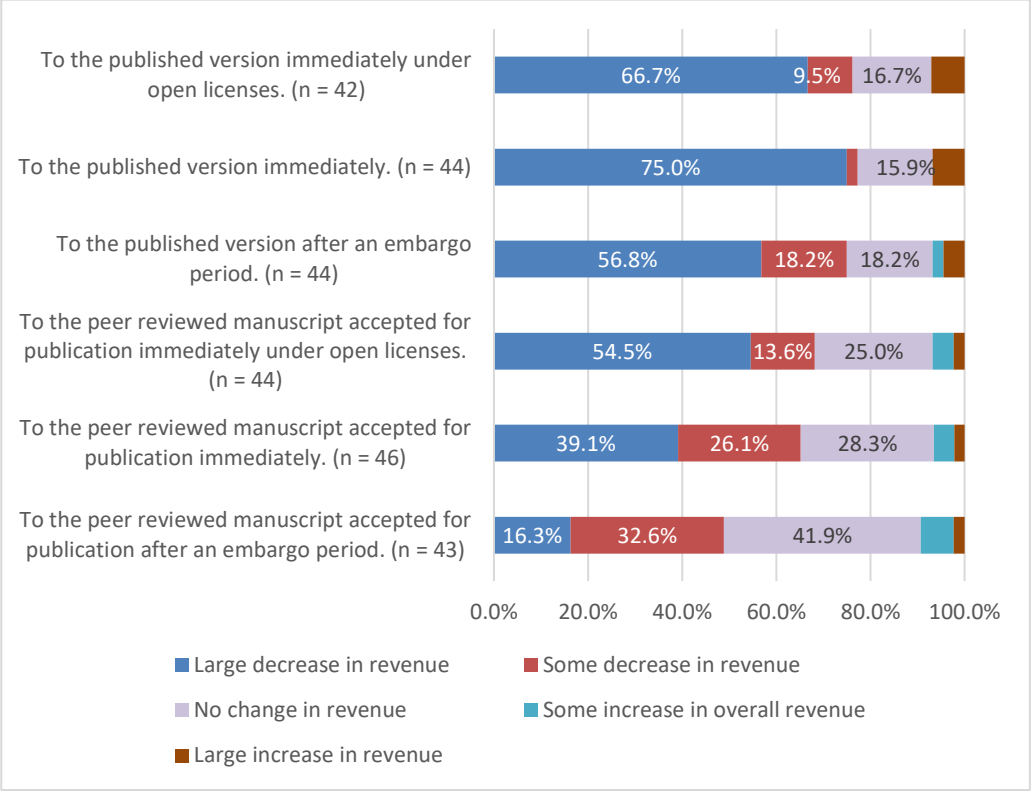
**When Open Access is granted to the published version,** for all three options, publishing after an embargo period, immediately or immediately under open licences, will most likely cause a large decrease in revenue for commercial publishers (56.8%, 75%, and 66.7%, respectively). As for institutional publishers, all three options would most likely have no

change in revenue (82.4%, 76.5%, and 76.5%, respectively). Finally, for non-commercial publishers, publishing after an embargo period would have no change in revenue for 36% of publishers, while for 32%, it would mean a large decrease in revenue. Publishing immediately and immediately under open licences would lead to a large decrease in revenue – 55.6% and 55.6%, respectively.

This comparison underscores the varying expectations and concerns of publishers – commercial, institutional, and non-commercial – regarding the potential impact of Open Access on their revenue streams.

### Commercial publishers

**Figure 216. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

**Table 236. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (commercial publishers)**

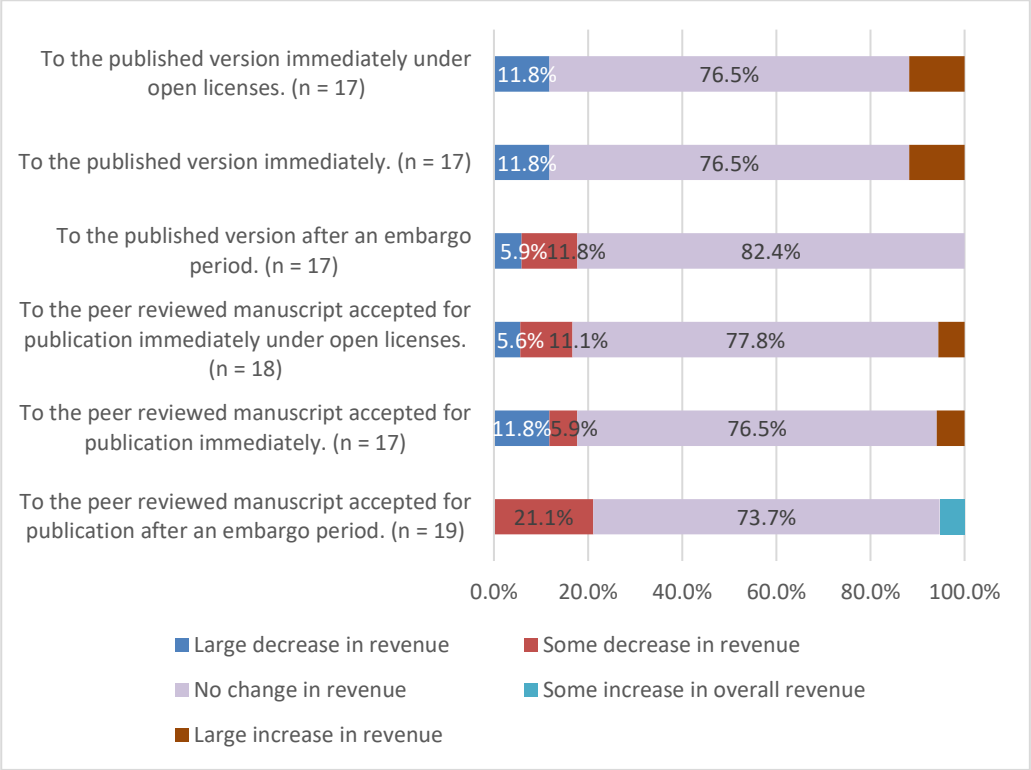
| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 1 (2.3%) | 3 (7.0%) | 18 (41.9%) | 14 (32.6%) | 7 (16.3%) | 43 |

| | | | | | | |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication immediately | 1 (2.2%) | 2 (4.3%) | 13 (28.3%) | 12 (26.1%) | 18 (39.1%) | 46 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 1 (2.3%) | 2 (4.5%) | 11 (25.0%) | 6 (13.6%) | 24 (54.5%) | 44 |
| To the published version after an embargo period | 2 (4.5%) | 1 (2.3%) | 8 (18.2%) | 8 (18.2%) | 25 (56.8%) | 44 |
| To the published version immediately | 3 (6.8%) | 0 (0.0%) | 7 (15.9%) | 1 (2.3%) | 33 (75.0%) | 44 |
| To the published version immediately under open licences | 3 (7.1%) | 0 (0.0%) | 7 (16.7%) | 4 (9.5%) | 28 (66.7%) | 42 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

**Institutional publishers**

**Figure 217. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (institutional publishers)**




*Source: Compiled by the study team using data from the publisher's survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

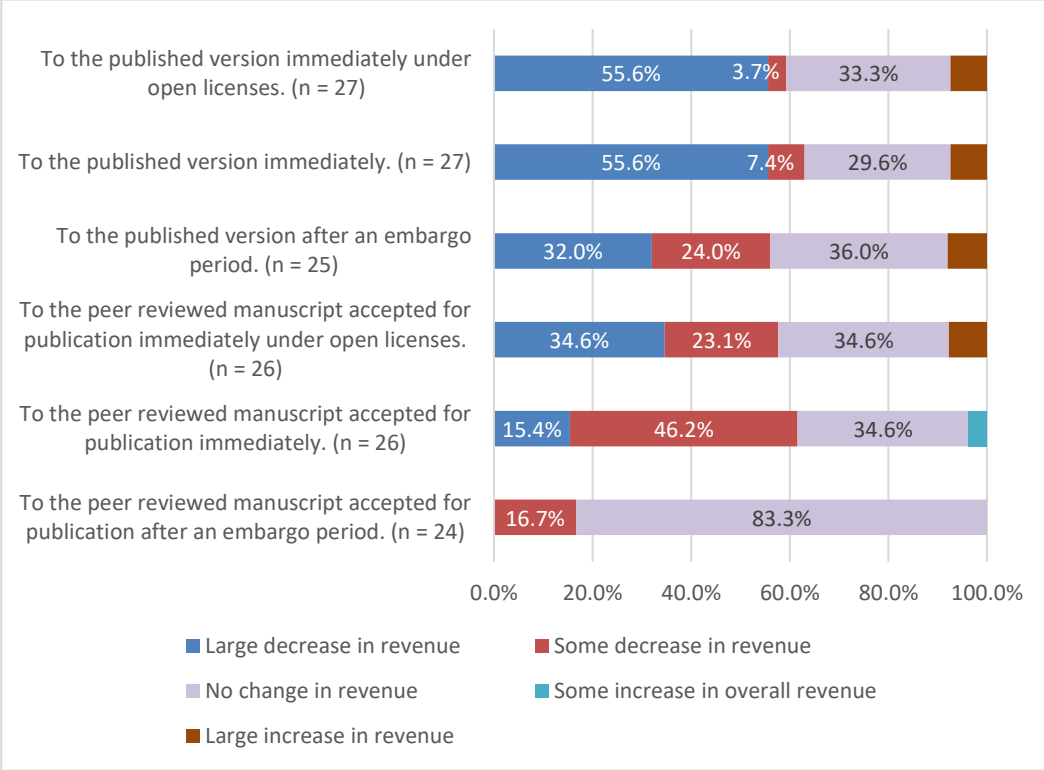
**Table 237. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (institutional publishers)**

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 0 (0.0%) | 1 (5.3%) | 14 (73.7%) | 4 (21.1%) | 0 (0.0%) | 19 |
| To the peer-reviewed manuscript accepted for publication immediately | 1 (5.9%) | 0 (0.0%) | 13 (76.5%) | 1 (5.9%) | 2 (11.8%) | 17 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 1 (5.6%) | 2 (11.1%) | 14 (77.8%) | 2 (11.1%) | 1 (5.6%) | 18 |
| To the published version after an embargo period | 0 (0.0%) | 0 (0.0%) | 14 (82.4%) | 2 (11.8%) | 1 (5.9%) | 17 |
| To the published version immediately | 2 (11.8%) | 0 (0.0%) | 13 (76.5%) | 0 (0.0%) | 2 (11.8%) | 17 |
| To the published version immediately under open licences | 2 (11.8%) | 0 (0.0%) | 13 (76.5%) | 0 (0.0%) | 2 (11.8%) | 17 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

## Non-commercial publishers

**Figure 218. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

**Table 238. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (non-commercial publishers)**

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 0 (0.0%) | 0 (0.0%) | 20 (83.3%) | 4 (16.7%) | 0 (0.0%) | 24 |
| To the peer-reviewed manuscript accepted for publication immediately | 0 (0.0%) | 1 (3.8%) | 9 (34.6%) | 12 (46.2%) | 4 (15.4%) | 26 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 2 (7.7%) | 0 (0.0%) | 9 (34.6%) | 6 (23.1%) | 9 (34.6%) | 26 |
| To the published version after an embargo period | 2 (8.0%) | 0 (0.0%) | 9 (36.0%) | 6 (24.0%) | 8 (32.0%) | 25 |

| | | | | | | |
|---|---|---|---|---|---|---|
| To the published version immediately | 2 (7.4%) | 0 (0.0%) | 8 (29.6%) | 2 (7.4%) | 15 (55.6%) | 27 |
| To the published version immediately under open licences | 2 (7.4%) | 0 (0.0%) | 9 (33.3%) | 1 (3.7%) | 15 (55.6%) | 27 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways ?"*

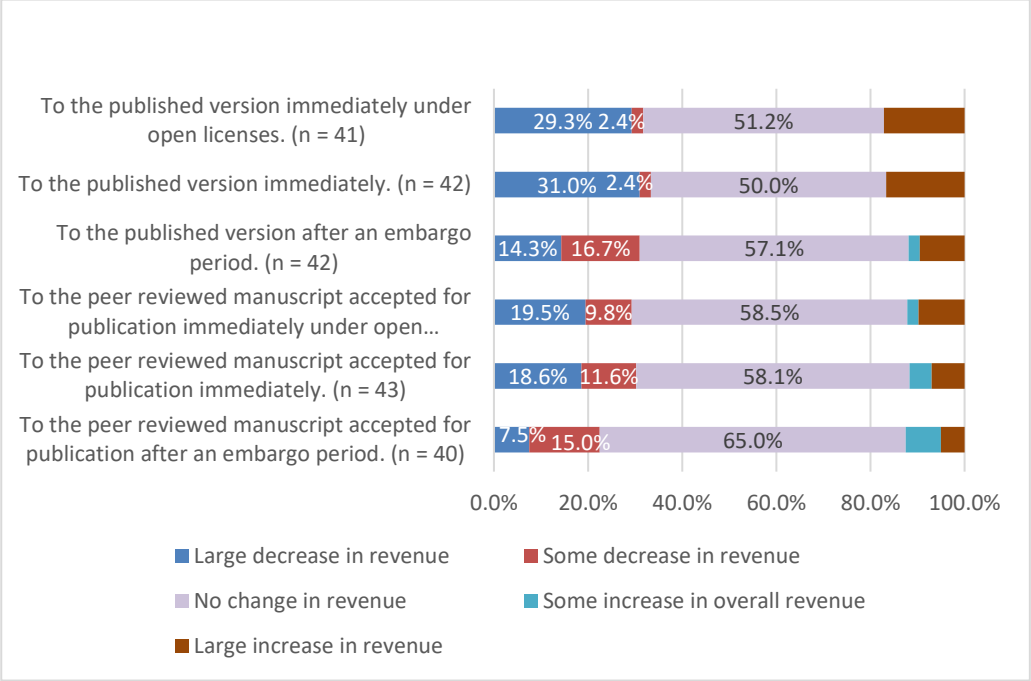
**Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (Breakdown by publishers' revenue – low, medium, high)**

When **Open Access is allowed to the peer-reviewed manuscript** after an embargo period, 65% of low-revenue publishers, 50% of medium-revenue publishers, and 55% of high-revenue publishers foresee no change in revenue. If **Open Access is allowed to the peer-reviewed accepted manuscript** immediately, 58.1% of low-revenue publishers, 20% of medium-revenue publishers, and 10% of high-revenue publishers would have no change in revenue. However, in this case, 40.5% of high-revenue publishers would have some decrease in revenue, while 40% would have a large decrease in revenue. If Open Access **is allowed immediately under open licences,** 58.5% of low-revenue publishers would foresee no changes in revenue, and 19.5% would foresee a large decrease in revenue. As for medium-revenue publishers, 22.2% would foresee no change, 44.4% some decrease in revenue, and 33.3% a large decrease in revenue. 85% of high-revenue publishers would foresee a large decrease in revenue.

When it comes **to the published version,** the low-revenue publishers would mostly have no change in revenue if Open Access were allowed after an embargo period (57.1%), immediately (50%), and immediately under open licences (51.2%). Moreover, if Open Access is allowed immediately or immediately under open licences, 16.7% and 17.1% of low-revenue publishers would expect a large increase in revenue. As for middle-revenue publishers, allowing the published version after an embargo period would result in some or a large decrease in revenue (50% and 30%, respectively). Publishing immediately or under open licences would result mostly in a large decrease in revenue (63.6% and 77.8%, respectively). Finally, to the high-revenue publishers, all three ways – under embargo, immediately, and immediately under open licences would result in a large decrease in revenue (77.8%, 89.5%, and 78.9%, respectively).

### Low-revenue publishers

**Figure 219. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (low-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways ?"*

**Table 239. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (low-revenue publishers)**

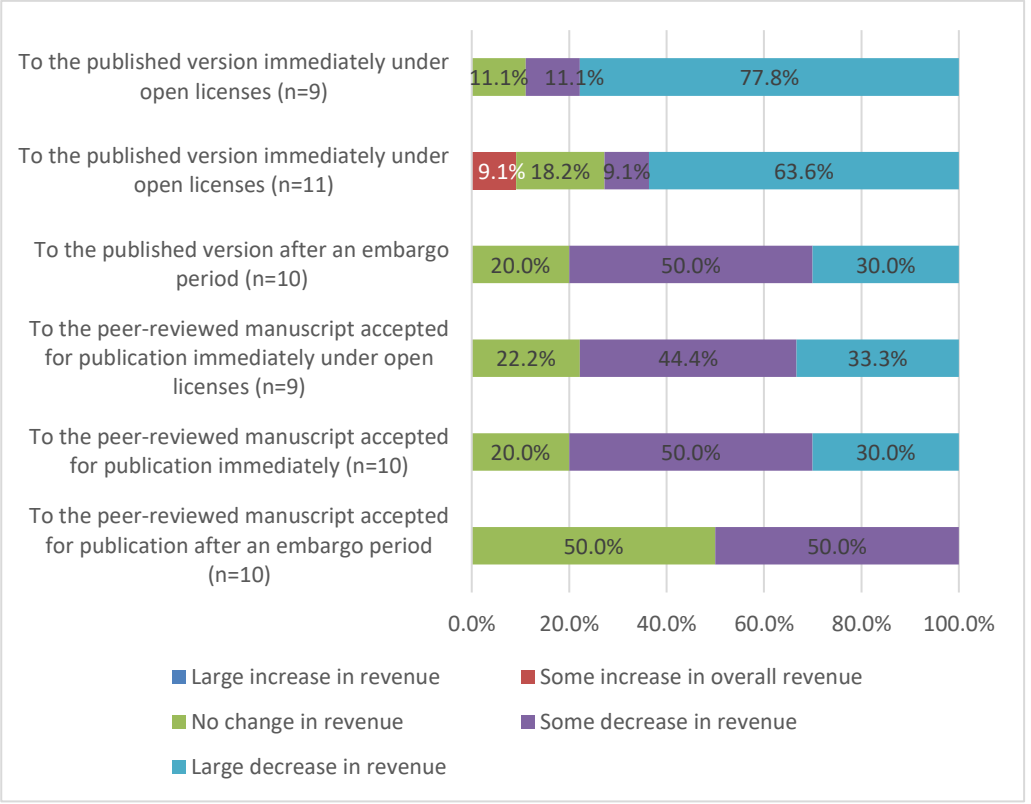
| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 2 (5.0%) | 3 (7.5%) | 26 (65.0%) | 6 (15.0%) | 3 (7.5%) | 40 |
| To the peer-reviewed manuscript accepted for publication immediately | 3 (7.0%) | 2 (4.7%) | 25 (58.1%) | 5 (11.6%) | 8 (18.6%) | 43 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 4 (9.8%) | 1 (2.4%) | 24 (58.5%) | 4 (9.8%) | 8 (19.5%) | 41 |
| To the published version after an embargo period | 4 (9.5%) | 1 (2.4%) | 24 (57.1%) | 7 (16.7%) | 6 (14.3%) | 42 |

| | | | | | | |
|---|---|---|---|---|---|---|
| To the published version immediately | 7 (16.7%) | 0 (0.0%) | 21 (50.0%) | 1 (2.4%) | 13 (31.0%) | 42 |
| To the published version immediately under open licences | 7 (17.1%) | 0 (0.0%) | 21 (51.2%) | 1 (2.4%) | 12 (29.3%) | 41 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

**Medium-revenue publishers**

**Figure 220. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (medium-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

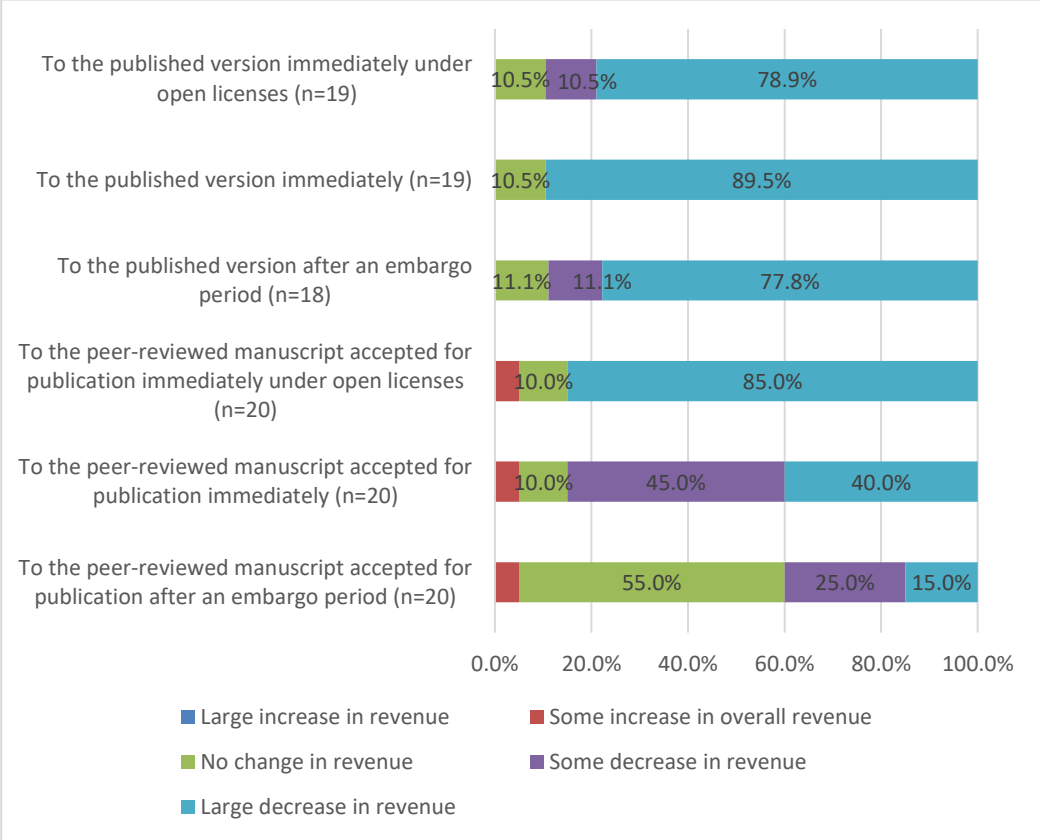
**Table 240. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (medium-revenue publishers)**

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 0 (0.0%) | 0 (0.0%) | 5 (50.0%) | 5 (50.0%) | 0 (0.0%) | 10 |
| To the peer-reviewed manuscript accepted for publication immediately | 0 (0.0%) | 0 (0.0%) | 2 (20.0%) | 5 (50.0%) | 3 (30.0%) | 10 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 0 (0.0%) | 0 (0.0%) | 2 (22.2%) | 4 (44.4%) | 3 (33.3%) | 9 |
| To the published version after an embargo period | 0 (0.0%) | 0 (0.0%) | 2 (20.0%) | 5 (50.0%) | 3 (30.0%) | 10 |
| To the published version immediately | 0 (0.0%) | 1 (9.1%) | 2 (18.2%) | 1 (9.1%) | 7 (63.6%) | 11 |
| To the published version immediately under open licences | 0 (0.0%) | 0 (0.0%) | 1 (11.1%) | 1 (11.1%) | 7 (77.8%) | 9 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

### High-revenue publishers

**Figure 221. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (high-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

**Table 241. Expected changes to publishers' revenue depending on the version to which Open Access is allowed via repositories (high-revenue publishers)**

| | Large increase in revenue | Some increase in overall revenue | No change in revenue | Some decrease in revenue | Large decrease in revenue | Total |
|---|---|---|---|---|---|---|
| To the peer-reviewed manuscript accepted for publication after an embargo period | 0 (0.0%) | 1 (5.0%) | 11 (55.0%) | 5 (25.0%) | 3 (15.0%) | 20 |
| To the peer-reviewed manuscript accepted for publication immediately | 0 (0.0%) | 1 (5.0%) | 2 (10.0%) | 9 (45.0%) | 8 (40.0%) | 20 |
| To the peer-reviewed manuscript accepted for publication immediately under open licences | 0 (0.0%) | 1 (5.0%) | 2 (10.0%) | 0 (0.0%) | 17 (85.0%) | 20 |

| | | | | | | |
|---|---|---|---|---|---|---|
| To the published version after an embargo period | 0 (0.0%) | 0 (0.0%) | 2 (11.1%) | 2 (11.1%) | 14 (77.8%) | 18 |
| To the published version immediately | 0 (0.0%) | 0 (0.0%) | 2 (10.5%) | 0 (0.0%) | 17 (89.5%) | 19 |
| To the published version immediately under open licences | 0 (0.0%) | 0 (0.0%) | 2 (10.5%) | 2 (10.5%) | 15 (78.9%) | 19 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What change of revenue would you expect to your organisation if Open Access was allowed via repositories to scientific publications resulting from public funding in one of the following ways?"*

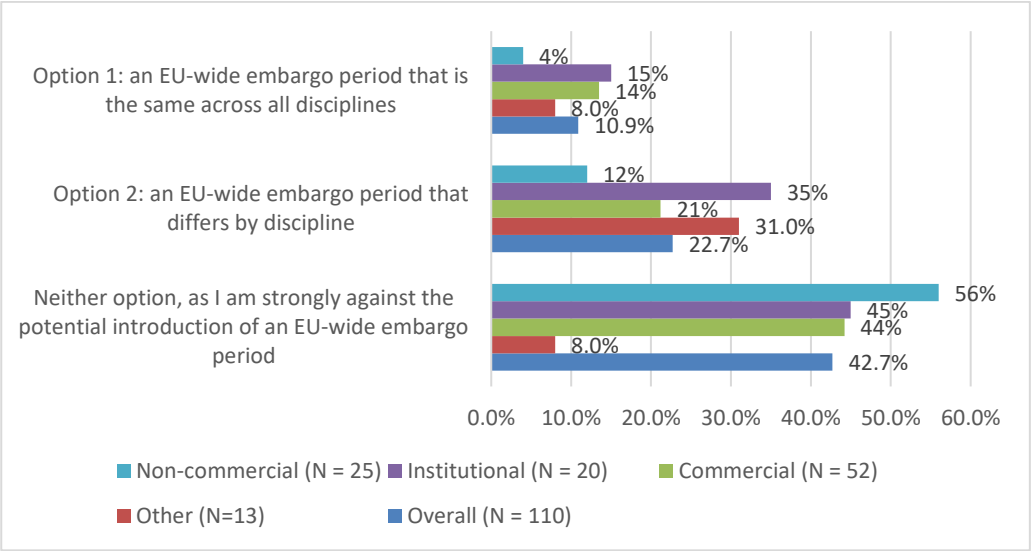
### QUESTION 26: The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?

Publishers were surveyed on their preferences regarding the potential introduction of an EU-wide embargo period for Secondary Publication Rights. The overall results indicate a diversity of opinions, with 42.7% expressing strong opposition to such an introduction. In contrast, 22.7% leaned towards the option advocating for an EU-wide embargo period that varies by discipline. A smaller percentage, 10.9%, supported the idea of an EU-wide embargo period that is the same across all disciplines. Additionally, 23.6% specified 'other' preferences.

Breaking down responses by publisher type:

Among commercial publishers, 44.2% opposed the introduction of an EU-wide embargo, while 21.2% preferred an EU-wide embargo period that differs by discipline and 13.5% would opt for an EU-wide embargo period that is the same across all disciplines. Another 21.2% specify 'other' preferences, for example, a different embargo period is appropriate for each discipline; the current embargo periods should not be shortened. For institutional publishers, 45.0% expressed strong opposition, with 35.0% supporting embargoes differing by disciplines and 15.0% favouring an EU-wide embargo period that is the same across all disciplines. A smaller percentage, 5.0%, specifies 'other' preferences, for example, no embargo is needed. As for non-commercial publishers, 56.0% strongly oppose an EU-wide embargo period, 12.0% would prefer an EU-wide embargo period that differs by discipline, 4.0% would favour the same embargo across all disciplines in the EU), and 28.0% specify 'other' preferences, for example, 12+ months, different embargoes by discipline. A difference between disciplines should be maintained and current embargoes should not be reduced.

**Figure 222. Publishers' preference on the length of a potential EU-wide embargo period**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 205 indicates the total count for each of the options.

**Table 242. Publishers' preference on the length of a potential EU-wide embargo period**

| | Overall result (share) | Commercial publishers (share) | Institutional publishers (share) | Non-commercial publishers (share) | Other type (share) |
|---|---|---|---|---|---|
| Neither option, as I am strongly against the potential introduction of an EU-wide embargo period | 47 (42.7%) | 23 (44.2%) | 9 (45.0%) | 14 (56.0%) | 1 (8.0%) |
| Option 2: an EU-wide embargo period that differs by discipline | 25 (22.7%) | 11 (21.2%) | 7 (35.0%) | 3 (12.0%) | 4 (31.0%) |
| Option 1: an EU-wide embargo period that is the same across all disciplines | 12 (10.9%) | 7 (13.5%) | 3 (15.0%) | 1 (4.0%) | 1 (8.0%) |
| Other (please specify) | 26 (23.6%) | 11 (21.2%) | 1 (5.0%) | 7 (28.0%) | 7 (54.0%) |
| Total | 110 (100%) | 52 (100%) | 20 (100%) | 25 (100%) | 13 (100%) |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?"*

**Publishers' preference on the lenght of a potential EU-wide embargo period (Breakdown by publishers' revenue – low, medium, high)**

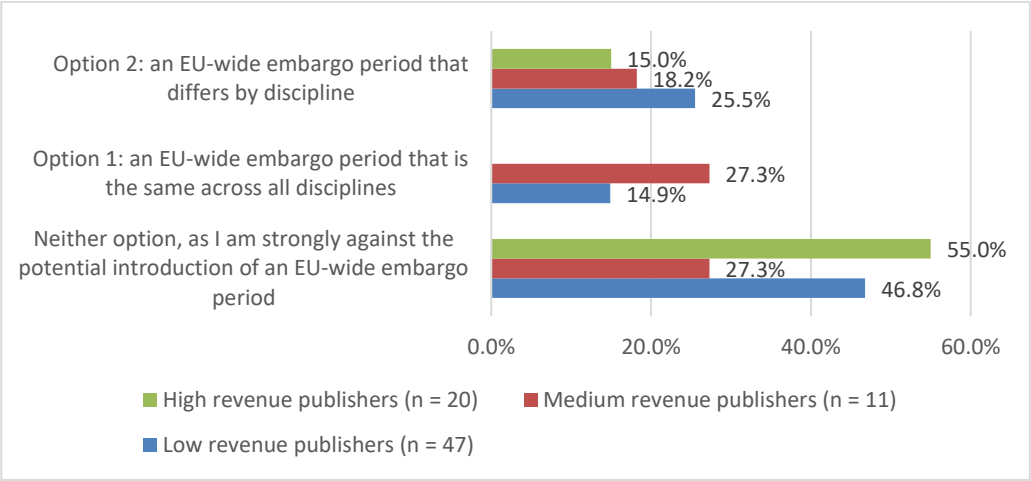
Publishers were surveyed on their preferences regarding the potential introduction of an EU-wide embargo period for Secondary Publication Rights, with responses categorised by revenue levels.

Among low-revenue publishers, 46.8% expressed strong opposition to an EU-wide embargo period, while 25.5% favour an EU-wide embargo period that differs by discipline, proposing a varied embargo period by discipline. Some 14.9% support an EU-wide embargo period that is the same across all disciplines, suggesting a uniform EU-wide embargo period across all disciplines. Another 12.8% specify 'other' preferences, for example, no embargo is needed.

Medium-revenue publishers present a mixed perspective, with 20.0% strongly opposing an EU-wide embargo period. Among the alternatives, 20.0% prefer an EU-wide embargo period that differs by discipline, proposing a varied embargo period by discipline, while 30.0% support an EU-wide embargo period that is the same across all disciplines for a uniform embargo period across all disciplines. Another 30.0% specify 'other' preferences, for example, embargo periods apply to individual journals within very different disciplines, no one size fits all.

For high-revenue publishers, a majority (57.1%) oppose the potential introduction of an EU-wide embargo period. Among the alternatives, 14.3% favour an EU-wide embargo period that differs by discipline, proposing a varied embargo period by discipline, and none support an EU-wide embargo period that is the same across all disciplines for a uniform embargo period. A total 28.6% specify 'other' preferences, for instance, a different embargo period is appropriate for each publication and each discipline. A difference between disciplines should be maintained and current embargoes should not be reduced.

**Figure 223. Publishers' preference on the length of a potential EU-wide embargo period (Breakdown by publishers' revenue - low, medium, high)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 206 indicates the total count for each of the options.

**Table 243. Publishers' preference on the length of a potential EU-wide embargo period (Breakdown by publishers' revenue - low, medium, high)**

| | Low-revenue publishers | | Medium-revenue publishers | | High-revenue publishers | |
|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share |
| Neither option, as I am strongly against the potential introduction of an EU-wide embargo period | 22 | 46.8% | 2 | 20.0% | 12 | 57.1% |
| Option 2: an EU-wide embargo period that differs by discipline | 12 | 25.5% | 2 | 20.0% | 3 | 14.3% |
| Option 1: an EU-wide embargo period that is the same across all disciplines | 7 | 14.9% | 3 | 30.0% | 0 | 0% |
| Other (please specify) | 6 | 12.8% | 3 | 30.0% | 6 | 28.6% |
| Total | 47 | 100% | 10 | 100% | 21 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "The current Secondary Publication Right legislation in Austria and Germany has an embargo period of 12 months and between 6-12 months in France and Belgium. Assuming that an EU-wide embargo period was introduced, which of the below options would you prefer?"*

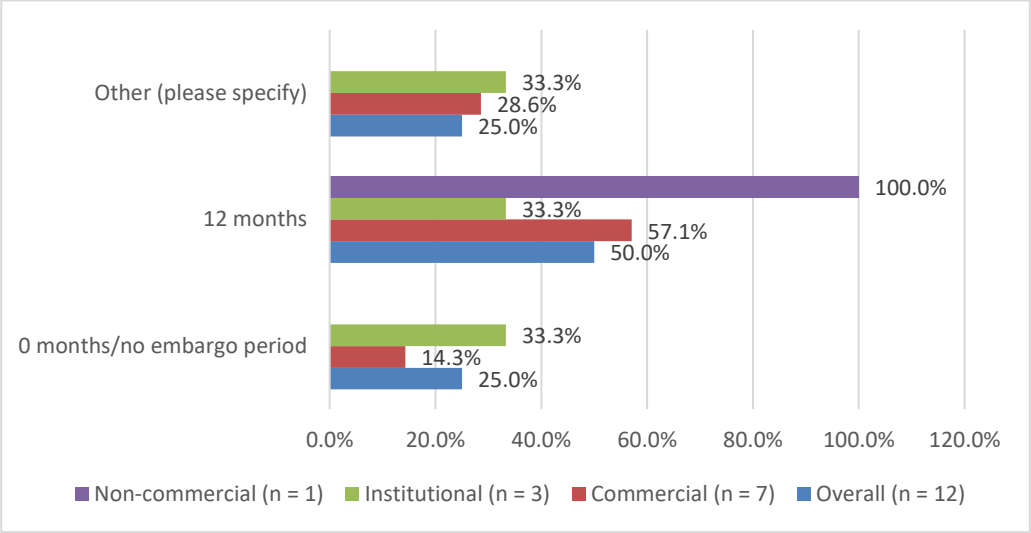
### QUESTION 27: Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?

Publishers were queried on the acceptable embargo periods if they chose an EU-wide embargo period that is the same across all disciplines. The overall results indicate a diversity of responses, with 50% (n=6) of publishers favouring a 12-month embargo, 25% (n=3) preferring no embargo period, and the remaining 25% (n=3) specifying other preferences (i.e. 24 month-long embargo period).

Breaking down responses by publisher type:

Among commercial publishers, 57.1% (n=4) favoured a 12-month embargo, 14.3% (n=1) preferred no embargo period, and 26.8% (n=2) specified other preferences. Among institutional publishers, 33.3% (n=1) favoured a 12-month embargo, 33.3% (n=1) preferred no embargo period, and 33.3% (n=1) specified other preferences. There was only one response from the non-commercial publishers, selecting a 12-month embargo.

**Figure 224. Publishers' views on the shortest embargo period that they would consider acceptable**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 207 indicates the total count for each of the options.

**Table 244. Publishers' views on the shortest embargo period that they would consider acceptable**

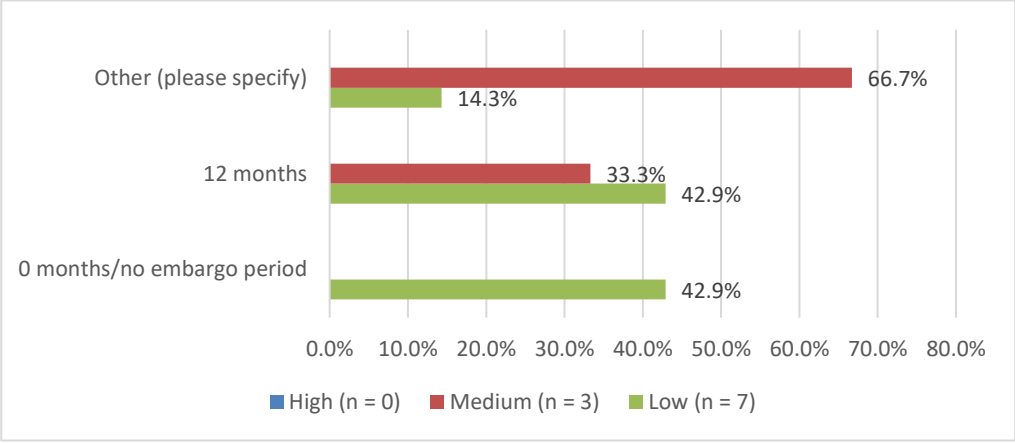
| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| 12 months | 6 | 50.0% | 4 | 57.1% | 1 | 33.3% | 1 | 100% | 0 | 0.0% |
| 0 months/no embargo period | 3 | 25.0% | 1 | 14.3% | 1 | 33.3% | 0 | 0% | 1 | 100% |
| Other (please specify) | 3 | 25.0% | 2 | 28.6% | 1 | 33.3% | 0 | 0% | 0 | 0.0% |
| Total | 12 | 100% | 7 | 100% | 3 | 100% | 1 | 100% | 1 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?"*

**Publishers' views on the shortest embargo period that they would consider acceptable (Breakdown by publishers' revenue - low, medium, high)**

Publishers selecting an EU-wide embargo period that is the same across all disciplines were queried about their acceptable embargo periods. Among low-revenue publishers, responses varied, with 42.9% (n=3) favouring a 12-month embargo, an equal percentage preferring no embargo period, and 14.3% (n=1) specifying other preferences. As for medium-revenue publishers, 1 (33.3%) selected a 12-month embargo, while 2 (66.7%) specified other preferences. None of the high-revenue publishers selected an option for an EU-wide embargo period that is the same across all disciplines in the previous question.

**Figure 225. Publishers' views on the shortest embargo period that they would consider acceptable (Breakdown by publishers' revenue - low, medium, high)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?"*

**Table 245. Publishers' views on the shortest embargo period that they would consider acceptable (Breakdown by publishers' revenue – low, medium, high)**

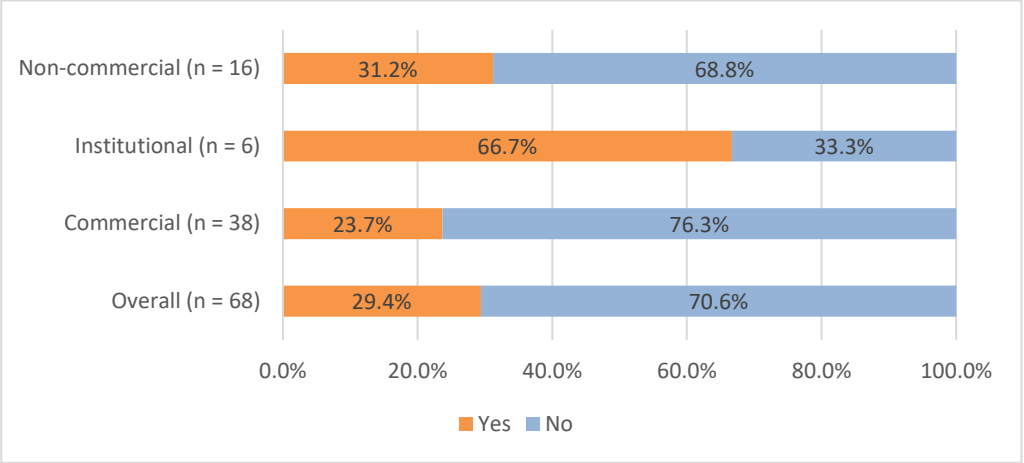
| | Low-revenue publishers publishers | | Medium-revenue publishers | | High-revenue publishers | |
|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share |
| 12 months | 3 | 42.9% | 1 | 33.3% | 0 | 0.0% |
| 0 months/no embargo period | 3 | 42.9% | 0 | 0.0% | 0 | 0.0% |
| Other (please specify) | 1 | 14.3% | 2 | 66.7% | 0 | 0.0% |
| Total | 7 | 100% | 3 | 100% | 0 | 0.0% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "Given that you chose option 1, what would be the shortest embargo period that is still acceptable to you?"*

**QUESTION 28: As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could be acceptable to your organisation?**

Publishers were surveyed on the acceptability of alternative approaches, such as extended collective licensing or lump sum remuneration regimes, instead of implementing an EU-wide Secondary Publication Right. The overall results indicate that 70.6% of publishers expressed a preference for not adopting these alternatives, while 29.4% found them acceptable. Among commercial publishers, 76.3% were against, with 23.7% in favour. As for institutional publishers, 33.3% were against, and 66.7% were in favour. Non-commercial publishers leaned towards reluctance, as 68.8% were against it, while 31.2% found the alternatives acceptable.

**Figure 226. Publishers' acceptance of specific licensing arrangements as an alternative to introducing an EU-wide SPR**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could be acceptable to your organisation?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 209 indicates the total count for each of the options.

**Table 246. Publishers' acceptance of specific licensing arrangements as an alternative to introducing an EU-wide SPR**

| | Overall result | | Commercial publishers | | Institutional publishers | | Non-commercial publishers | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share | Count | Share | Count | Share |
| No | 48 | 70.6% | 29 | 76.3% | 2 | 33.3% | 11 | 68.8% | 6 | 75.0% |
| Yes | 20 | 29.4% | 9 | 23.7% | 4 | 66.7% | 5 | 31.2% | 2 | 25.0% |
| Total | 68 | 100% | 38 | 100% | 6 | 100% | 16 | 100% | 8 | 100% |

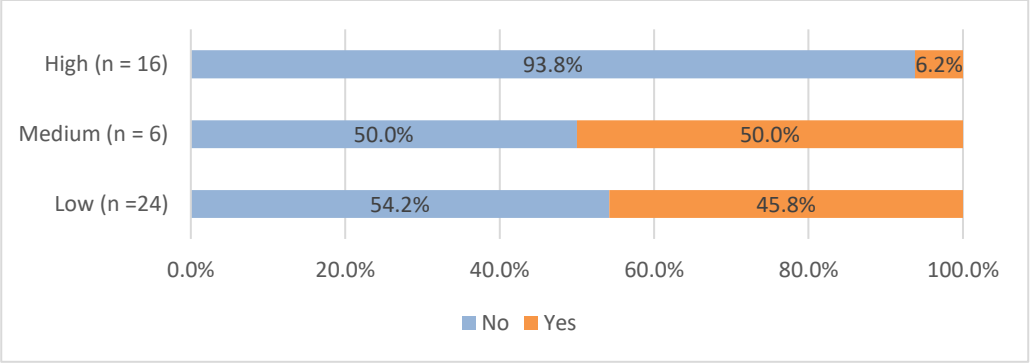
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could be acceptable to your organisation?"*

**Publishers' acceptance of specific licensing arrangements as an alternative to introducing an EU-wide SPR(Breakdown by publishers' revenue – low, medium, high)**

Publishers were surveyed on the acceptability of alternative approaches, such as extended collective licensing or lump sum remuneration regimes, as alternatives to introducing an EU-wide Secondary Publication Right. Among low-revenue publishers, 54.2% expressed a

preference for not adopting these alternatives, while 45.8% found them acceptable. Medium-revenue publishers showed an even split, with 50% against and 50% in favour. In contrast, high-revenue publishers leaned strongly against these alternatives, with 93.8% opposed and only 6.2% in favour.

**Figure 227. Publishers' acceptance of specific licensing arrangements as an alternative to introducing an EU-wide SPR(Breakdown by publishers' revenue – low, medium, high)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could be acceptable to your organisation?"*

**Table 247. Publishers' acceptance of specific licensing arrangements as an alternative to introducing an EU-wide SPR(Breakdown by publishers' revenue - low, medium, high)**

| | Low-revenue publishers publishers | | Medium-revenue publishers | | High-revenue publishers | |
|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share |
| No | 13 | 54.2% | 3 | 50.0% | 15 | 93.8% |
| Yes | 11 | 45.8% | 3 | 50.0% | 1 | 6.2% |
| Total | 24 | 100% | 6 | 100% | 16 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "As an alternative to introducing an EU-wide Secondary Publication Right, do you think that specific licensing arrangements, such as extended collective licensing (collecting societies offer umbrella licences covering various types of copyright-protected knowledge resources) or lump sum remuneration regimes (publishers receive a pre-determined lump sum payment for Open Access publishing), could be acceptable to your organisation?"*

### QUESTION 29: Please explain the reasons for your answer to the previous question.

This open-ended received 53 responses.

Publishers' responses indicate a range of opinions and concerns. Several publishers are happy with the existing Creative Commons (CC) licences. They bleieve that these licences provide good coverage for authors' rights. However, some highlighted the need for options beyond the most open Creative Commons By licence, particularly in disciplines like humanities, where authors may be reluctant to relinquish certain rights.

Some publishers suggested using extended collective licensing, a method already applied in secondary and mandatory licensing, as a suitable model. They believe that primary markets like universities, libraries, and researchers are better served by direct licensing agreements. Publishers suggested that collective licensing or lump sum remuneration regimes could simplify negotiations, especially for Open Access fees related to new books or journals.

In terms of financial considerations, non-profit scholarly publishers expressed a willingness to explore any financial contributions at the EU level that could support the survival of their journals. Some publishers viewed these financial arrangements as more equitable and efficient, providing publishers with due remuneration while offering broad access to end-users.

However, there are concerns expressed as well. Some publishers cautioned against arrangements like extended collective licensing becoming a "cash cow" for big publishers, potentially undermining academic bibliodiversity. Publishers emphasised the success of existing Open Access models, pointing to significant uptake between 2012 and 2022 and questioning the need for a Secondary Publication Right or alternative arrangements.

The concept of lump sum remuneration regimes received mixed feedback. Some publishers find them viable, stating that they would enable organisations to plan budgets effectively. Others expressed reservations, noting potential difficulties in determining lump sum amounts and the risk of putting pressure on diverse publishing types in fields like humanities.

In summary, publishers had diverse views on alternative licensing arrangements, emphasising the importance of maintaining fairness, transparency, and flexibility in any proposed models. The need for financial support for non-profit publishers, concerns about the potential concentration of funding among big publishers, and the perceived success of existing Open Access models are recurring themes in their responses.

**QUESTION 30: As an alternative to introducing an EU-wide Secondary Publication Right, what other legislative interventions or practices can you envisage to facilitate the uptake of Open Access and Open Science ?**

This open-ended question received 79 responses.

Publishers provided varied suggestions and opinions. Some publishers expressed uncertainty or lack of knowledge about alternative legislative interventions. Others proposed specific measures:

- **Mandatory Open Access Mandates:** Some publishers suggested implementing mandatory Open Access mandates in the context of third-party funding, ensuring compliance verification. However, concerns were raised about the insufficient funding available to cover the publication costs.

- **Flexibility and Funding for Gold Open Access:** Publishers emphasised the need for flexibility in Open Access models and avenues. Adequate funding for gold Open Access, without funding for closed publishing, was proposed. The importance of appropriate funding for diverse Open Access publishing models, including for non-profit publishers, was highlighted.

- **Centralised EU-Sponsored Repository:** A suggestion was made for the creation of a centralised EU-sponsored compulsory mega-repository for scientific products.

- **Mandatory Publication of Manuscripts:** Some publishers recommended making it mandatory in the EU to publish author accepted manuscripts for books/chapters and journal articles under an open licence on repositories.

- **Education on Open Licensing:** There was a proposal to ensure authors' rights by allowing them to keep their copyright through open licensing. The Secondary Publication Right was criticised as a temporary solution.

- **Support for non-Profit Publishers:** Publishers advocated for proper funding for non-commercial publishers, enabling public institutions to provide sponsorships/donations to not-for-profit publishers.

- **Funding for Open Access Publishing:** Several publishers stressed the importance of direct funding for Open Access publishing, supporting diverse models and respecting academic freedom. Transformative agreements, APC cost coverage by funders, and support for research-intensive institutions were suggested.

- **Market-Led Solutions and Transformative Deals:** Some publishers favoured market-led solutions, such as licensing, for flexibility and assurance. Transformative deals, where entire outputs are converted to Open Access, were highlighted as effective in certain regions.

- **Encourage Open Science Practices:** Recommendations included information campaigns to encourage authors to use their existing right to deposit manuscripts, set up harmonised data repositories, and support initiatives like San Francisco Declaration on Research Assessment (DORA) and Coalition for Advancing Research Assessment (CoARA).

- **International Collaboration and Treaties**: Suggestions were made for international collaboration on Open Science worldwide and the need for treaties to ensure reciprocity.

- **Supporting Scholar-Led Ecosystems**: Publishers advocated for supporting scholar-led scholarly communication ecosystems, similar to those in Latin America, as alternatives to commercial publishing.

- **Transparent Funding and Incentives:** The importance of transparent funding, incentives, and encouragement for authors to choose Open Access publishing options was highlighted.

- **No Legislative Intervention:** Some publishers expressed the view that legislative intervention is unnecessary or undesirable, emphasising the progress already made without such interventions.

- **Cap on Copyright Duration:** A suggestion was made to cap the copyright duration for academic publications at 20 years after publication at a European level.

- **Service Level Agreements:** Proposals included more service level agreements with publishers by funders and institutions, embedding Open Access and Open Science practices in agreements.

- **Support for Primary Open Publication:** Some publishers suggested supporting initiatives that focus on primary open publication, eliminating the need for secondary publication.

- **Mandatory Gold or Diamond Open Access:** There was a recommendation for mandatory gold or diamond Open Access.

It is evident from the responses that there are diverse opinions on the most effective strategies to promote Open Access and Open Science, reflecting the complexities of the publishing landscape and the need for nuanced approaches in different disciplines and regions.

### QUESTION 31: As scientific publishers, what extra services do you provide to authors that enhance the value of their publication compared to self-publishing?

This open-ended question received 93 responses. Publishers mentioned the following extra services they provide to authors, and which enhance the value of their publication compared to self-publishing:

- **Peer Review:** Academic publishers provide a robust peer review process, ensuring the quality and validity of scientific content before publication.

- **Editing and Typesetting:** Services include copy-editing, figure redrawing, typesetting, and machine-readable XML creation to enhance the presentation and clarity of articles.

- **Promotion and Visibility:** Publishers actively promote and maximise the visibility of research through various channels, ensuring broader dissemination.

- **Community Development and Involvement:** Publishers foster collaboration and community development, supporting research communities and providing platforms for interaction.

- **Digital Preservation and Indexing:** Efforts are made to ensure digital preservation, downstream indexing services, and adherence to publishing technical standards, contributing to long-term access and discoverability.

- **Professional and Ethical Standards:** Publishers adhere to professional and ethical standards, investing in technology, processes, and personnel to maintain the integrity of the scholarly record.

- **Quality Assurance:** Publishers engage in quality assurance measures to uphold high standards in peer review, content production, and overall publication quality.

- **Additional Services:** Publishers offer a range of additional services, including metadata management, print-version delivery, marketing management, native speaker services, and more.

- **Curation and Validation:** Publishers play a crucial role in selecting, verifying, and curating scientific findings, acting as a filter and validation mechanism in an era of rampant misinformation.

- **Archiving and Preservation:** The current publishing system ensures the archiving and preservation of published knowledge in perpetuity, contributing to the long-term accessibility and availability of scholarly content.

- **Freedom of Scientific Research:** Publishers contribute to enabling freedom of expression and scientific research, allowing researchers to define questions and decide how to disseminate their findings while maintaining professional standards.

- **Relief of Author Burden:** Publishers relieve authors of mundane, time-consuming tasks related to efficient communication of science, allowing authors to focus on research rather than administrative responsibilities.

- **Detection of Inconsistencies:** Inconsistencies, omissions, or errors in science or data overlooked during peer review are often detected in the production of the version of record (VoR) from the Author Accepted Manuscript (AAM).

- **Public Quality Recognitions:** Publishers provide professional proofreading and public quality recognitions, contributing to the overall quality and credibility of published content.

- **Indexation in Prestigious Databases:** Published work is indexed in prestigious databases, such as ESCI, Scopus, Latindex, Google Scholar, DOAJ, enhancing the dissemination, traceability, and citability of research.

- **Personalised Sub-Editing:** Some publishers offer careful and personalised sub-editing, proofreading, and minor formal corrections to papers at no cost to authors.

- **Infrastructure and Security:** Publishers invest in industry-leading peer review and research integrity services, providing a secure and trusted infrastructure for the scholarly record.

- **Maximising Discovery of Research:** Efforts are made to maximise the discovery of research through the development of digital content platforms and partnerships with key platforms and indices.

- **Funding of Editorial Offices:** Publishers fund editorial offices, supporting the launch and cultivation of trusted journals, and fostering collaboration across scientific communities.

- **Accessibility Initiatives:** Publishers work on accessibility initiatives, making products fully accessible to all users and adhering to accessibility standards.

- **Collaboration with Institutions:** Collaboration with institutions worldwide enables Open Access publication for researchers and builds international readership for their work.

- **Reputation of Journals:** The reputation of journals is emphasised as a crucial aspect, contributing to the trustworthiness and credibility of the published content.

- **Standards Setting and Training:** Publishers engage in standards setting, training initiatives, and policy making to ensure quality and integrity in scientific publishing.

- **Outreach to Underrepresented Cohorts:** Outreach efforts extend to underrepresented cohorts, such as the Global South, to ensure inclusivity in scholarly communication.

- **Education Programme Support:** Support is provided for education programmes to develop new researchers in the field, contributing to the growth and sustainability of the research community.

These summarised points provide a comprehensive overview of the valuable services and contributions made by academic publishers to the research community and authors.

**QUESTION 32: How does/would the introduction of the EU-wide Secondary Publication Right impact your publication services offered to authors?**

This open-ended question received 87 responses.

The responses from scientific publishers regarding the potential impact of the EU-wide Secondary Publication Right on their publication services to authors are diverse and nuanced. Several publishers expressed concerns about the potential financial implications, which could affect their ability to offer a comprehensive package of publishing services. The perceived impact on income is a common theme, and there are worries about how it might limit the range of services provided.

Many publishers emphasised the uncertainty surrounding the Secondary Publication Right, stating that the actual impact would depend on the specific details of implementation and market conditions. Some publishers argued that the introduction of such a right may not affect them at all, particularly if their content is already licensed under a Creative Commons By licence, eliminating the need for secondary rights.

A recurring sentiment is that any negative impact on revenue could lead to difficult decisions for publishers. They may face a dilemma between compromising the high-quality services they offer or reducing their ability to fund charitable objectives. Some publishers expressed the intention to maintain a focus on dissemination and quality control.

Concerns were raised about the potential undermining of journal business models, especially if the Secondary Publication Right enables subscription content to be made freely available before the subscription model becomes effective. This, in turn, could impact publishers' ability to invest in the services outlined in the survey, affecting the quality and reliability of research and disrupting an important EU industry.

The potential impact on authors was highlighted, with the risk of limiting options and choices for publishing in journals that provide rigorous assessment, visibility, and recognition. Some publishers argued that the Secondary Publication Right may be unnecessary, given the strides made by EU Member States in ensuring Open Access through commercial agreements with publishers.

A consistent theme was the interconnectedness between revenue, services to authors, and the sustainability of scholarly publishing. Publishers expressed concerns about the potential reduction in income, leading to layoffs, decreased investments in scholarship, and a higher rejection rate for academically valuable but commercially unviable research.

While some publishers argued that their existing practices would not change, others anticipated a need to increase fees or modify business models. Overall, the responses emphasised the complex and multifaceted nature of the potential impact of the EU-wide Secondary Publication Right on the publishing landscape and the services provided to authors.

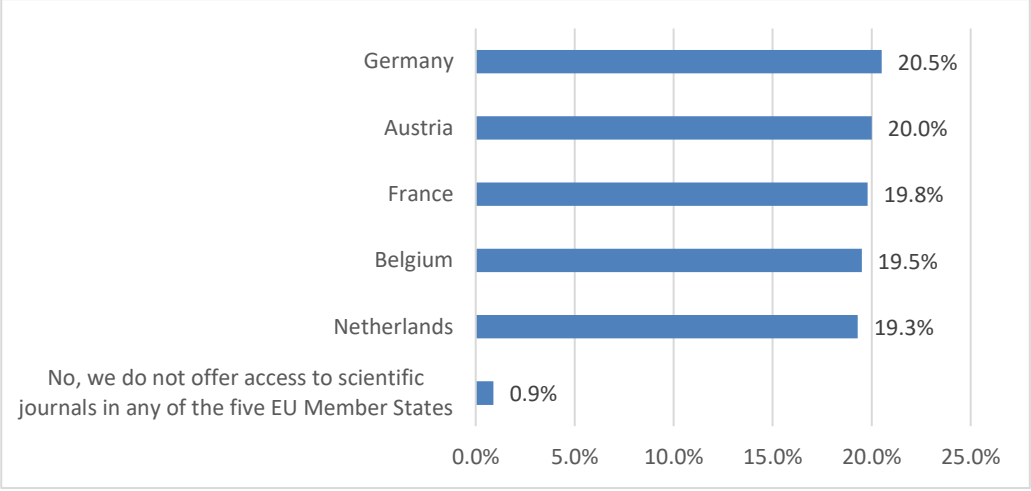
## Tell us about your experiences with Secondary Publication Right (SPR) legislation in the five EU countries that have introduced it

**QUESTION 33: Do you offer access to your scientific journals in any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)? Please select all that apply.**

Publishers were surveyed about the geographical scope of their scientific journal in five EU Member States (allowing them to select more than one country). Only 0.9% indicated that

they provide no access in any of the listed countries (Austria, Belgium, France, Germany, and the Netherlands). Access distribution across individual countries showed a relatively even spread, with percentages ranging from 19.3% in the Netherlands to 20.5% in Germany. These findings suggest a broad and comparable presence of scientific journal access across Austria, Belgium, France, Germany, and the Netherlands among the surveyed publishers.

**Figure 228. Access to scientific journals offered by publishers in five Member States (Austria, Belgium, France, Germany, and the Netherlands) (n=430)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Do you offer access to your scientific journals in any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)?"*

**Table 248. Access to scientific journals offered by publishers in five Member States (Austria, Belgium, France, Germany, and the Netherlands) (n=430)**

| | Count | Share |
|---|---|---|
| No, we do not offer access to scientific journals in any of the five EU Member States | 4 | 0.9% |
| Netherlands | 83 | 19.3% |
| Belgium | 84 | 19.5% |
| France | 85 | 19.8% |
| Austria | 86 | 20.0% |
| Germany | 88 | 20.5% |
| Total | 430 | 100% |

*Source: Compiled by the study team using data from publishers' survey, the question in the survey was "Do you offer access to your scientific journals in any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)?"*

### QUESTION 34: If you do not offer access in all five EU Member States (Austria, Belgium, France, Germany, the Netherlands), could you provide reasons, why certain Members States are excluded from access to your scientific journals?

This open-ended question received 23 responses.

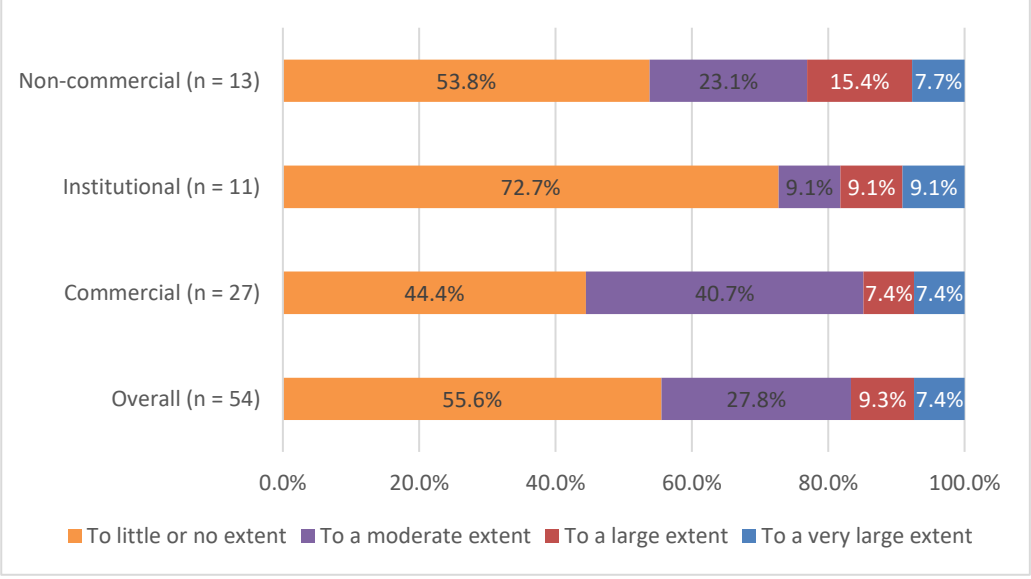
Many publishers indicated that the question did not apply to them. A common explanation was that their content is fully Open Access, with no restrictions imposed on users from any country, including the specified EU Member States. Some publishers explicitly mentioned being Open Access or Diamond Open Access publishers, emphasising their commitment to providing unrestricted access to their publications across all EU Member States. Additionally, a few responses indicated that territorial or legal considerations, such as access to consortia

or collaborations with partners in specific countries, played a role in determining access. Overall, the prevailing trend was that the surveyed publishers did not exclude any EU Member State from accessing their scientific journals.

## QUESTION 35: Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?

Publishers were queried about the impact of Secondary Publication Right provisions in five EU Member States (Austria, Belgium, France, Germany, and the Netherlands). Overall, 55.6% of publishers indicated that these provisions affected their organisations to little or no extent, with 27.8% stating a moderate impact and 16.7% reporting a large to very large extent of impact. Breaking down responses by publisher type, commercial publishers noted that 44.4% experienced little or no impact, while 40.7% reported a moderate impact. Institutional publishers, in contrast, largely felt unaffected, with 72.7% stating little or no impact. Non-commercial publishers demonstrated a varied response, with 53.8% indicating little or no impact, 23.1% reporting a moderate impact, and 23.1% citing a large to very large impact.

**Figure 229. Impact of the SPR provisions on publishers**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 249. Impact of the SPR provisions on publishers**

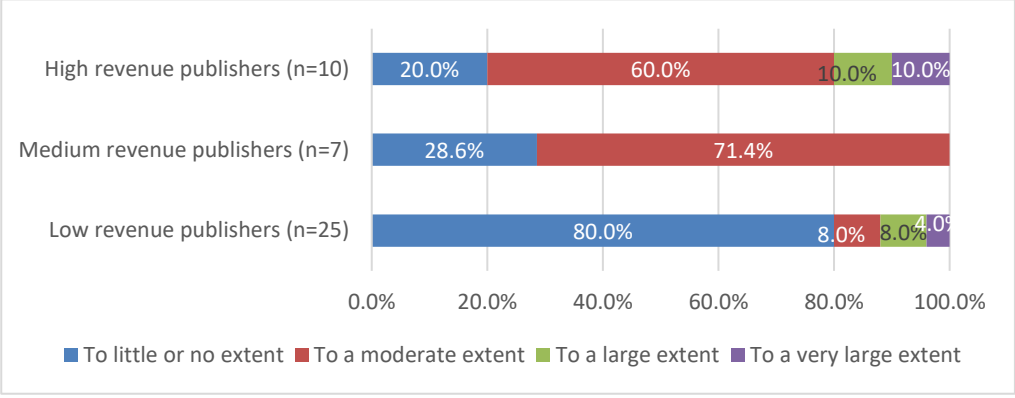
| | Overall result (share) | Commercial publishers (share) | Institutional publishers (share) | Non-commercial publishers (share) | Other (share) |
|---|---|---|---|---|---|
| To little or no extent | 30 (55.6%) | 12 (44.4%) | 8 (72.7%) | 7 (53.8%) | 3 (100%) |
| To a moderate extent | 15 (27.8%) | 11 (40.7%) | 1 (9.1%) | 3 (23.1%) | 0 |
| To a large extent | 5 (9.3%) | 2 (7.4%) | 1 (9.1%) | 2 (15.4%) | 0 |
| To a very large extent | 4 (7.4%) | 2 (7.4%) | 1 (9.1%) | 1 (7.7%) | 0 |
| Total | 54 (100%) | 27 (100%) | 11 (100%) | 13 (100%) | 3 (100%) |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?"*

**Impact of the SPR provisions on publishers (Breakdown by publishers' revenue – low, medium, high)**

Publishers, categorised by revenue levels, were surveyed on the overall impact of Secondary Publication Right provisions in five EU Member States (Austria, Belgium, France, Germany, and the Netherlands). Among low-revenue publishers, 80.0% indicated little or no impact, with 8.0% reporting a moderate impact and 12.0% citing a large to very large extent of impact. Medium-revenue publishers indicated having little or no impact – 28.6%, with 71.4% reporting a moderate impact. High-revenue publishers expressed varied impacts, with 20.0% stating little or no effect, 60.0% indicating a moderate impact, and 20.0% reporting a large to very large extent of impact.

**Figure 230. Impact of the SPR provisions on publishers (Breakdown by publishers' revenue – low, medium, high)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?"*

**Table 250. Impact of the SPR provisions on publishers (Breakdown by publishers' revenue - low, medium, high)**

| | Low-revenue publishers publishers | | Medium-revenue publishers | | High revenue publishers | |
|---|---|---|---|---|---|---|
| | Count | Share | Count | Share | Count | Share |
| To little or no extent | 20 | 80.0% | 2 | 28.6% | 2 | 20.0% |
| To a moderate extent | 2 | 8.0% | 5 | 71.4% | 6 | 60.0% |
| To a large extent | 2 | 8.0% | 0 | 0% | 1 | 10.0% |
| To a very large extent | 1 | 4.0% | 0 | 0% | 1 | 10.0% |
| Total | 25 | 100% | 7 | 100% | 10 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "Overall, to what extent do the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) impact your organisation?"*

## QUESTION 36: In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following (please select all that apply):

Publishers provided insights into the perceived impact of Secondary Publication Right provisions in five EU Member States (Austria, Belgium, France, Germany, and the Netherlands).

In terms of the overall amount of revenue generated from scientific publishing, 12.5% of publishers indicated a slight increase, while 43.8% reported a slight decrease and 31.2% a strong decrease. For 11.8% of publishers, the SPR strongly increased the share of research publications published in Open Access that appeared originally in their journals, while for 5.9%, it strongly decreased. In the popularity of their journals among researchers, 6.7% experienced a strong increase, while 20% noted a slight decrease, and 53.3% perceived no changes.

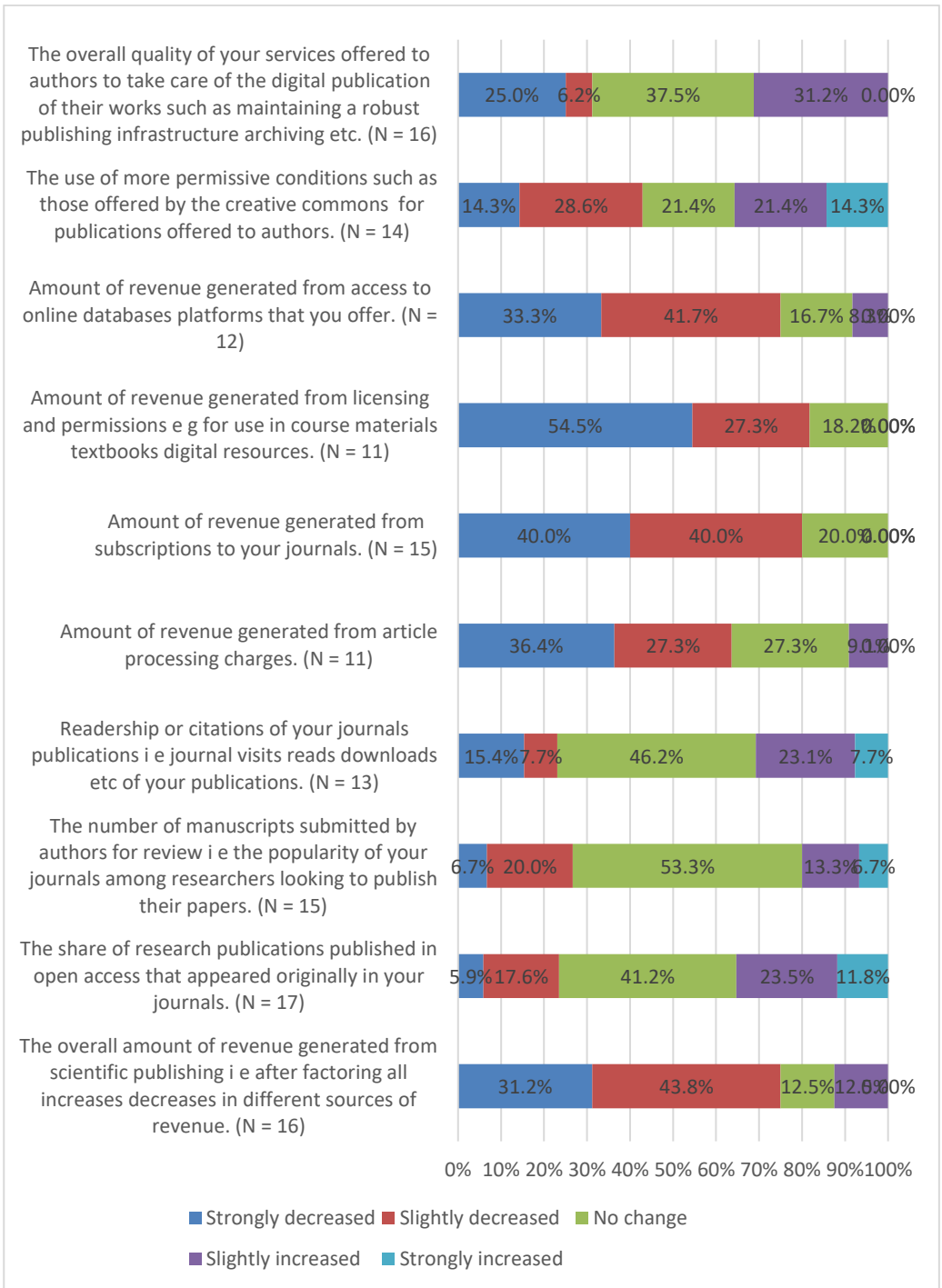
The readership or citations of journals' publications strongly increased for 7.7% of publishers, slightly increased for 23.1% of publishers, and strongly decreased for 15.4%.

The amount of revenue generated from APCs due to the SPR in the five EU Member States experienced a strong decrease by 36.4%. The amount generated from subscriptions showed either a slight decrease (40.0%) or a strong decrease (40.0%). Furthermore, the amount of revenue generated from licensing and permissions showed a slight decrease in revenue (27.3%) or a large decrease in revenue (54.5%). The decrease in revenue was also noted when it comes to revenue generated from access to online databases/platforms that publishers offer (41.7% reported a slight decrease and 33.3% large decreases).

The use of more permissive conditions for publications offered to authors strongly increased for 14.3% of publishers, slightly increased for 21.4%, slightly decreased for 28.6% and strongly decreased for 14.3%.

Finally, the overall quality of the services offered to authors slightly increased for 31.2% of publishers, strongly decreased for 25% of publishers, and had no changes for 37.5%.

**Figure 231.Impact on publishers of SPR in five EU Member States**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following".*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 251. Impact on publishers of SPR in five EU Member States**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 2 (12.5%) | 7 (43.8%) | 5 (31.2%) | 2 (12.5%) | 16 |
| The share of research publications published in Open Access that appeared originally in your journals | 2 (11.8%) | 4 (23.5%) | 3 (17.6%) | 1 (5.9%) | 7 (41.2%) | 17 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 1 (6.7%) | 2 (13.3%) | 3 (20.0%) | 1 (6.7%) | 8 (53.3%) | 15 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 1 (7.7%) | 3 (23.1%) | 1 (7.7%) | 2 (15.4%) | 6 (46.2%) | 13 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 1 (9.1%) | 3 (27.3%) | 4 (36.4%) | 3 (27.3%) | 11 |
| Amount of revenue generated from subscriptions to your journals | (0.0%) | (0.0%) | 6 (40.0%) | 6 (40.0%) | 3 (20.0%) | 15 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | (0.0%) | (0.0%) | 3 (27.3%) | 6 (54.5%) | 2 (18.2%) | 11 |
| Amount of revenue generated from access to online databases/platforms that you offer | (0.0%) | 1 (8.3%) | 5 (41.7%) | 4 (33.3%) | 2 (16.7%) | 12 |
| The use of more permissive conditions (such as those offered by the creative commons) for publications offered to authors | 2 (14.3%) | 3 (21.4%) | 4 (28.6%) | 2 (14.3%) | 3 (21.4%) | 14 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | (0.0%) | 5 (31.2%) | 1 (6.2%) | 4 (25.0%) | 6 (37.5%) | 16 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following ?"*

**Impact on publishers of SPR in five EU Member States (Breakdown by commercial, institutional, and non-commercial publishers)**

In terms of the overall amount of revenue generated from scientific publishing, 12.5% of publishers indicated a slight increase, while 43.8% reported a slight decrease and 31.2% a strong decrease as an effect of the SPR legislation in five Member States. For 11.8% of publishers, the SPR strongly increased the share of research publications published in Open Access that appeared originally in their journals, while for 5.9%, it strongly decreased. In terms of popularity of their journals among researchers, 6.7% experienced a strong increase, while 20% noted a slight decrease, and 53.3% perceived no changes.

The readership or citations of journals' publications strongly increased for 7.7% of publishers, slightly increased for 23.1% of publishers, and strongly decreased for 15.4%.

The amount of revenue generated from APCs due to the SPR in the five EU Member States slightly increased for 9.1% of publishers while strongly decreasing for 36.4% of them. The amount generated from subscriptions caused either a slight decrease (40%) or a strong decrease (40%). Furthermore, the amount of revenue generated from licensing and permissions caused a slight decrease in revenue (27.3%) or a large decrease in revenue (54.5%). The decrease in revenue was also noted when it comes to revenue generated from access to online databases/platforms that publishers offer (41.7% reported a slight decrease and 33.3% large decreases).

The use of more permissive conditions for publications offered to authors strongly increased for 14.3% of publishers, slightly increased for 21.4%, slightly decreased for 28.6% and strongly decreased for 14.3%.

Finally, the overall quality of the services offered to authors slightly increased for 31.2% of publishers, strongly decreased for 25% of publishers, and had no changes for 37.5%.

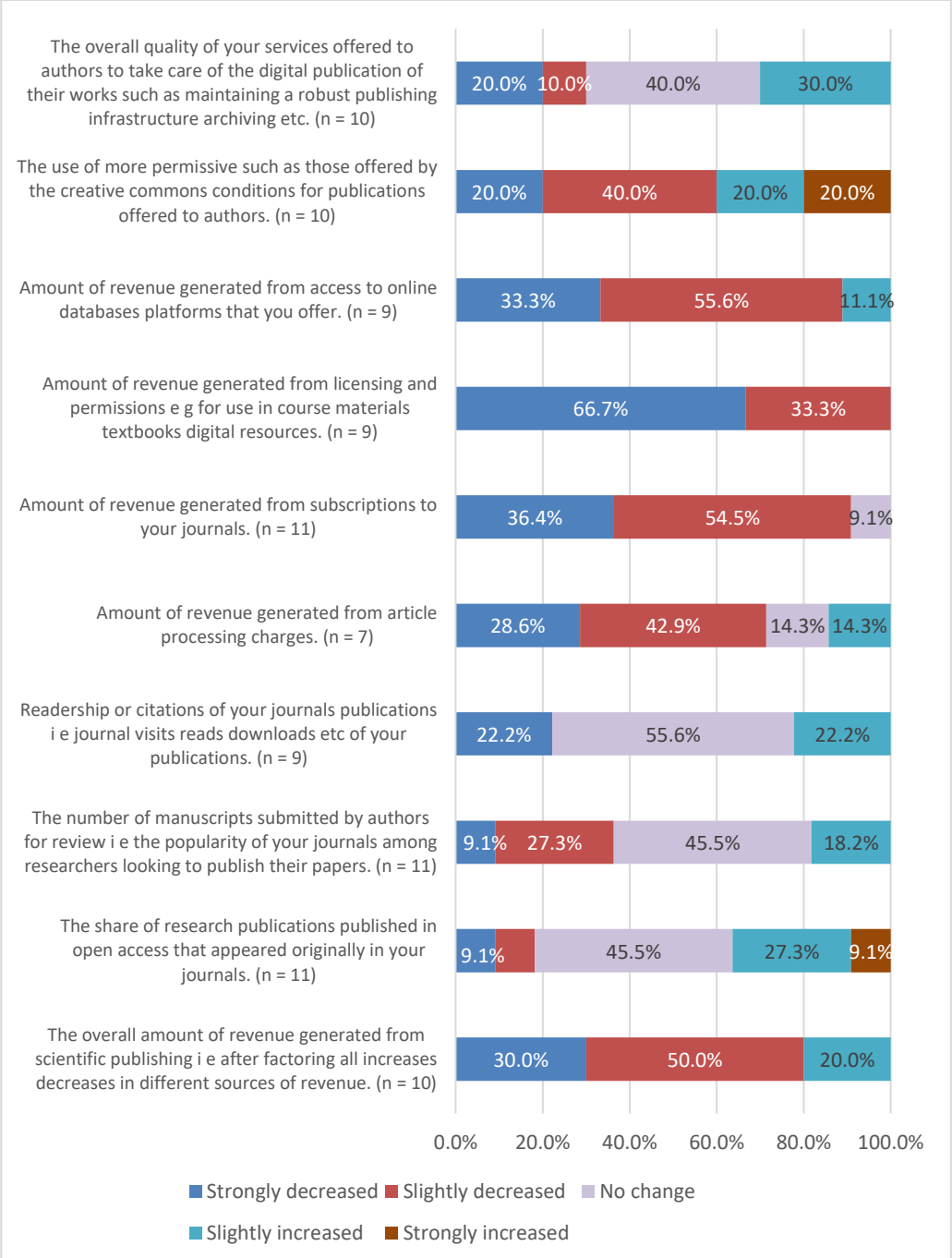
As for commercial publishers, regarding the overall amount of revenue generated from scientific publishing, responses indicate limited changes, with slight decreases being more prevalent (n=5, 50%) than increases (n=2, 20%). In terms of the share of research publications in Open Access from their journals, there's a modest shift towards an increase (slight/strong) (n=4, 36.4%) compared to a decrease (slight/strong) (n=2, 18.2%). The popularity of journals among researchers, measured by manuscript submissions, shows a balance between slight increases (n=2, 18.2%) and slight decreases (n=3, 27.3%), while for 45.5%, it resulted in no change. When it comes to readership or citations, for 2 (22.2%) of commercial publishers, the readership or citations slightly increased; for 2 (22.2%) strongly decreased; and for 5 (55.6%), there was no change. Revenue sources saw declines: in article processing charges, a slight or strong decrease was selected by 71.5% (n=5) of publishers; in subscriptions of their journals, the revenue decreased (slightly/strongly) for 90.9% (n=10%) of commercial publishers. The amount of revenue generated from subscriptions strongly decreased for 66.7% of commercial publishers. The amount generated from access to online databases that the publishers offer declines for 88.9% (n=8) of commercial publishers. The use of more permissive conditions for publications offered by authors strongly increased for 20% (n=2), slightly increased for 30% (n=3), and strongly decreased for 20% (n=2) of commercial publishers. The quality of services remained unchanged for 40% (n=4) of commercial publishers, slightly increased for 30%, and strongly decreased for 20%.

Regarding institutional publishers, they reported limited changes and only 1-3 responses were selected for each of the options.

Non-commercial publishers mostly selected no change in most cases, and their responses were very limited, ranging from 1 to 4 in each option.

## Commercial publishers

**Figure 232. Impact on publishers of SPR in five EU Member States (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

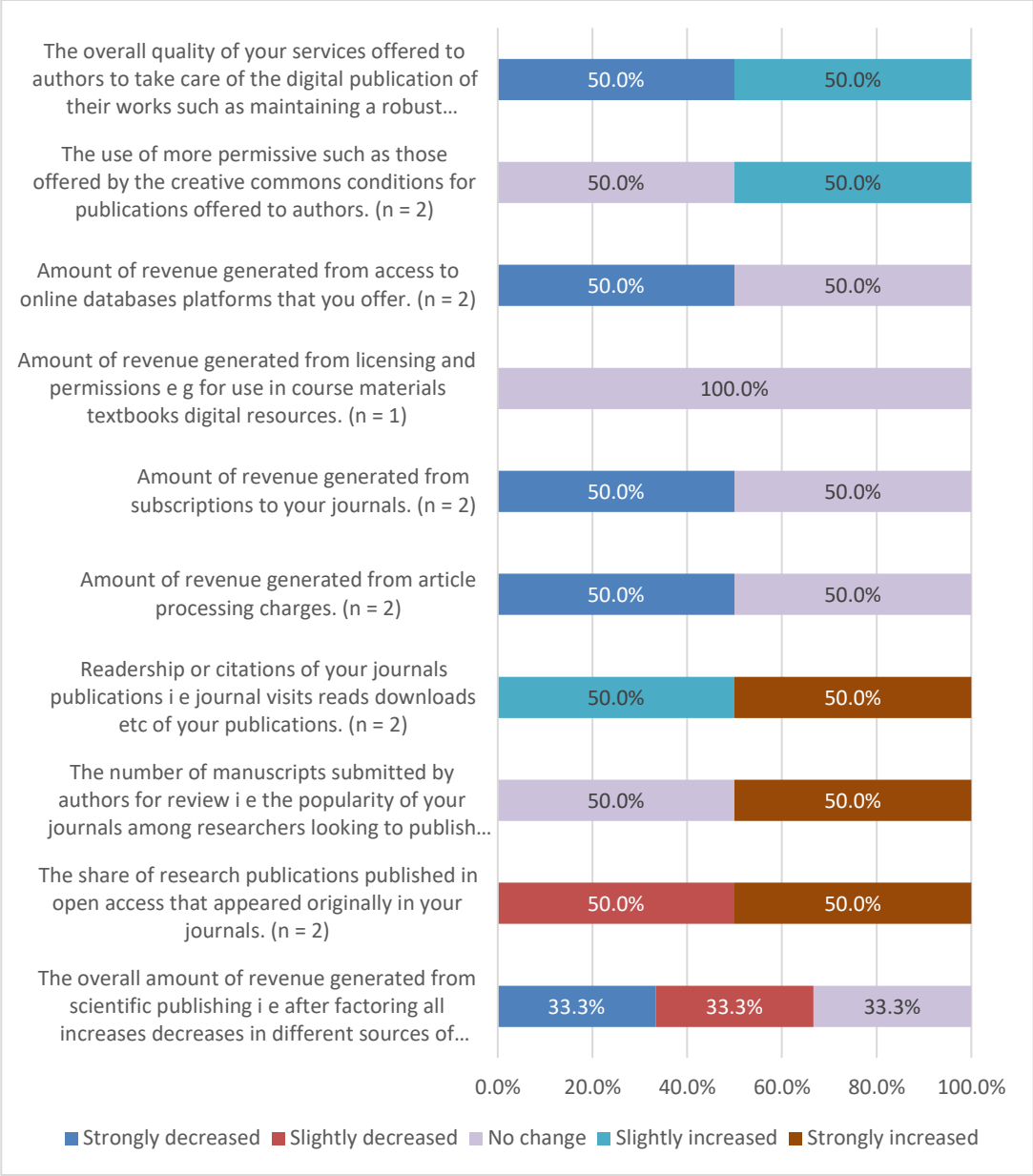
**Table 252. Impact on publishers of SPR in five EU Member States**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 2 (20.0%) | 5 (50.0%) | 3 (30.0%) | 0 (0.0%) | 10 |
| The share of research publications published in Open Access that appeared originally in your journals | 1 (9.1%) | 3 (27.3%) | 1 (9.1%) | 1 (9.1%) | 5 (45.5%) | 11 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 0 (0.0%) | 2 (18.2%) | 3 (27.3%) | 1 (9.1%) | 5 (45.5%) | 11 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 0 (0.0%) | 2 (22.2%) | 0 (0.0%) | 2 (22.2%) | 5 (55.6%) | 9 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 1 (14.3%) | 3 (42.9%) | 2 (28.6%) | 1 (14.3%) | 7 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 6 (54.5%) | 4 (36.4%) | 1 (9.1%) | 11 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 3 (33.3%) | 6 (66.7%) | 0 (0.0%) | 9 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 1 (11.1%) | 5 (55.6%) | 3 (33.3%) | 0 (0.0%) | 9 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 2 (20.0%) | 2 (20.0%) | 4 (40.0%) | 2 (20.0%) | 0 (0.0%) | 10 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 3 (30.0%) | 1 (10.0%) | 2 (20.0%) | 4 (40.0%) | 10 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**Institutional publishers**

**Figure 233. Impact on publishers of SPR in five EU Member States (Institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**Table 253. Impact on publishers of SPR in five EU Member States (Institutional publishers)**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 1 (33.3%) | 3 |
| The share of research publications published in Open Access that appeared originally in your journals | 1 (50.0%) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 2 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 1 (50.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (100%) | 1 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 2 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 2 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following".*

## Non-commercial publishers

**Figure 234. Impact on publishers of SPR in five EU Member States (non-commercial publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**Table 254. Impact on publishers of SPR in five EU Member States (non-commercial publishers)**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 1 (33.3%) | 3 |
| The share of research publications published in Open Access that appeared originally in your journals | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (100%) | 2 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (100%) | 1 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (100%) | 1 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (100%) | 2 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 2 (50.0%) | 4 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**Impact on publishers of SPR in five EU Member States (Breakdown by publishers' revenue –low, medium, high)**

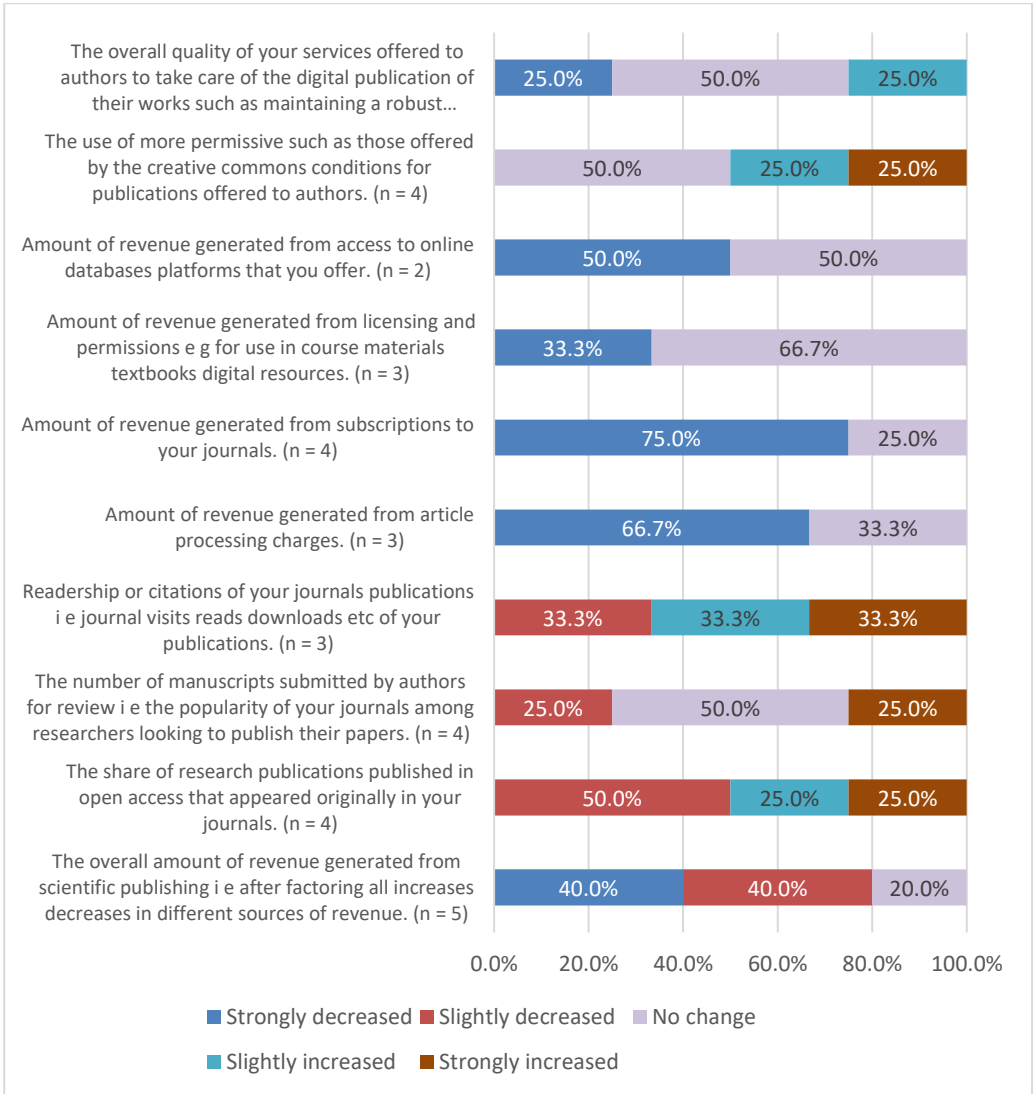
Across different revenue categories, publishers provided insights into the impact of Secondary Publication Right provisions in the five EU Member States. Among low-revenue publishers, the total number of responses was small, (total of 3-5 responses per answer option). A strong decrease was noted in the amount of revenue generated from APCs (66.7%,

n=2) and in the amount of revenue generated from subscriptions to their journals (75%, n=3). An increase was noted in the share of research publications published in Open Access that appeared originally in their journals (25%, n=1), readership or citations (33.3%, n=1), and the use of more permissive conditions for publications offered to authors (25%, n=1).

As for the medium-revenue publishers, the total number of responses was small for each option. The amount of revenue generated from licencing and permissions strongly decreased for 100% medium-revenue publishers (however, n=2). The same applies to high-revenue publishers, where the results mostly are towards a slight or strong decrease for most of the options. However, the number of answers is very limited.

### Low-revenue publishers

**Figure 235. Impact on publishers of SPR in five EU Member States (low-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following".*

**Table 255. Impact on publishers of SPR in five EU Member States (low-revenue publishers publishers)**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 0 (0.0%) | 2 (40.0%) | 2 (40.0%) | 1 (20.0%) | 5 |
| The share of research publications published in Open Access that appeared originally in your journals | 1 (25.0%) | 1 (25.0%) | 2 (50.0%) | 0 (0.0%) | 0 (0.0%) | 4 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 1 (33.3%) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 0 (0.0%) | 3 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (66.7%) | 1 (33.3%) | 3 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 3 (75.0%) | 1 (25.0%) | 4 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (33.3%) | 2 (66.7%) | 3 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 2 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 2 (50.0%) | 4 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following".*

**Medium-revenue publishers**

**Figure 236. Impact on publishers of SPR in five EU Member States (medium-revenue publishers)**


*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

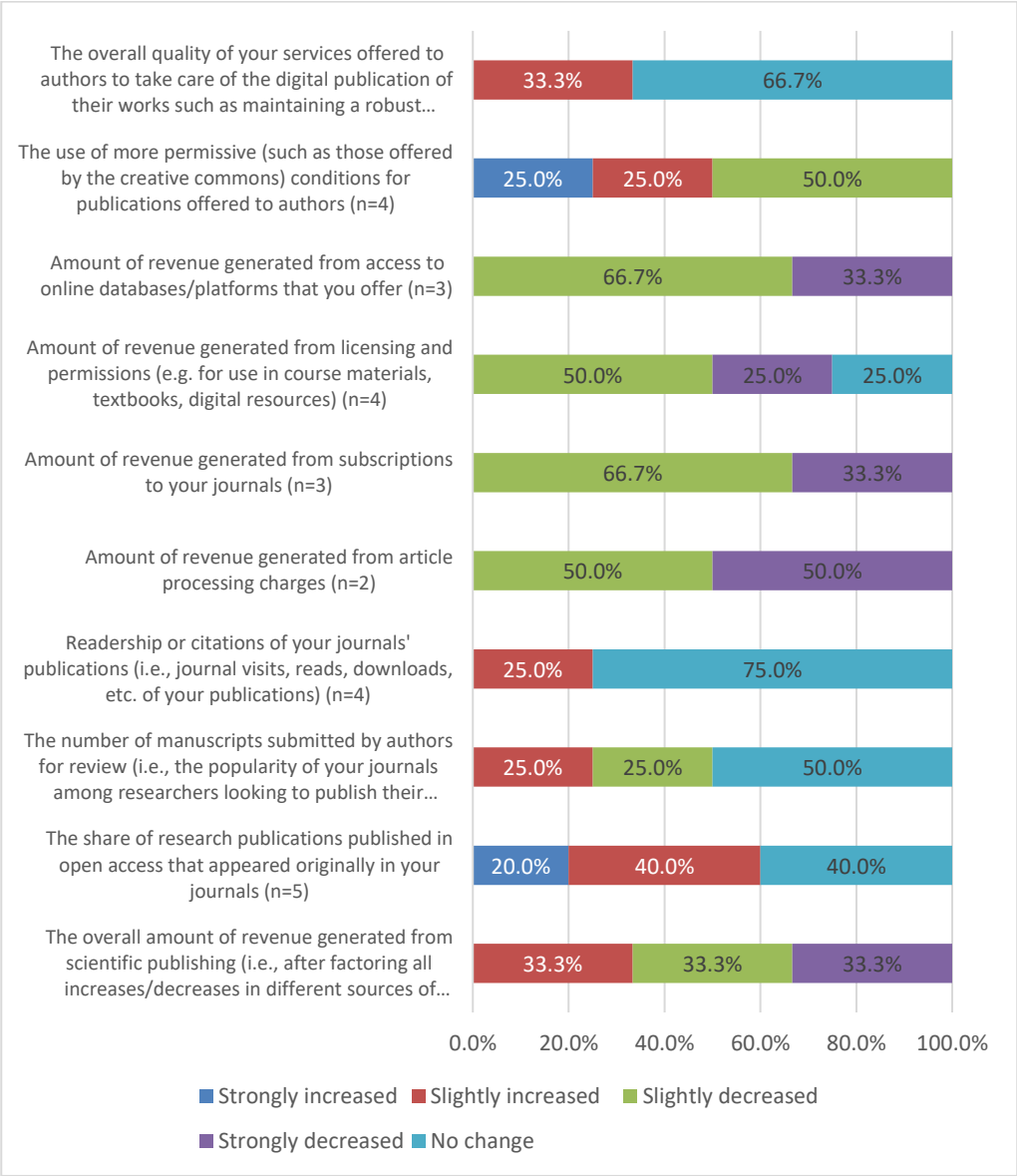
**Table 256. Impact on publishers of SPR in five EU Member States (medium-revenue publishers)**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 1 (33.3%) | 2 (66.7%) | 0 (0.0%) | 0 (0.0%) | 3 |
| The share of research publications published in Open Access that appeared originally in your journals | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 2 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 1 (33.3%) | 3 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 3 (100.0%) | 0 (0.0%) | 0 (0.0%) | 3 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (100.0%) | 0 (0.0%) | 2 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 1 (33.3%) | 2 (66.7%) | 0 (0.0%) | 0 (0.0%) | 3 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 2 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 (50.0%) | 4 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**High-revenue publishers**

**Figure 237. Impact on publishers of SPR in five EU Member States (high-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

**Table 257. Impact on publishers of SPR in five EU Member States (high-revenue publishers)**

| | Strongly increased | Slightly increased | Slightly decreased | Strongly decreased | No change | Total |
|---|---|---|---|---|---|---|
| The overall amount of revenue generated from scientific publishing (i.e. after factoring all increases/decreases in different sources of revenue) | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 3 |
| The share of research publications published in Open Access that appeared originally in your journals | 1 (20.0%) | 2 (40.0%) | 0 (0.0%) | 0 (0.0%) | 2 (40.0%) | 5 |
| The number of manuscripts submitted by authors for review (i.e. the popularity of your journals among researchers looking to publish their papers) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 2 (50.0%) | 4 |
| Readership or citations of your journals' publications (i.e. journal visits, reads, downloads, etc. of your publications) | 0 (0.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 3 (75.0%) | 4 |
| Amount of revenue generated from article processing charges | 0 (0.0%) | 0 (0.0%) | 1 (50.0%) | 1 (50.0%) | 0 (0.0%) | 2 |
| Amount of revenue generated from subscriptions to your journals | 0 (0.0%) | 0 (0.0%) | 2 (66.7%) | 1 (33.3%) | 0 (0.0%) | 3 |
| Amount of revenue generated from licensing and permissions (e.g. for use in course materials, textbooks, digital resources) | 0 (0.0%) | 0 (0.0%) | 2 (50.0%) | 1 (25.0%) | 1 (25.0%) | 4 |
| Amount of revenue generated from access to online databases/platforms that you offer | 0 (0.0%) | 0 (0.0%) | 2 (66.7%) | 1 (33.3%) | 0 (0.0%) | 3 |
| The use of more permissive (such as those offered by the creative commons) conditions for publications offered to authors | 1 (25.0%) | 1 (25.0%) | 2 (50.0%) | 0 (0.0%) | 0 (0.0%) | 4 |
| The overall quality of your services offered to authors to take care of the digital publication of their works such as maintaining a robust publishing infrastructure, archiving etc. | 0 (0.0%) | 1 (33.3%) | 0 (0.0%) | 0 (0.0%) | 2 (66.7%) | 3 |

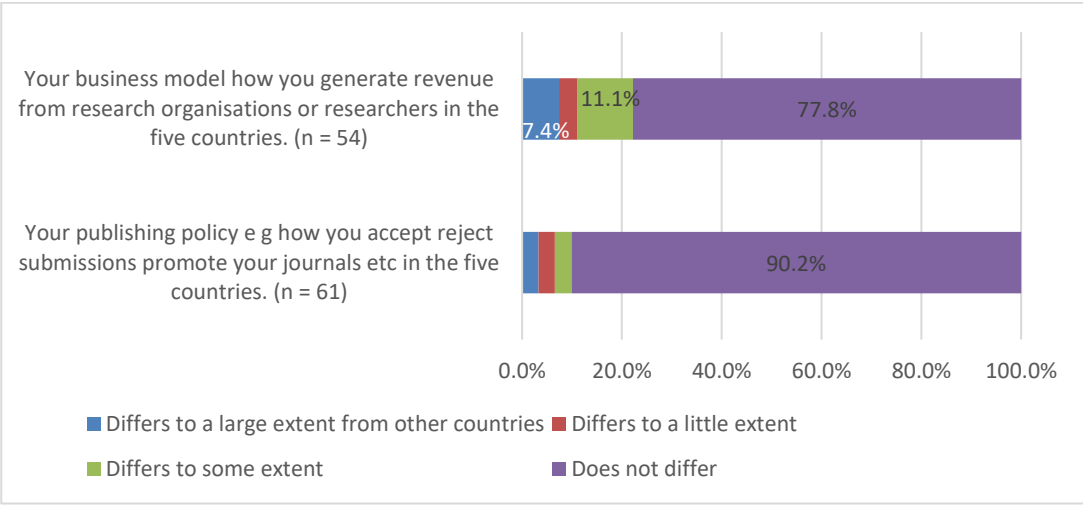
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "In your opinion, did the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) increase or decrease the following?"*

## QUESTION 37: To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries? (please select the most suitable option)

Publishers have consistent publishing policies across the five EU Member States which introduced Secondary Publication Rights (Austria, Belgium, France, Germany, and the Netherlands) compared to other countries. The majority (90.2%) indicated that their publishing policies, encompassing aspects like submission processes and journal promotion, do not differ. Regarding business models and revenue generation, 77.8% of publishers

reported that their approach remains consistent across the five countries, while a smaller percentage acknowledged varying degrees of difference.

**Figure 238. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 221 indicates the total count for each of the options.

**Table 258. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries**

| | Differs to a large extent from other countries | Differs to some extent | Differs to a little extent | Does not differ | Total |
|---|---|---|---|---|---|
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 2 (3.3%) | 2 (3.3%) | 2 (3.3%) | 55 (90.2%) | 61 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 4 (7.4%) | 6 (11.1%) | 2 (3.7%) | 42 (77.8%) | 54 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (Breakdown by commercial, institutional, and non-commercial publishers)**

Commercial publishers emphasised a high degree of consistency in both publishing policies and business models across the five EU Member States with introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) and other

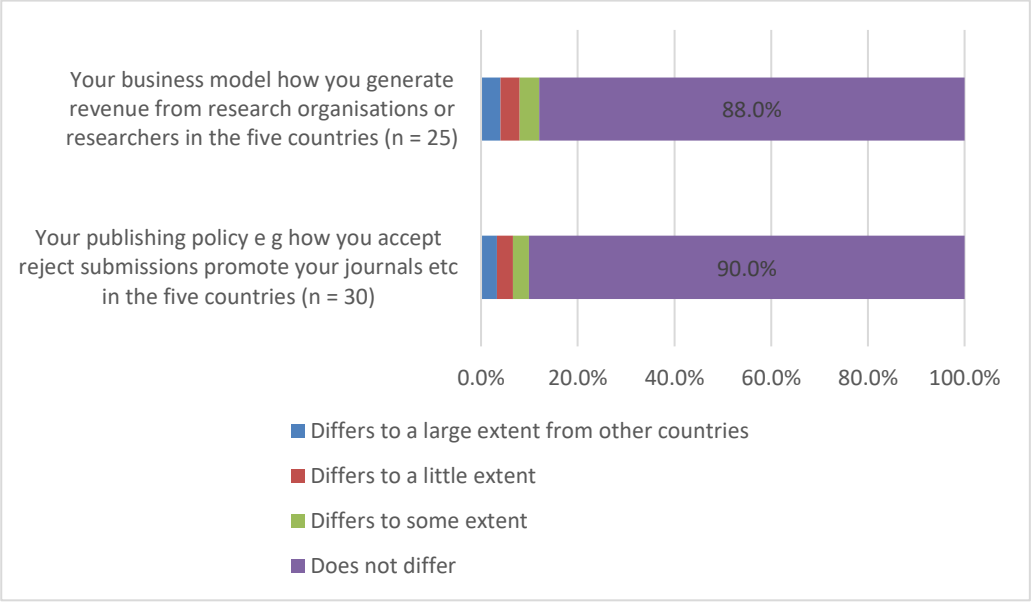
countries. For publishing policies, 90% indicated no differences, while for business models, 88% reported no difference.

Institutional publishers displayed varying degrees of divergence in their publishing policies and business models across the surveyed countries. For publishing policies, 77.8% stated no substantial differences, but 11.1% indicated a large extent of variance. Regarding business models, 77.8% reported no significant differences, while 22.2% noted that they differ to a large extent.

Non-commercial publishers consistently reported that their publishing policies (100%) and business models (68.8%) do not differ to a large, some, or some extent across five countries compared to others.

**Commercial publishers**

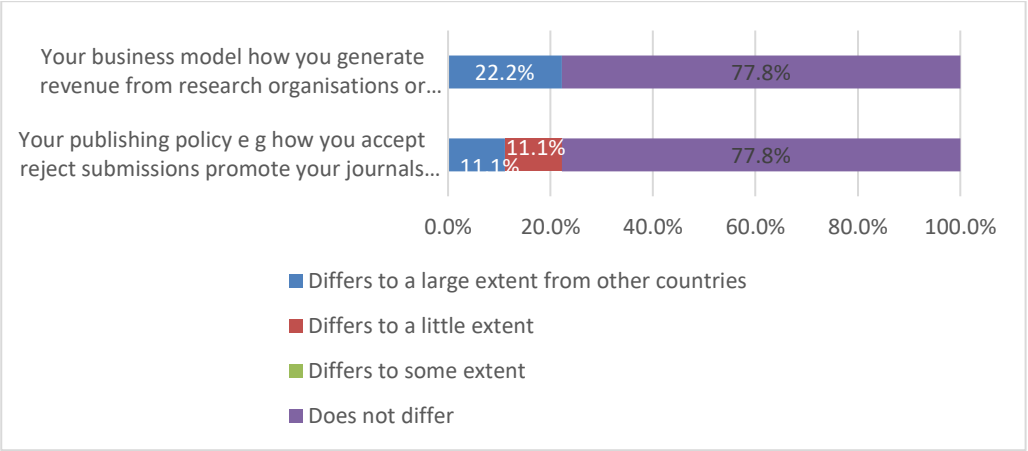
**Figure 239. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

### Institutional publishers

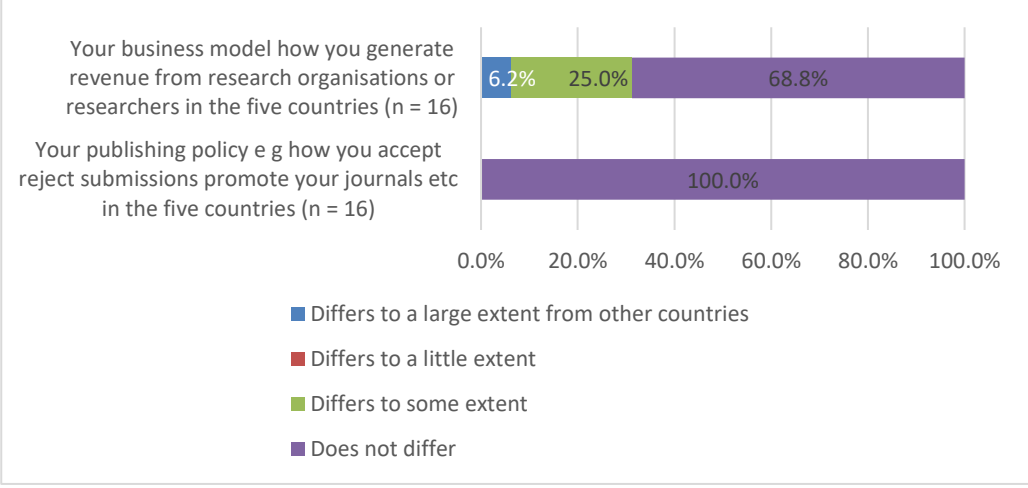
**Figure 240. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

### Non-commercial publishers

**Figure 241. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**Table 259. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries** (B**reakdown by commercial, institutional, and non-commercial publishers)**

| | Differs to a large extent from other countries | Differs to some extent | Differs to a little extent | Does not differ | Total |
|---|---|---|---|---|---|
| Commercial publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 1 (3.3%) | 1 (3.3%) | 1 (3.3%) | 27 (90.0%) | 30 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 1 (4.0%) | 1 (4.0%) | 1 (4.0%) | 22 (88.0%) | 25 |
| Institutional publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 1 (11.1%) | 0 (0.0%) | 1 (11.1%) | 7 (77.8%) | 9 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 2 (22.2%) | 0 (0.0%) | 0 (0.0%) | 7 (77.8%) | 9 |
| Non-commercial publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 16 (100%) | 16 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 1 (6.2%) | 4 (25.0%) | 0 (0.0%) | 11 (68.8%) | 16 |
| Other type | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 0 (0.0%) | 1 (16.7%) | 0 (0.0%) | 5 (83.3%) | 6 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 2 (50%) | 4 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (Breakdown by publishers' revenue - low, medium, high)**

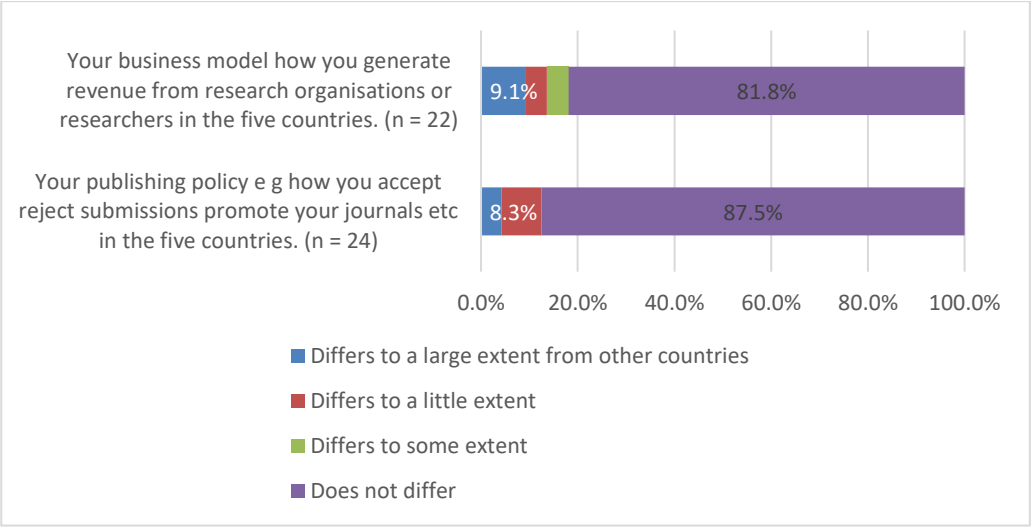
Low-revenue publishers predominantly reported a high level of consistency in both publishing policies and business models across the five EU Member States with introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) and other countries. For publishing policies, 87.5% indicated no differences, and for business models, 81.8% reported a similar situation. However, a minority acknowledged some extent of difference in both categories.

Medium-revenue publishers unanimously conveyed that their publishing policies and business models do not differ to any extent between SPR and other countries.

High-revenue publishers demonstrated uniformity in publishing policies, with 90.9% reporting no significant differences. However, in business models, 70.0% indicated that their approach does not differ, while 30.0% reported some extent of variance.

**Low-revenue publishers**

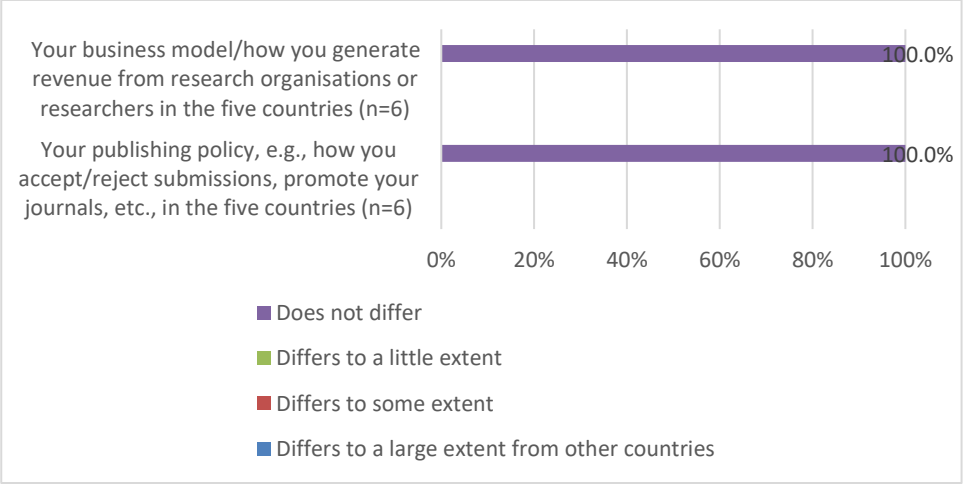
**Figure 242. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (low-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**Medium-revenue publishers**

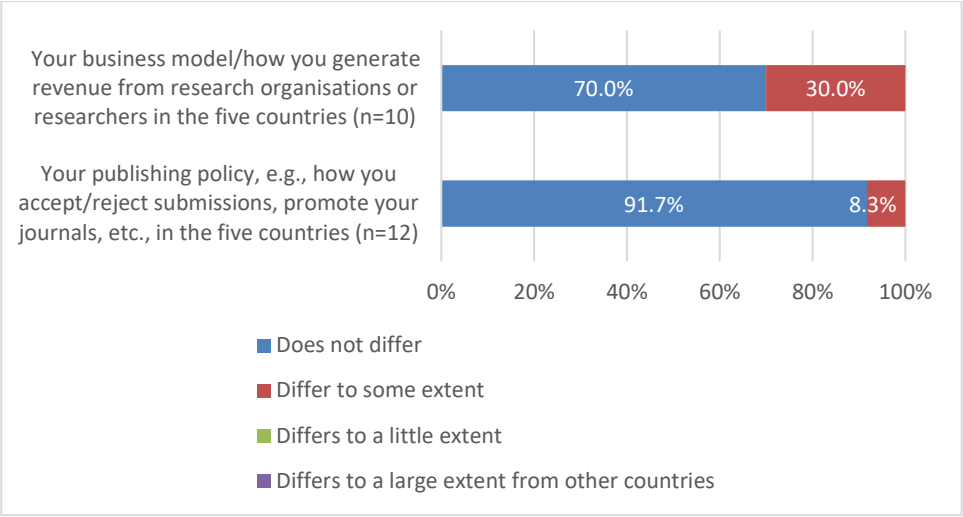
**Figure 243. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (medium-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**High-revenue publishers**

**Figure 244. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (high-revenue publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

**Table 260. Differences in publishers' policy and business model between the five EU Member State that have already introduced SPR and other countries (breakdown by revenue)**

| | Differs to a large extent from other countries | Differs to some extent | Differs to a little extent | Does not differ | Total |
|---|---|---|---|---|---|
| Low-revenue publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 1 (4.2%) | 0 (0.0%) | 2 (8.3%) | 21 (87.5%) | 24 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 2 (9.1%) | 1 (4.5%) | 1 (4.5%) | 18 (81.8%) | 22 |
| Medium-revenue publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 6 (100%) | 6 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 6 (100%) | 6 |
| High-revenue publishers | | | | | |
| Your publishing policy, e.g. how you accept/reject submissions, promote your journals, etc., in the five countries | 0 (0.0%) | 1 (8.3%) | 0 (0.0%) | 11 (91.7%) | 12 |
| Your business model/how you generate revenue from research organisations or researchers in the five countries | 0 (0.0%) | 3 (30.0%) | 0 (0.0%) | 7 (70.0%) | 10 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do your publishing policy and business model differ towards the five EU Member States that have already introduced Secondary Publication Rights (Austria, Belgium, France, Germany, the Netherlands) from how you operate in other countries?"*

### QUESTION 38: Can you explain the adjustments you had to make with regard to any of the five EU Member States (Austria, Belgium, France, Germany, the Netherlands)?

This open-ended question received 7 responses.

The responses from scientific publishers regarding adjustments made in response to the EU Member States (Austria, Belgium, France, Germany, and the Netherlands) reveal diverse approaches to navigating the evolving scholarly publishing landscape.

One common theme is the affirmation that editorial decisions are not influenced by whether an article is Open Access or not. However, there is an acknowledgement of promoting Open Access articles more than paywalled ones, with specific examples highlighting the differences in promotion based on the publishing context. For instance, articles from Germany published via a Transformative Agreement receive more promotion than those from France that are paywalled. This approach aims to enhance engagement with Open Access content and reflects a strategic response to changing publication practices.

Some publishers noted the necessity of adjusting licensing agreements, revenue budgets, and business models in response to the evolving publishing landscape. This adjustment indicates a proactive stance in aligning business strategies with the changing dynamics of scholarly communication, ensuring sustainability and adaptability.

The exploration of new options is a recurrent theme, suggesting a willingness to innovate and adapt to the evolving publishing environment. Publishers are actively seeking strategies to accommodate changes, indicating a dynamic approach to addressing challenges and opportunities.

Certain publishers emphasised that their publishing policy remains unchanged, but they acknowledged the potential challenges posed by the EU-wide Secondary Publication Right (SPR). There is recognition that an immediate SPR could impact the ability to sell non-Open Access content, influencing their overall approach to publishing.

Some publishers mentioned no adjustment, because they were not officially informed about the changes. This suggests that the impact of policies or developments in the surveyed EU Member States might not have been communicated clearly to all publishers, leading to varied responses.

Introducing “read and publish” agreements is a notable strategy mentioned by publishers. This approach aims to ensure that the costs of publishing are covered centrally through libraries and consortia, reflecting a shift toward transformative agreements that bundle subscription and Open Access fees. Additionally, there is an indication of accelerating Gold Open Access publishing activities, showcasing a commitment to Open Access models.

Finally, publishers who already operate exclusively in an Open Access model highlighted that their journals are in Open Access, suggesting a business model that is already aligned with Open Access principles.

In summary, the responses demonstrate a range of strategies, including adjustments to licensing agreements and business models, exploration of new options, promotion of Open Access, and the introduction of transformative agreements to navigate the complexities introduced by the evolving scholarly publishing landscape and potential changes in EU Member States' policies.

**QUESTION 39: To support public policy goals aiming at Open Access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Austria that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received no responses.

**QUESTION 40: To support public policy goals aiming at Open Access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Belgium that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received one response.

The publisher noted that the option to ask the King of Belgium for an exception in the current SPR is seen as unusual.

**QUESTION 41: To support public policy goals aiming at Open Access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in France that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received 7 responses. The summary of the responses is presented below:

- Publishers expressed support for the Subscribe to Open (S2O) model[1770] as a fair way to promote Open Access, advocating for changes in legislation in some EU countries to facilitate library subscriptions.

- Additionally, there was a suggestion to provide metadata only. However, there were concerns about potential encroachments on academic freedom and the need to avoid excessive deposit requirements.

- In the context of France, some publishers highlighted the existing balanced legislation in Humanities and Social Sciences (HSS), allowing free access to most articles on publishers' websites after a certain period, emphasising the importance of maintaining this balance for academic freedom, editorial teams, and sustainability of publishers' business models.

- Some publishers propose a legal approach, suggesting a law that considers the copyright of a scientific publication to fall under the public domain within a specified time frame.

**QUESTION 42: To support public policy goals aiming at Open Access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in Germany that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received 12 responses. The summary of the responses is presented below:

1770 Subscribe to Open (S2O) is an economic model used by peer-reviewed scholarly journals to provide readers with Open Access (OA) to the journal's content, without charging costs to authors. S2O converts journals that have a traditional subscription model to Open Access.

- Some publishers proposed no changes to the SPR but emphasised the need for funds to finance institutional agreements, Article publication charges, and other mechanisms to facilitate the transition to Open Access.

- Some publishers recommended specific adjustments, such as eliminating embargo periods for accepted manuscripts and allowing the secondary publishing of the version of record after a certain period (e.g. 12 months).

- Some publishers expressed the view that the current German regulation of § 38 Section 4 UrhG (which includes criteria like a 12-month embargo period and restrictions on commercial purposes) is tolerable but caution against extending the criteria, as it could negatively impact the financial situation of academic publishers.

- There are also suggestions for flexibility in licensing, allowing publishers to retain rights to other formats or translations to cover publication costs.

- There are opinions advocating for abolishing the regimes altogether or, if retained, extending embargo periods, particularly in subject areas that do not progress rapidly.

**QUESTION 43: To support public policy goals aiming at Open Access availability of scientific publications, are there any changes to the existing Secondary Publication Rights regime in the Netherlands that you would recommend, or are there any additional publication access and reuse provisions that you would recommend in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands) that have introduced the legislation? Please suggest some examples.**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received two responses.

A suggestion was made to clarify that the SPR does not necessarily apply to the version of record (VoR).

**QUESTION 44: Would you have any specific reservations about the Secondary Publication Right provisions in the five EU Member States (Austria, Belgium, France, Germany, the Netherlands), considering your position as a scientific publisher?**

This question was administered only to RPOs in the five countries with SPR: Austria, Belgium, France, Germany or Netherlands.

This open-ended question received 59 responses. Several publishers expressed concerns. One publisher mentioned having no specific reservations, while another emphasised that the SPR does not achieve true Open Access to the version of record (VoR) and is dependent on the subscription model, which counteracts the transition to Open Science.

Some publishers voiced concerns about the impact of SPR on their business models, especially for small, non-profit organisations that may struggle to maintain services with eroding income. Others highlighted the variability in how Member States implement the provisions, with Germany's implementation being seen as fairer and more beneficial to researchers than others.

Several publishers expressed reservations about the SPR not delivering Open Access to the VoR and relying on the subscription model, which they believe undermines the transition to full, sustainable Open Access. There were concerns about the potential negative effects on academic freedom, the quality of published content, and the economic basis for maintaining publishing activities.

A common sentiment was that the SPR provisions, as introduced in some EU countries, were designed to be proportionate and satisfy the Berne[1771] three-step-test. However, some of the proposals mentioned in the survey were perceived as going beyond these provisions, raising concerns about their comparability and meaningfulness.

Overall, reservations included doubts about the SPR's effectiveness in achieving Open Access, concerns about its impact on business models, and the need for careful consideration to avoid unintended consequences.

## Data and digital legislation-related questions

The part of the publishers' survey focusing on questions about data and digital legislation received a total of 113 responses. This includes 100 (88.5%) complete responses and 13 (11.5%) partial responses. This indicates that publishers either completed the entire set of data and digital legislation-related questions or skipped just one question.

**Table 261. Overview of the publishers' responses (data and digital legislation part) (n=113)**

| Status | Count | Share |
|---|---|---|
| Complete | 100 | 88.5% |
| Partial | 13 | 11.5% |
| Total | 113 | 100% |

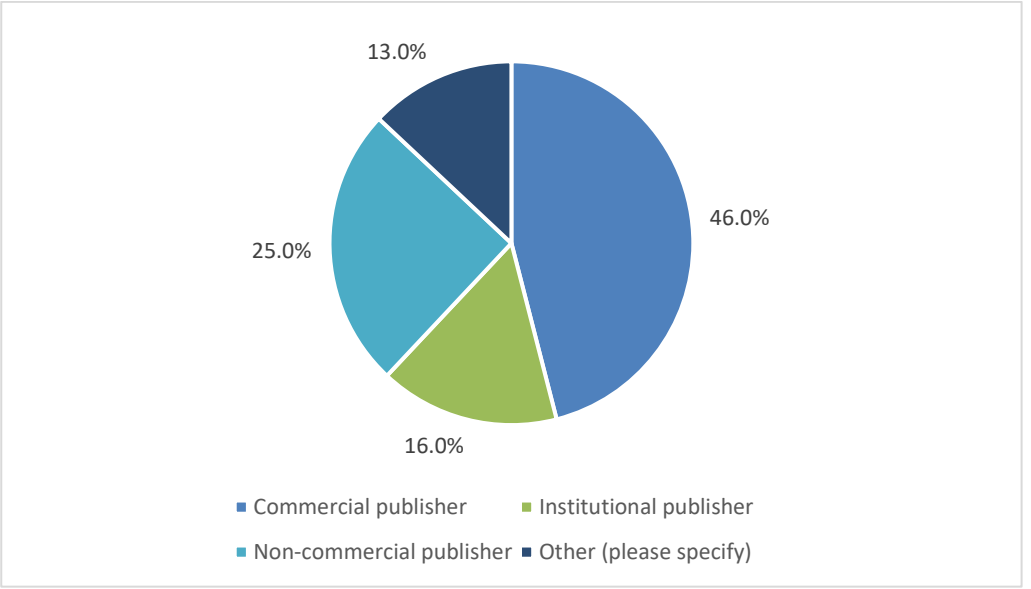
*Source: Compiled by the study team using data from the publishers' survey.*

### *QUESTION 2: What is the type of your organisation?*

In response to the question about the type of organisation, publishers provided the following breakdown: Commercial publishers constituted the majority at 46.0%, followed by non-commercial publishers at 25.0%. Institutional publishers accounted for 16.0%, and 13.0% fell under the "Other (please specify)" category. This indicates a predominant presence of commercial and non-commercial publishers among the surveyed publishers for the data and digital legislation.

1771 The Berne Convention for the Protection of Literary and Artistic Works was concluded on 9 September 1886. It is the oldest of the international copyright treaties; it provides a high level of protection and gives authors the most comprehensive set of rights it is possible to give them.

**Figure 245. Type of publisher (n=113)**




*Source: Compiled by the study team using data from the publishers' survey.*

**Table 262. Type of publisher**

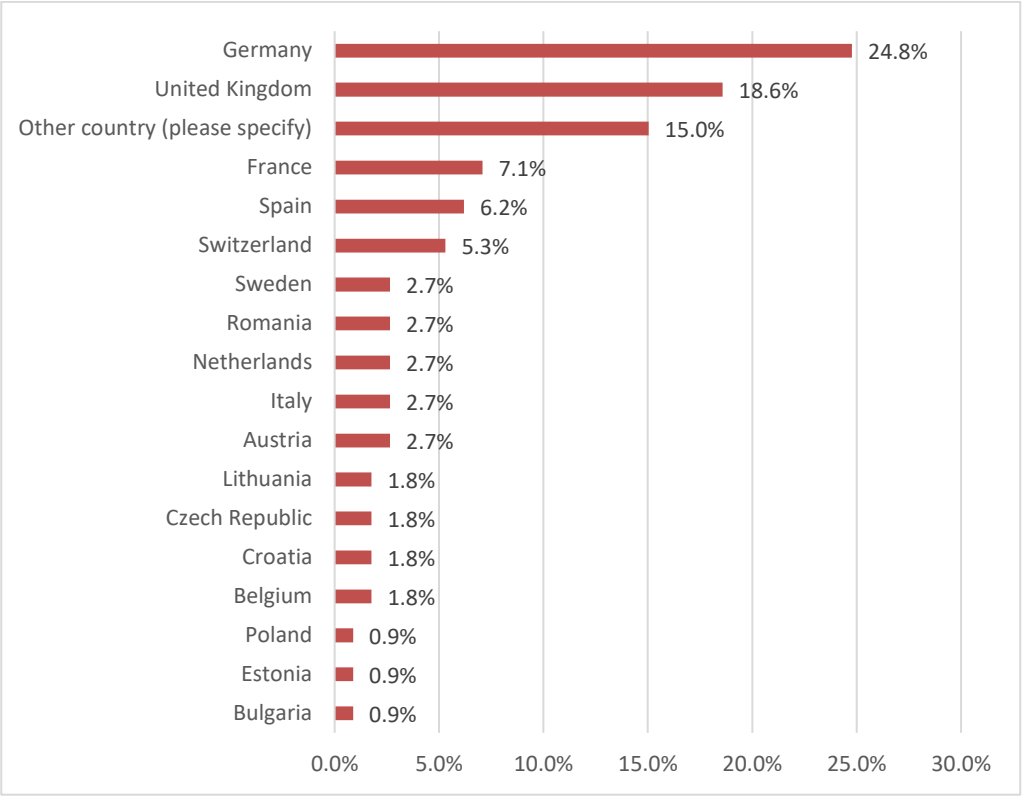
| | Count | Share |
|---|---|---|
| Other (please specify) | 15 | 13.0% |
| Institutional publisher | 18 | 16.0% |
| Non-commercial publisher | 28 | 25.0% |
| Commercial publisher | 52 | 46.0% |
| Total | 113 | 100% |

*Source: Compiled by the study team using data from the publishers' survey, n=113.*

**QUESTION 3:** In which country is the organisation that you represent located?

The surveyed publishers represented a diverse geographical distribution. The majority of publishers were from Germany (24.8%), followed by the United Kingdom (18.6%). Switzerland accounted for 5.3%, while the figures for France, Spain, and the Netherlands were 7.1%, 6.2%, and 2.7%, respectively. Other countries, specified by publishers, constituted 15.0%, emphasising a broad international participation. The remaining countries each represented less than 3.0% of the total responses, reflecting a varied presence across European nations in the survey.

**Figure 246. Country of the surveyed publishers (n=113)**




*Source: Compiled by the study team using data from the publishers' survey.*

**Table 263. Country of the surveyed publishers (n=113)**

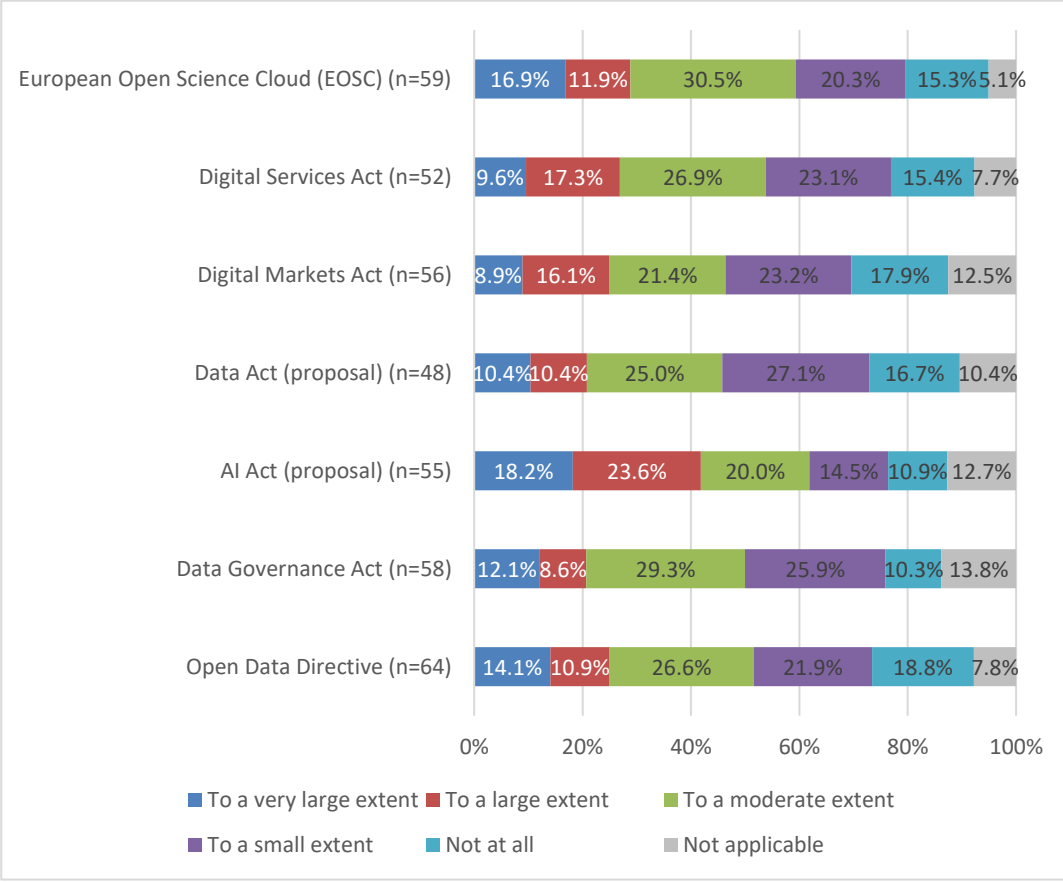
| | Count | Share |
|---|---|---|
| Austria | 3 | 2.7% |
| Belgium | 2 | 1.8% |
| Bulgaria | 1 | 0.9% |
| Croatia | 2 | 1.8% |
| Czechia | 2 | 1.8% |
| Estonia | 1 | 0.9% |
| France | 8 | 7.1% |
| Germany | 28 | 24.8% |
| Italy | 3 | 2.7% |
| Lithuania | 2 | 1.8% |
| Netherlands | 3 | 2.7% |
| Other country (please specify) | 17 | 15.0% |
| Poland | 1 | 0.9% |
| Romania | 3 | 2.7% |
| Spain | 7 | 6.2% |
| Sweden | 3 | 2.7% |
| Switzerland | 6 | 5.3% |
| United Kingdom | 21 | 18.6% |
| Total | 113 | 100% |

*Source: Compiled by the study team using data from the publishers' survey.*

***QUESTION 45: To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?***

Publishers shared diverse expectations regarding the potential impact of laws and frameworks on their operations in the next few years. For the Open Data Directive, 14.1% foresaw a very large impact, 10.9% expected a large impact, and 26.6% anticipated a moderate impact. Conversely, 18.8% projected a small impact, and 7.8% expected no impact. Similarly, the expectations for the Data Governance Act were varied, with 12.1% expecting a very large impact, 8.6% a large impact, 29.3% a moderate impact, and 25.9% a small impact. Notably, 13.8% foresaw no impact. As for the AI Act (proposal), opinions diverged, with 18.2% anticipating a very large impact, 23.6% a large impact, 20.0% a moderate impact, and 14.5% a small impact. Approximately 12.7% expected no impact. Publishers also expressed diverse views on the potential impact of the Data Act (proposal), Digital Markets Act, Digital Services Act, and the European Open Science Cloud (EOSC), highlighting the nuanced perspectives within the industry regarding the implications of these legislative and framework developments.

**Figure 247. Expected impact of laws and frameworks on publishers' operations (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table 227 indicates the total count for each of the options.

**Table 264. Expected impact of laws and frameworks on publishers' operations (all types of publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 9 (14.1%) | 7 (10.9%) | 17 (26.6%) | 14 (21.9%) | 12 (18.8%) | 5 (7.8%) | 64 |
| Data Governance Act | 7 (12.1%) | 5 (8.6%) | 17 (29.3%) | 15 (25.9%) | 6 (10.3%) | 8 (13.8%) | 58 |
| AI Act (proposal) | 10 (18.2%) | 13 (23.6%) | 11 (20.0%) | 8 (14.5%) | 6 (10.9%) | 7 (12.7%) | 55 |
| Data Act (proposal) | 5 (10.4%) | 5 (10.4%) | 12 (25.0%) | 13 (27.1%) | 8 (16.7%) | 5 (10.4%) | 48 |
| Digital Markets Act | 5 (8.9%) | 9 (16.1%) | 12 (21.4%) | 13 (23.2%) | 10 (17.9%) | 7 (12.5%) | 56 |
| Digital Services Act | 5 (9.6%) | 9 (17.3%) | 14 (26.9%) | 12 (23.1%) | 8 (15.4%) | 4 (7.7%) | 52 |
| European Open Science Cloud (EOSC) | 10 (16.9%) | 7 (11.9%) | 18 (30.5%) | 12 (20.3%) | 9 (15.3%) | 3 (5.1%) | 59 |

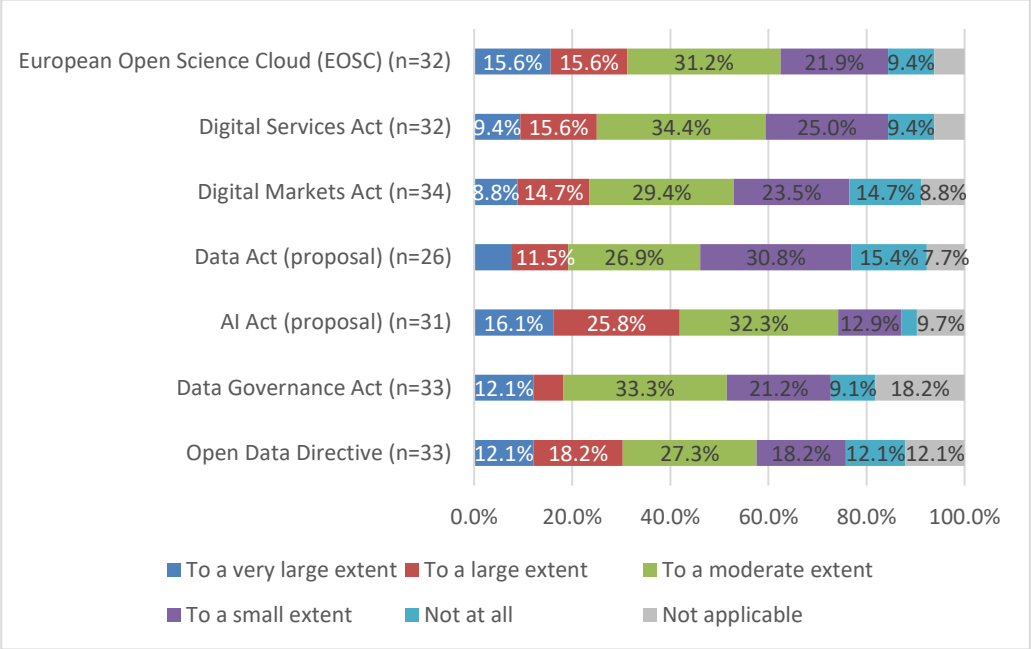
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

**Expected impact of laws and frameworks on publishers' operations (Breakdown by commercial, institutional, and non-commercial publishers)**

Commercial publishers, institutional publishers, and non-commercial publishers expressed varied expectations regarding the impact of laws and frameworks on their operations in the next few years. For commercial publishers, the Open Data Directive was expected to have a very large impact by 12.1%, a large impact by 18.2%, and a moderate impact by 27.3%, with 12.1% foreseeing no impact. The Data Governance Act was anticipated to have a very large impact by 12.1%, a large impact by 6.1%, and a moderate impact by 33.3%, while 9.1% expected no impact. As for the AI Act (proposal), 16.1% expected a very large impact, 25.8% a large impact, and 32.3% a moderate impact, with 3.2% predicting no impact. Similarly, varied expectations were observed for the Data Act (proposal), Digital Markets Act, and Digital Services Act. Institutional publishers, on the other hand, showed consensus on certain aspects, with 40.0% expecting a very large impact from the Open Data Directive, 20.0% from the Data Governance Act, and 40.0% from the AI Act (proposal). Non-commercial publishers exhibited diverse expectations, with 35.3% of publishers in the Open Data Directive category anticipating a moderate impact, 42.9% in the Data Governance Act category foreseeing a small impact, and 30.8% in the AI Act (proposal) category expecting a small impact. Overall, these responses underscored the nuanced perspectives across different types of publishers in relation to the anticipated impact of legislative and framework developments.

## Commercial publishers

**Figure 248. Expected impact of laws and frameworks on publishers' operations (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

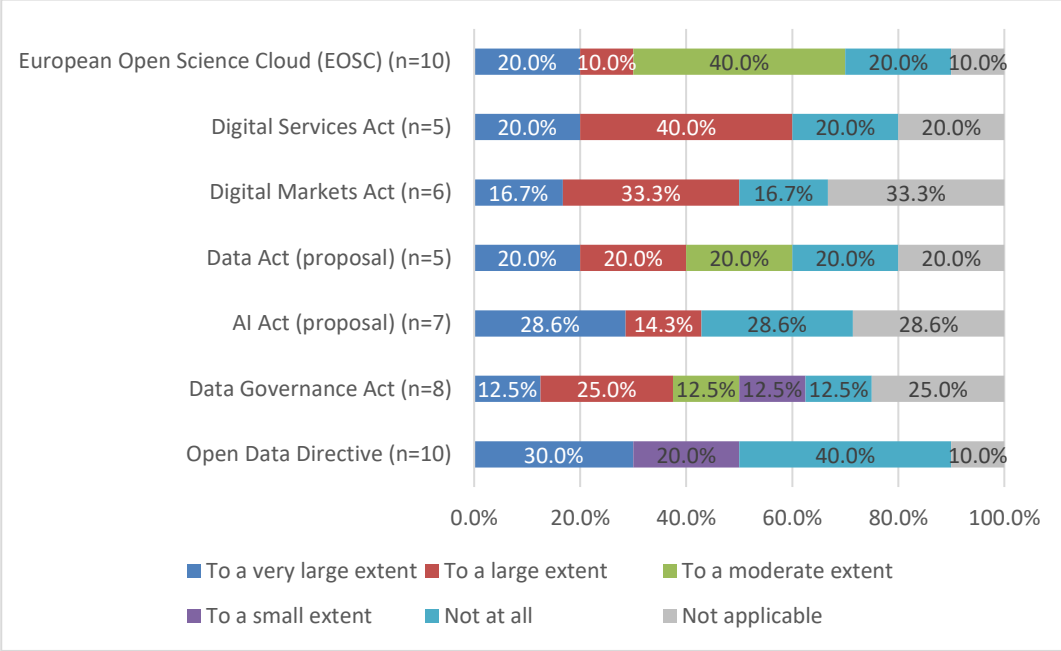
**Table 265. Expected impact of laws and frameworks on publishers' operations (commercial publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 4 (12.1%) | 6 (18.2%) | 9 (27.3%) | 6 (18.2%) | 4 (12.1%) | 4 (12.1%) | 33 |
| Data Governance Act | 4 (12.1%) | 2 (6.1%) | 11 (33.3%) | 7 (21.2%) | 3 (9.1%) | 6 (18.2%) | 33 |
| AI Act (proposal) | 5 (16.1%) | 8 (25.8%) | 10 (32.3%) | 4 (12.9%) | 1 (3.2%) | 3 (9.7%) | 31 |
| Data Act (proposal) | 2 (7.7%) | 3 (11.5%) | 7 (26.9%) | 8 (30.8%) | 4 (15.4%) | 2 (7.7%) | 26 |
| Digital Markets Act | 3 (8.8%) | 5 (14.7%) | 10 (29.4%) | 8 (23.5%) | 5 (14.7%) | 3 (8.8%) | 34 |
| Digital Services Act | 3 (9.4%) | 5 (15.6%) | 11 (34.4%) | 8 (25.0%) | 3 (9.4%) | 2 (6.2%) | 32 |
| European Open Science Cloud (EOSC) | 5 (15.6%) | 5 (15.6%) | 10 (31.2%) | 7 (21.9%) | 3 (9.4%) | 2 (6.2%) | 32 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

### Institutional publishers

**Figure 249. Expected impact of laws and frameworks on publishers' operations (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

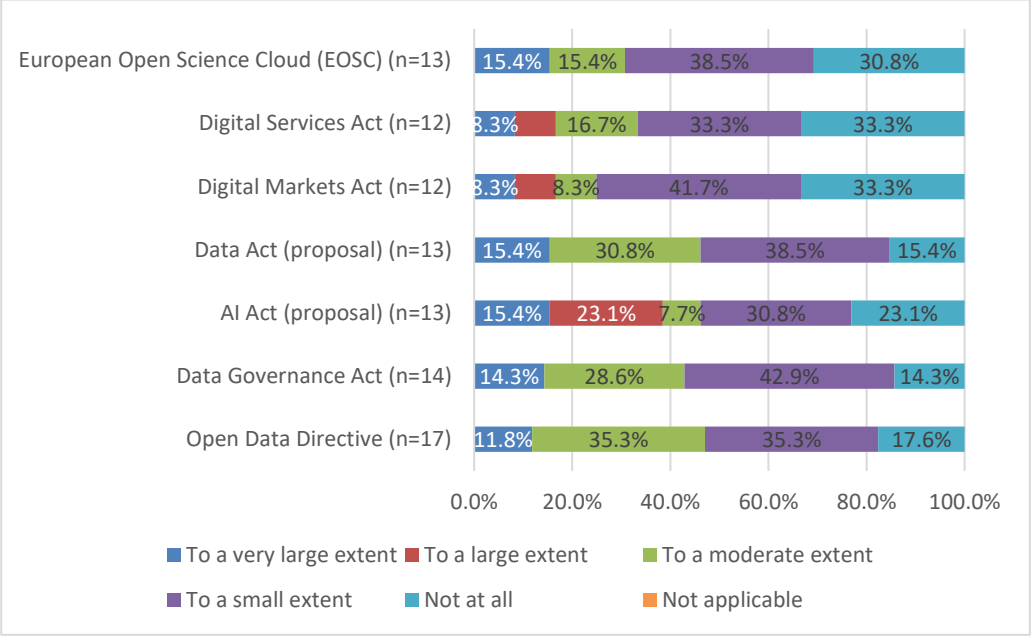
**Table 266. Expected impact of laws and frameworks on publishers' operations (institutional publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 3 (30.0%) | 0 (0.0%) | 0 (0.0%) | 2 (20.0%) | 4 (40.0%) | 1 (10.0%) | 10 |
| Data Governance Act | 1 (12.5%) | 2 (25.0%) | 1 (12.5%) | 1 (12.5%) | 1 (12.5%) | 2 (25.0%) | 8 |
| AI Act (proposal) | 2 (28.6%) | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 2 (28.6%) | 2 (28.6%) | 7 |
| Data Act (proposal) | 1 (20.0%) | 1 (20.0%) | 1 (20.0%) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 5 |
| Digital Markets Act | 1 (16.7%) | 2 (33.3%) | 0 (0.0%) | 0 (0.0%) | 1 (16.7%) | 2 (33.3%) | 6 |
| Digital Services Act | 1 (20.0%) | 2 (40.0%) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 5 |
| European Open Science Cloud (EOSC) | 2 (20.0%) | 1 (10.0%) | 4 (40.0%) | 0 (0.0%) | 2 (20.0%) | 1 (10.0%) | 10 |

*Source: Compiled by the study team using data from publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

## Non-commercial publishers

**Figure 250. Expected impact of laws and frameworks on publishers' operations (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

**Table 267. Expected impact of laws and frameworks on publishers' operations (non-commercial publishers)**

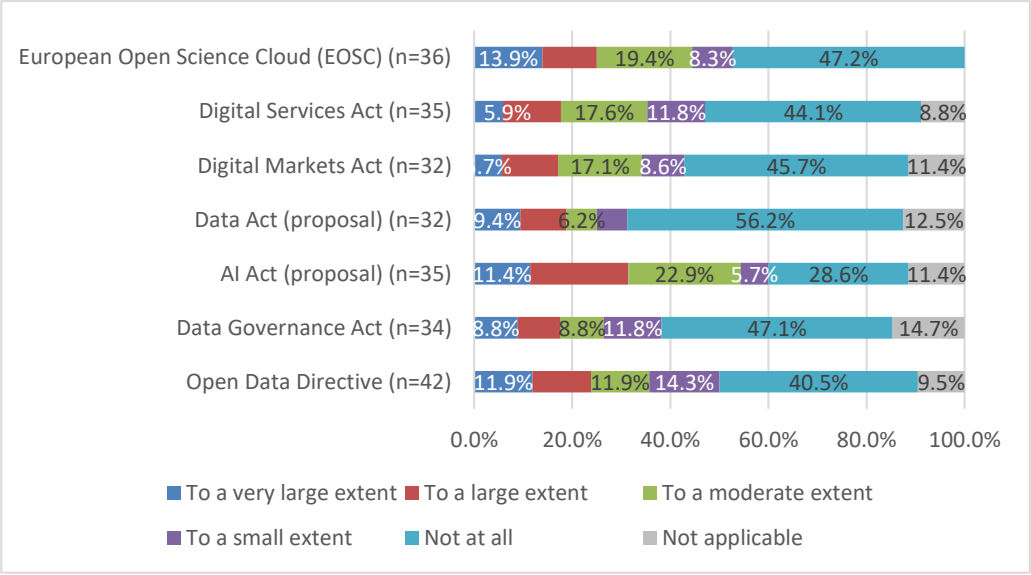
| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 2 (11.8%) | 0 (0.0%) | 6 (35.3%) | 6 (35.3%) | 3 (17.6%) | 0 (0.0%) | 17 |
| Data Governance Act | 2 (14.3%) | 0 (0.0%) | 4 (28.6%) | 6 (42.9%) | 2 (14.3%) | 0 (0.0%) | 14 |
| AI Act (proposal) | 2 (15.4%) | 3 (23.1%) | 1 (7.7%) | 4 (30.8%) | 3 (23.1%) | 0 (0.0%) | 13 |
| Data Act (proposal) | 2 (15.4%) | 0 (0.0%) | 4 (30.8%) | 5 (38.5%) | 2 (15.4%) | 0 (0.0%) | 13 |
| Digital Markets Act | 1 (8.3%) | 1 (8.3%) | 1 (8.3%) | 5 (41.7%) | 4 (33.3%) | 0 (0.0%) | 12 |
| Digital Services Act | 1 (8.3%) | 1 (8.3%) | 2 (16.7%) | 4 (33.3%) | 4 (33.3%) | 0 (0.0%) | 12 |
| European Open Science Cloud (EOSC) | 2 (15.4%) | 0 (0.0%) | 2 (15.4%) | 5 (38.5%) | 4 (30.8%) | 0 (0.0%) | 13 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do you expect that the following laws (EU and national implementation) and framework (may) affect operations at your organisation in the next few years?"*

**QUESTION 46: To what extent does your organisation (expect to) benefit from the following laws and framework?**

Publishers across different sectors provided insights into the impact of laws and frameworks on their operations in the next few years. The Open Data Directive received varying responses, with 40.5% stating that it would not affect their operations at all, while 11.9% anticipated a very large or large impact. Similarly, for the Data Governance Act, 47.1% expected no impact, and 8.8% foresaw a very large or large impact. The AI Act (proposal) generated diverse expectations, as 28.6% believed it would not affect their operations, while 20.0% expected a large impact. Publishers expressed a range of opinions on the expected impact of the Data Act (proposal), Digital Markets Act, Digital Services Act, and the European Open Science Cloud (EOSC). In particular, for the EOSC, 47.2% did not anticipate any impact, while 13.9% expected a very large impact. These responses highlight the nuanced perspectives of publishers on the potential effects of legislative and framework developments.

**Figure 251. Extent to which publishers benefits from the laws and framework (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 268. Extent to which publishers benefits from the laws and framework (all types of publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 5 (11.9%) | 5 (11.9%) | 5 (11.9%) | 6 (14.3%) | 17 (40.5%) | 4 (9.5%) | 42 |
| Data Governance Act | 3 (8.8%) | 3 (8.8%) | 3 (8.8%) | 4 (11.8%) | 16 (47.1%) | 5 (14.7%) | 34 |
| AI Act (proposal) | 4 (11.4%) | 7 (20.0%) | 8 (22.9%) | 2 (5.7%) | 10 (28.6%) | 4 (11.4%) | 35 |
| Data Act (proposal) | 3 (9.4%) | 3 (9.4%) | 2 (6.2%) | 2 (6.2%) | 18 (56.2%) | 4 (12.5%) | 32 |
| Digital Markets Act | 2 (5.7%) | 4 (11.4%) | 6 (17.1%) | 3 (8.6%) | 16 (45.7%) | 4 (11.4%) | 35 |
| Digital Services Act | 2 (5.9%) | 4 (11.8%) | 6 (17.6%) | 4 (11.8%) | 15 (44.1%) | 3 (8.8%) | 34 |
| European Open Science Cloud (EOSC) | 5 (13.9%) | 4 (11.1%) | 7 (19.4%) | 3 (8.3%) | 17 (47.2%) | 0 (0.0%) | 36 |

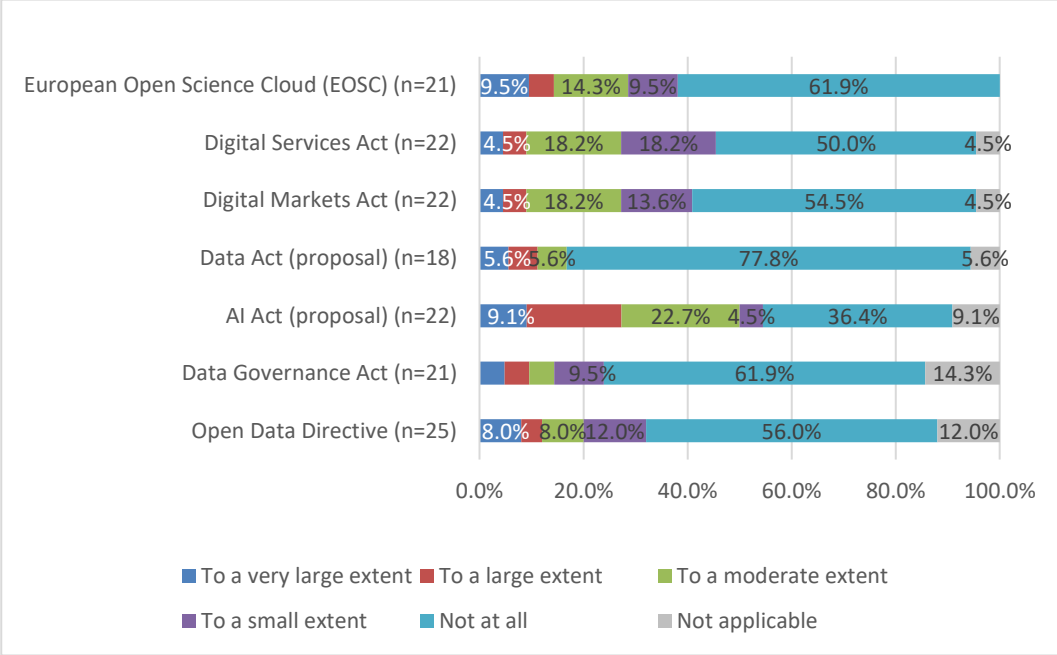
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

**Extent to which publishers benefits from the laws and framework (Breakdown by commercial, institutional, and non-commercial publishers)**

Publishers across different sectors shared their expectations regarding the benefits their organisations may derive from laws and frameworks. In the commercial publishing sector, responses varied. For the Open Data Directive, 56.0% of commercial publishers anticipated no benefit, while 12.0% expected a moderate benefit. Similarly, for the Data Governance Act, 61.9% foresaw no benefit, with 9.5% expecting a moderate benefit. In contrast, for the AI Act (proposal), 36.4% believed it would not benefit their organisation, while 22.7% expected a moderate benefit. The Digital Services Act generated diverse expectations, with 50.0% anticipating no benefit and 18.2% expecting a moderate benefit. In the institutional publishing sector, responses indicated that 20.0% of publishers expected a very large benefit from the Open Data Directive, while 40.0% anticipated a very large benefit from the Data Governance Act. For the non-commercial publishers, 37.5% expected a small benefit from the Open Data Directive, and 40.0% anticipated a moderate benefit from the Data Act (proposal). These responses highlight the varied perspectives across different types of publishers regarding the potential benefits of laws and frameworks.

### Commercial publishers

**Figure 252. Extent to which publishers benefits from the laws and framework (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

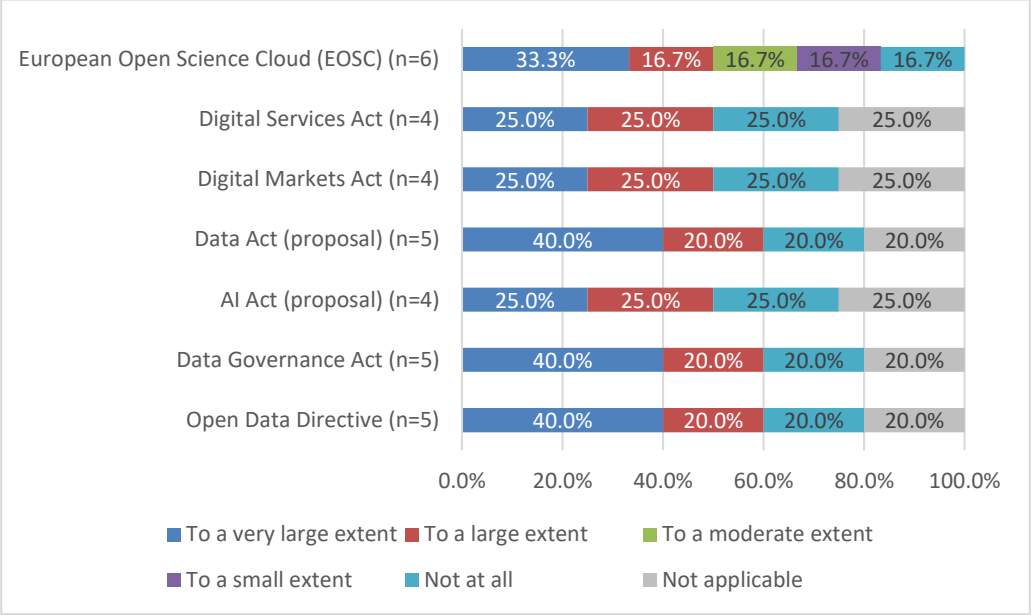
**Table 269. Extent to which publishers benefits from the laws and framework (commercial publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 2 (8.0%) | 1 (4.0%) | 2 (8.0%) | 3 (12.0%) | 14 (56.0%) | 3 (12.0%) | 25 |
| Data Governance Act | 1 (4.8%) | 1 (4.8%) | 1 (4.8%) | 2 (9.5%) | 13 (61.9%) | 3 (14.3%) | 21 |
| AI Act (proposal) | 2 (9.1%) | 4 (18.2%) | 5 (22.7%) | 1 (4.5%) | 8 (36.4%) | 2 (9.1%) | 22 |
| Data Act (proposal) | 1 (5.6%) | 1 (5.6%) | 1 (5.6%) | 0 (0.0%) | 14 (77.8%) | 1 (5.6%) | 18 |
| Digital Markets Act | 1 (4.5%) | 1 (4.5%) | 4 (18.2%) | 3 (13.6%) | 12 (54.5%) | 1 (4.5%) | 22 |
| Digital Services Act | 1 (4.5%) | 1 (4.5%) | 4 (18.2%) | 4 (18.2%) | 11 (50.0%) | 1 (4.5%) | 22 |
| European Open Science Cloud (EOSC) | 2 (9.5%) | 1 (4.8%) | 3 (14.3%) | 2 (9.5%) | 13 (61.9%) | 0 (0.0%) | 21 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

### Institutional publishers

**Figure 253. Extent to which publishers benefits from the laws and framework (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

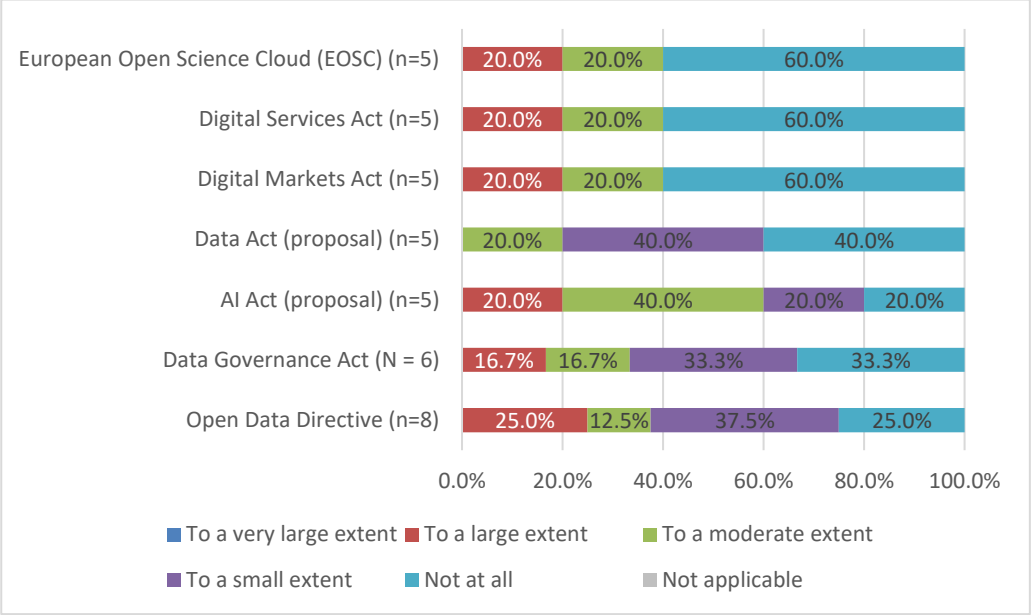
**Table 270. Extent to which publishers benefits from the laws and framework (institutional publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 2 (40.0%) | 1 (20.0%) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 5 |
| Data Governance Act | 2 (40.0%) | 1 (20.0%) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 5 |
| AI Act (proposal) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 4 |
| Data Act (proposal) | 2 (40.0%) | 1 (20.0%) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 5 |
| Digital Markets Act | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 4 |
| Digital Services Act | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 4 |
| European Open Science Cloud (EOSC) | 2 (33.3%) | 1 (16.7%) | 1 (16.7%) | 1 (16.7%) | 1 (16.7%) | 0 (0.0%) | 6 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

**Non-commercial publishers**

**Figure 254. Extent to which publishers benefits from the laws and framework (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

**Table 271. Extent to which publishers benefits from the laws and framework (non-commercial publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 0 (0.0%) | 2 (25.0%) | 1 (12.5%) | 3 (37.5 %) | 2 (25.0 %) | 0 (0.0%) | 8 |
| Data Governance Act | 0 (0.0%) | 1 (16.7%) | 1 (16.7%) | 2 (33.3 %) | 2 (33.3 %) | 0 (0.0%) | 6 |
| AI Act (proposal) | 0 (0.0%) | 1 (20.0%) | 2 (40.0%) | 1 (20.0 %) | 1 (20.0 %) | 0 (0.0%) | 5 |
| Data Act (proposal) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 2 (40.0 %) | 2 (40.0 %) | 0 (0.0%) | 5 |
| Digital Markets Act | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 0 (0.0%) | 3 (60.0 %) | 0 (0.0%) | 5 |
| Digital Services Act | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 0 (0.0%) | 3 (60.0 %) | 0 (0.0%) | 5 |
| European Open Science Cloud (EOSC) | 0 (0.0%) | 1 (20.0%) | 1 (20.0%) | 0 (0.0%) | 3 (60.0 %) | 0 (0.0%) | 5 |

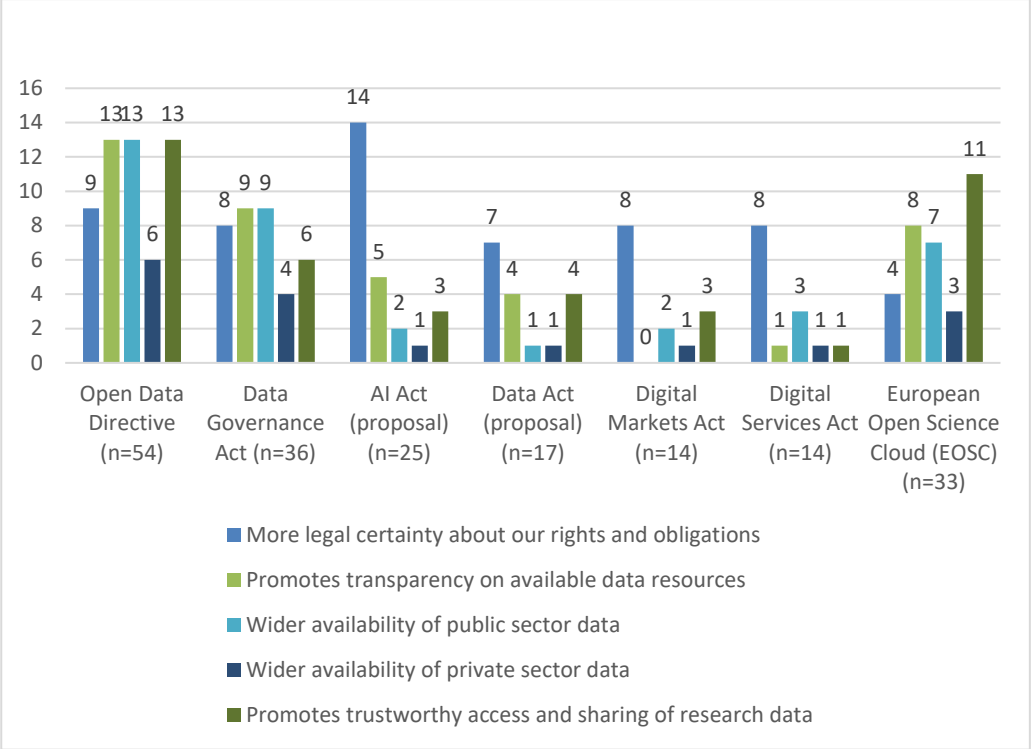
*Source: Compiled by the study team using data from the survey, the question in the survey was "To what extent does your organisation (expect to) benefit from the following laws and framework?"*

**QUESTION 47: What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?**

Publishers expressed diverse perspectives on the opportunities presented by laws and frameworks. Overall, for the Open Data Directive, 24.1% emphasised transparency, while 24.1% saw opportunities in wider data availability. The Data Governance Act revealed a focus on legal certainty (22.2%) and transparency (25.0%). In the AI Act (proposal), 56.0% viewed legal certainty as an opportunity, and 20.0% saw transparency as beneficial. The Data Act (proposal) revealed the importance of legal certainty (41.2%), and the significance of transparency (23.5%). Regarding the Digital Markets Act, 57.1% found legal certainty beneficial, while the Digital Services Act showed similar results. For the European Open Science Cloud (EOSC), 33.3% perceived opportunities in legal certainty and 24.2% in transparency.

Due to small numbers, the figures below do not provide the shares of the responses but rather the total number of responses.

**Figure 255. Opportunities for publishers' operations generated by the laws and framework (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, table below indicates the total count for each of the options.

**Table 272. Opportunities for publishers' operations generated by the laws and framework (all types of publishers)**

| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data | Wider availability of private sector data | Promotes trustworthy access and sharing of research data | Total |
|---|---|---|---|---|---|---|
| Open Data Directive | 9 (16.7%) | 13 (24.1%) | 13 (24.1%) | 6 (11.1%) | 13 (24.1%) | 54 |
| Data Governance Act | 8 (22.2%) | 9 (25.0%) | 9 (25.0%) | 4 (11.1%) | 6 (16.7%) | 36 |
| AI Act (proposal) | 14 (56.0%) | 5 (20.0%) | 2 (8.0%) | 1 (4.0%) | 3 (12.0%) | 25 |
| Data Act (proposal) | 7 (41.2%) | 4 (23.5%) | 1 (5.9%) | 1 (5.9%) | 4 (23.5%) | 17 |
| Digital Markets Act | 8 (57.1%) | 0 (0.0%) | 2 (14.3%) | 1 (7.1%) | 3 (21.4%) | 14 |
| Digital Services Act | 8 (57.1%) | 1 (7.1%) | 3 (21.4%) | 1 (7.1%) | 1 (7.1%) | 14 |
| European Open Science Cloud (EOSC) | 4 (12.1%) | 8 (24.2%) | 7 (21.2%) | 3 (9.1%) | 11 (33.3%) | 33 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

Opportunities for publishers' operations generated by the laws and framework (breakdown by commercial, institutional, and non-commercial publishers)

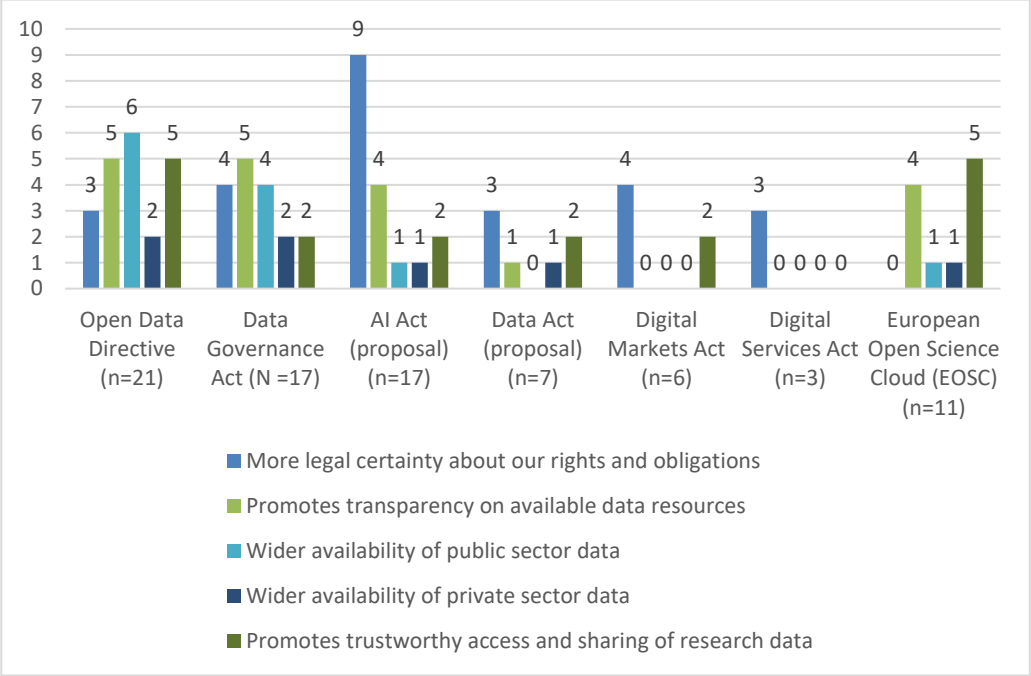
Examining commercial publishers, 28.6% highlighted that the Open Data Directive offers opportunities for wider data availability, while 23.8% think it will promote transparency on the available data resources. When it comes to the Data Governance Act, 23.5% think it will provide more legal certainty about rights and obligations, and 29.4% consider it will promote transparency on available data resources. Regarding the AI Act (proposal), 52.9% think it offers an opportunity for more legal certainty about rights and obligations, while 23.5% estimate it will promote transparency on available data resources. As for the Digital Markets Act, 67.0% expect it will bring more legal certainty. Finally, all publishers think the Digital Service Act will bring opportunities for more legal certainty. As for the EOSC, 36.4% perceived transparency on available data resources as a possible opportunity brought by this initiative.

Examining institutional publishers, 23.1% highlighted that the Open Data Directive offers opportunities for transparency. When it comes to the Data Governance Act, 22.2% think that it will provide more legal certainty. Regarding the AI Act (proposal), 33.3% think that it will offer an opportunity for more legal certainty. Similarly, regarding the Data Act (proposal), 40.0% think that it will offer an opportunity for more legal certainty. As for the Digital Markets Act, 25.0% expect it will bring more legal certainty. As for the Digital Services Act, 33.3% think that it offers opportunities for transparency. Finally, for the EOSC, 30.8% think that it will offer opportunities for transparency.

As for non-commercial publishers, 33.3% highlighted that the Open Data Directive offers opportunities in transparency. When it comes to the Data Governance Act, 33.3% think it will provide more legal certainty. Similarly, for the AI Act (proposal), 66.7% think that it will provide more legal certainty. As for the Data Act (proposal), 25.0% think that it will provide more legal certainty. For the Digital Markets Act, 50.0% think that it will provide opportunity for more legal certainty. As for the Digital Services Act, 50.0% think that it will provide more legal certainty, and as for the EOSC, 33.3% think that it will offer opportunities for transparency.

## Commercial publishers

**Figure 256. Opportunities for publishers' operations generated by the laws and framework (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

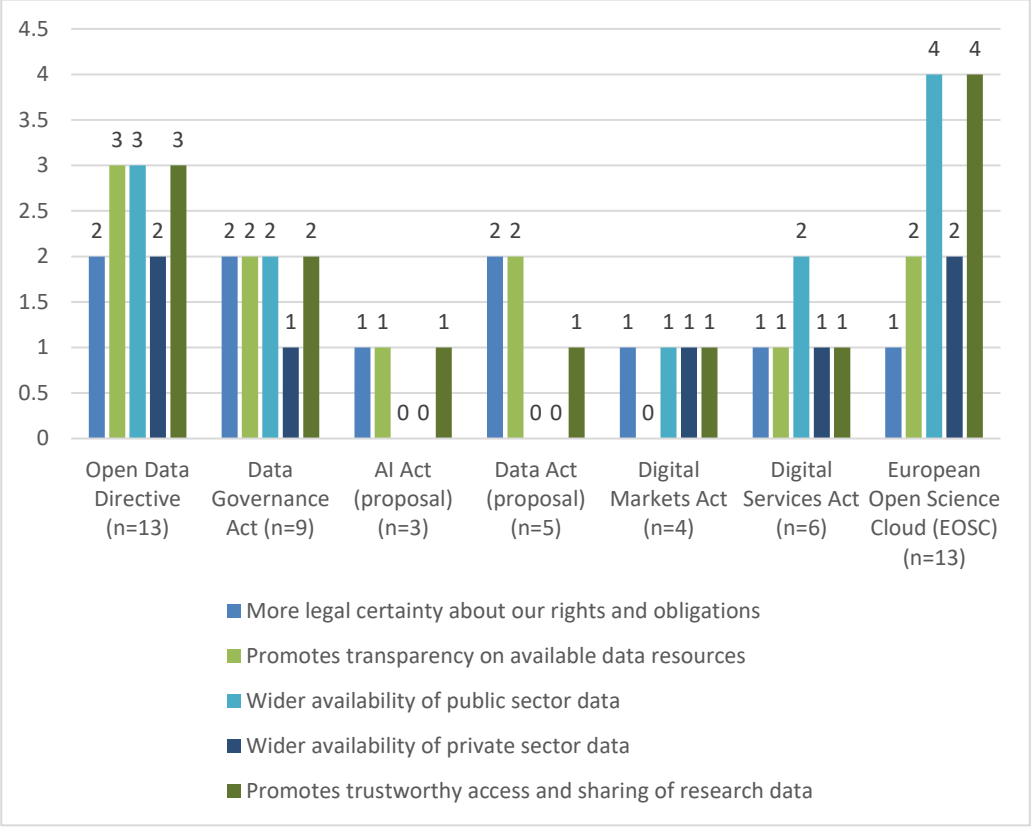
**Table 273. Opportunities for publishers' operations generated by the laws and framework (commercial publishers)**

| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data | Wider availability of private sector data | Promotes trustworthy access and sharing of research data | Total |
|---|---|---|---|---|---|---|
| Open Data Directive | 3 (14.3%) | 5 (23.8%) | 6 (28.6%) | 2 (9.5%) | 5 (23.8%) | 21 |
| Data Governance Act | 4 (23.5%) | 5 (29.4%) | 4 (23.5%) | 2 (11.8%) | 2 (11.8%) | 17 |
| AI Act (proposal) | 9 (52.9%) | 4 (23.5%) | 1 (5.9%) | 1 (5.9%) | 2 (11.8%) | 17 |
| Data Act (proposal) | 3 (42.9%) | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 2 (28.6%) | 7 |
| Digital Markets Act | 4 (66.7%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 (33.3%) | 6 |
| Digital Services Act | 3 (100.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 3 |
| European Open Science Cloud (EOSC) | 0 (0.0%) | 4 (36.4%) | 1 (9.1%) | 1 (9.1%) | 5 (45.5%) | 11 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

**Institutional publishers**

**Figure 257. Opportunities for publishers' operations generated by the laws and framework (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

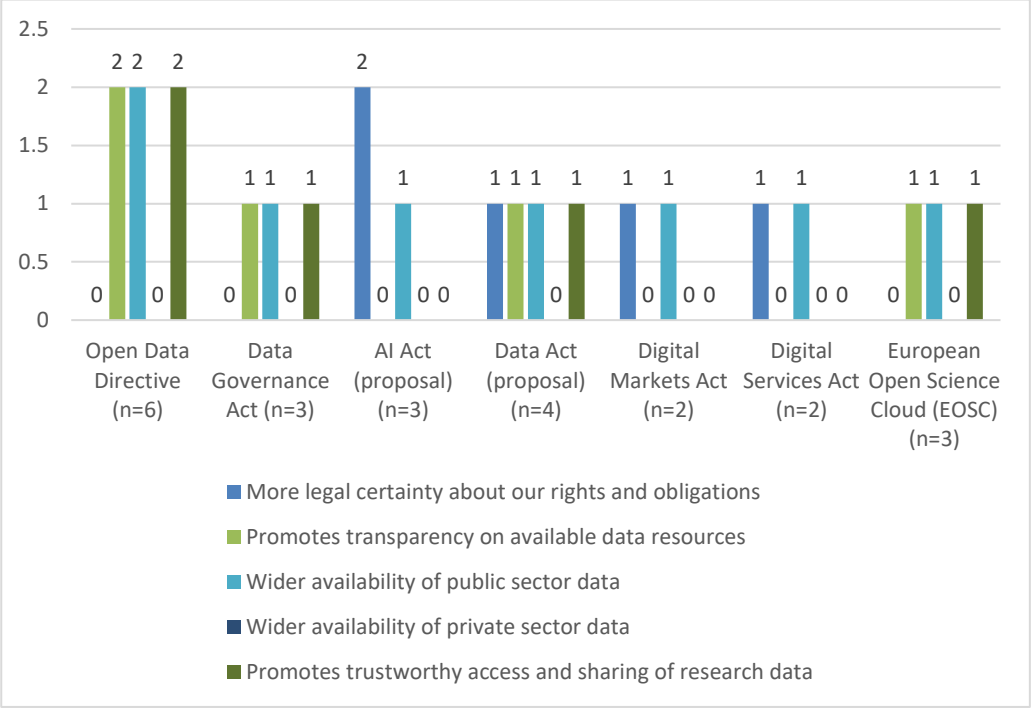
**Table 274. Opportunities for publishers' operations generated by the laws and framework (institutional publishers)**

| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data | Wider availability of private sector data | Promotes trustworthy access and sharing of research data | Total |
|---|---|---|---|---|---|---|
| Open Data Directive | 2 (15.4%) | 3 (23.1%) | 3 (23.1%) | 2 (15.4%) | 3 (23.1%) | 13 |
| Data Governance Act | 2 (22.2%) | 2 (22.2%) | 2 (22.2%) | 1 (11.1%) | 2 (22.2%) | 9 |
| AI Act (proposal) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 0 (0.0%) | 1 (33.3%) | 3 |
| Data Act (proposal) | 2 (40.0%) | 2 (40.0%) | 0 (0.0%) | 0 (0.0%) | 1 (20.0%) | 5 |
| Digital Markets Act | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 1 (25.0%) | 1 (25.0%) | 4 |
| Digital Services Act | 1 (16.7%) | 1 (16.7%) | 2 (33.3%) | 1 (16.7%) | 1 (16.7%) | 6 |
| European Open Science Cloud (EOSC) | 1 (7.7%) | 2 (15.4%) | 4 (30.8%) | 2 (15.4%) | 4 (30.8%) | 13 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

**Non-commercial publishers**

**Figure 258. Opportunities for publishers' operations generated by the laws and framework (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

**Table 275. Opportunities for publishers' operations generated by the laws and framework (non-commercial publishers)**

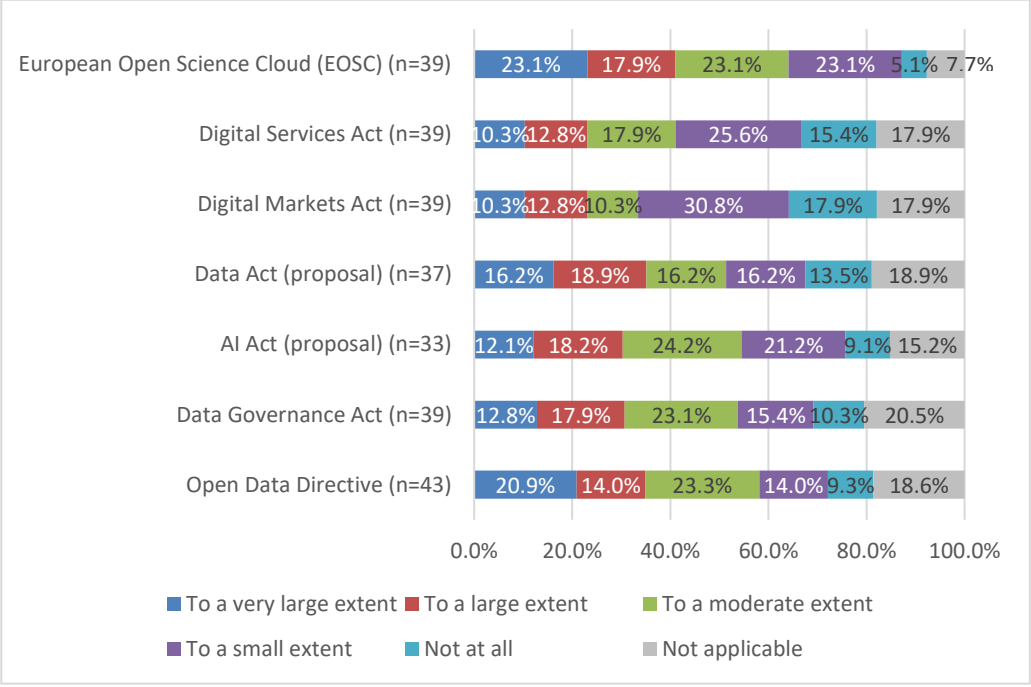
| | More legal certainty about our rights and obligations | Promotes transparency on available data resources | Wider availability of public sector data | Wider availability of private sector data | Promotes trustworthy access and sharing of research data | Total |
|---|---|---|---|---|---|---|
| Open Data Directive | 0 (0.0%) | 2 (33.3%) | 2 (33.3%) | 0 (0.0%) | 2 (33.3%) | 6 |
| Data Governance Act | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 1 (33.3%) | 3 |
| AI Act (proposal) | 2 (66.7%) | 0 (0.0%) | 1 (33.3%) | 0 (0.0%) | 0 (0.0%) | 3 |
| Data Act (proposal) | 1 (25.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 1 (25.0%) | 4 |
| Digital Markets Act | 1 (50.0%) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| Digital Services Act | 1 (50.0%) | 0 (0.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| European Open Science Cloud (EOSC) | 0 (0.0%) | 1 (33.3%) | 1 (33.3%) | 0 (0.0%) | 1 (33.3%) | 3 |

*Source: Compiled by the study team using data from publishers' survey, the question in the survey was, "What aspects of the laws and framework do you expect or consider to be an opportunity for your operations?"*

**QUESTION 48: To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?**

Publishers anticipate varied challenges posed by laws and frameworks. Overall, the Open Data Directive is expected to pose challenges to a moderate extent (23.3%), with 18.6% considering it not applicable. The Data Governance Act is projected to pose challenges to a large extent (17.9%) and a moderate extent (23.1%), with 20.5% finding it not applicable. The AI Act (proposal) is perceived to present challenges to a moderate extent (24.2%) and to a small extent (21.2%), while 15.2% find it not applicable. The Data Act (proposal) is expected to pose challenges to a large extent (18.9%) and a moderate extent (16.2%), with 18.9% considering it not applicable. The Digital Markets Act is anticipated to pose challenges to a small extent (30.8%), with 17.9% finding it not applicable. Similarly, the Digital Services Act is expected to pose challenges to a small extent (25.6%), with 15.4% considering it not applicable. The European Open Science Cloud (EOSC) is perceived to pose challenges to a very large extent (23.1%), with 7.7% finding it not applicable.

**Figure 259. Extent to which laws and frameworks are expected to pose challenges to publishers (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

**Table 276. Extent to which laws and frameworks are expected to pose challenges to publishers (all publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 9 (20.9%) | 6 (14.0%) | 10 (23.3%) | 6 (14.0%) | 4 (9.3%) | 8 (18.6%) | 43 |
| Data Governance Act | 5 (12.8%) | 7 (17.9%) | 9 (23.1%) | 6 (15.4%) | 4 (10.3%) | 8 (20.5%) | 39 |
| AI Act (proposal) | 4 (12.1%) | 6 (18.2%) | 8 (24.2%) | 7 (21.2%) | 3 (9.1%) | 5 (15.2%) | 33 |
| Data Act (proposal) | 6 (16.2%) | 7 (18.9%) | 6 (16.2%) | 6 (16.2%) | 5 (13.5%) | 7 (18.9%) | 37 |
| Digital Markets Act | 4 (10.3%) | 5 (12.8%) | 4 (10.3%) | 12 (30.8%) | 7 (17.9%) | 7 (17.9%) | 39 |
| Digital Services Act | 4 (10.3%) | 5 (12.8%) | 7 (17.9%) | 10 (25.6%) | 6 (15.4%) | 7 (17.9%) | 39 |
| European Open Science Cloud (EOSC) | 9 (23.1%) | 7 (17.9%) | 9 (23.1%) | 9 (23.1%) | 2 (5.1%) | 3 (7.7%) | 39 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

Extent to which laws and frameworks are expected to pose challenges to publishers (Breakdown by commercial, institutional, and non-commercial publishers)

Among commercial publishers, the Open Data Directive is anticipated to pose challenges to a moderate extent (25.9%), with 18.5% finding it not applicable. The Data Governance Act is expected to pose challenges to a moderate extent (29.2%) and to a small extent (16.7%), with 16.7% finding it not applicable. The AI Act (proposal) is projected to pose challenges to a moderate extent (36.8%) and to a small extent (31.6%), while 5.3% find it not applicable. The Data Act (proposal) is perceived to pose challenges to a large extent (19.0%) and to a moderate extent (14.3%), with 9.5% finding it not applicable. The Digital Markets Act is expected to pose challenges to a small extent (41.7%), with 16.7% finding it not applicable. Similarly, the Digital Services Act is anticipated to pose challenges to a small extent (33.3%), with 16.7% finding it not applicable. The EOSC is perceived to pose challenges to a moderate extent (16.7%) and to a small extent (33.3%), with 8.3% finding it not applicable.

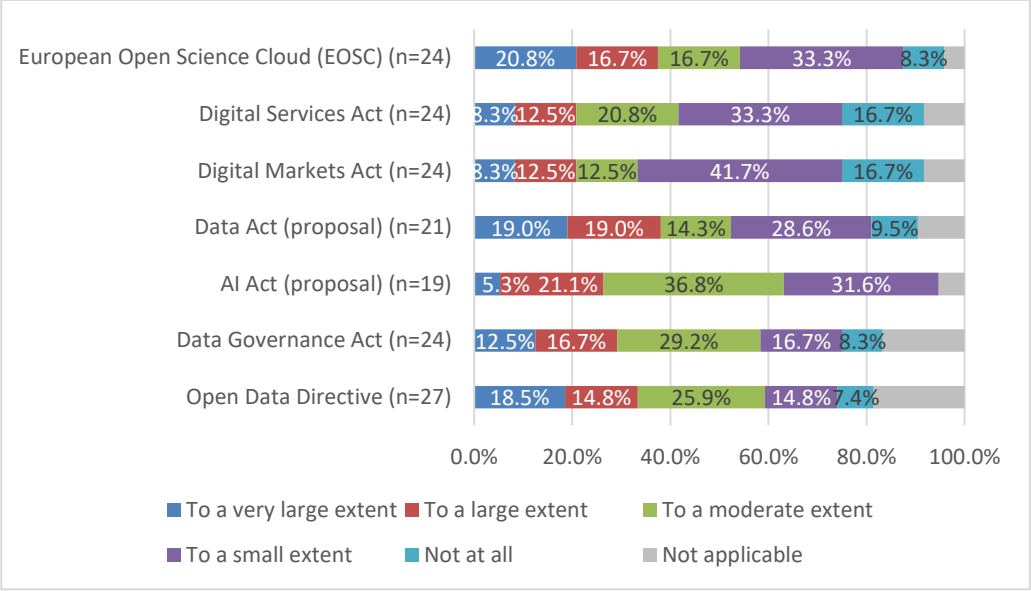
Institutional publishers foresee challenges from the Open Data Directive to a moderate extent (20.0%), with 20.0% finding it not applicable. The Data Governance Act is expected to pose challenges to a large extent (40.0%), with 20.0% finding it not applicable. The AI Act (proposal) is perceived to pose challenges to a moderate extent (20.00%), with 20.0% finding it not applicable. The Data Act (proposal) is anticipated to pose challenges to a large extent (40.0%), with 20.0% finding it not applicable. The Digital Markets Act is expected to pose challenges to a moderate extent (25.0%), with 25.0% finding it not applicable. Similarly, the Digital Services Act is anticipated to pose challenges to a moderate extent (25.0%), with 25.0% finding it not applicable. The EOSC is perceived to pose challenges to a moderate extent (50.0%), with 0.0% finding it not applicable.

Non-commercial publishers expect challenges from the Open Data Directive to a moderate extent (28.6%), with 28.6% finding it not applicable. The Data Governance Act is anticipated to pose challenges to a moderate extent (28.6%), with 28.6% finding it not applicable. The AI Act (proposal) is expected to pose challenges to a small extent (16.7%) and to a moderate extent (50.0%), while 0.0% find it not applicable. The Data Act (proposal) is perceived to pose challenges to a moderate extent (42.9%), with 42.9% finding it not applicable. The Digital Markets Act is expected to pose challenges to a moderate extent (28.6%), with 42.9% finding

it not applicable. Similarly, the Digital Services Act is anticipated to pose challenges to a moderate extent (28.6%), with 28.6% finding it not applicable. The EOSC is perceived to pose challenges to a moderate extent (20.0%), with 0.0% finding it not applicable.

### Commercial publishers

**Figure 260. Extent to which laws and frameworks are expected to pose challenges to publishers (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

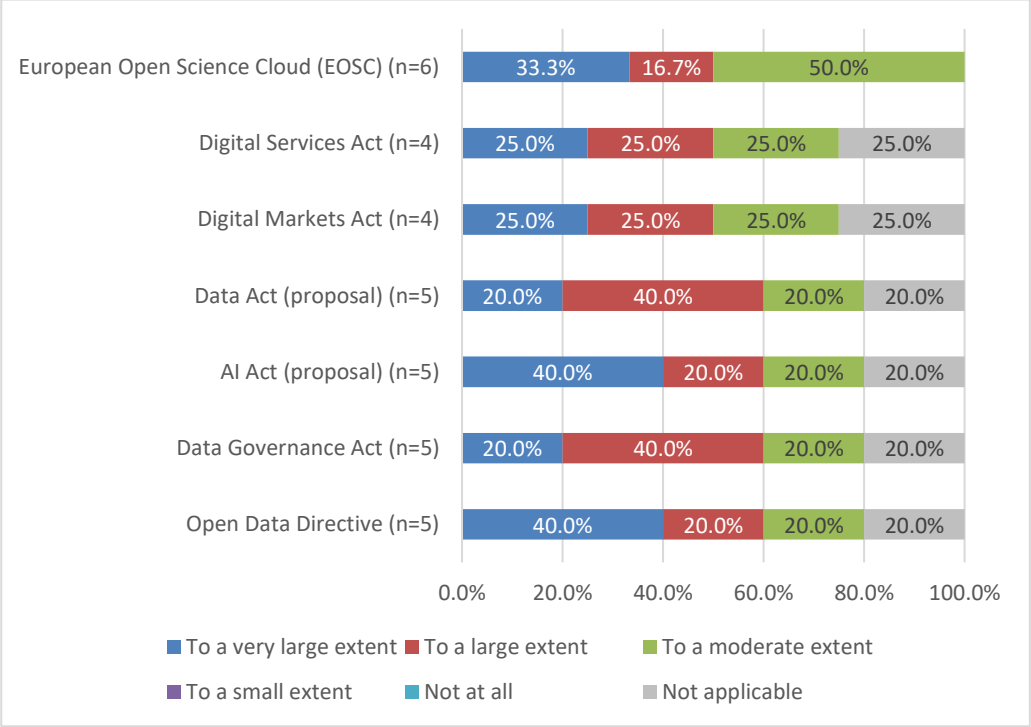
**Table 277. Extent to which laws and frameworks are expected to pose challenges to publishers (commercial publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 5 (18.5%) | 4 (14.8%) | 7 (25.9%) | 4 (14.8%) | 2 (7.4%) | 5 (18.5%) | 27 |
| Data Governance Act | 3 (12.5%) | 4 (16.7%) | 7 (29.2%) | 4 (16.7%) | 2 (8.3%) | 4 (16.7%) | 24 |
| AI Act (proposal) | 1 (5.3%) | 4 (21.1%) | 7 (36.8%) | 6 (31.6%) | 0 (0.0%) | 1 (5.3%) | 19 |
| Data Act (proposal) | 4 (19.0%) | 4 (19.0%) | 3 (14.3%) | 6 (28.6%) | 2 (9.5%) | 2 (9.5%) | 21 |
| Digital Markets Act | 2 (8.3%) | 3 (12.5%) | 3 (12.5%) | 10 (41.7%) | 4 (16.7%) | 2 (8.3%) | 24 |
| Digital Services Act | 2 (8.3%) | 3 (12.5%) | 5 (20.8%) | 8 (33.3%) | 4 (16.7%) | 2 (8.3%) | 24 |
| European Open Science Cloud (EOSC) | 5 (20.8%) | 4 (16.7%) | 4 (16.7%) | 8 (33.3%) | 2 (8.3%) | 1 (4.2%) | 24 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

**Institutional publishers**

**Figure 261. Extent to which laws and frameworks are expected to pose challenges to publishers (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

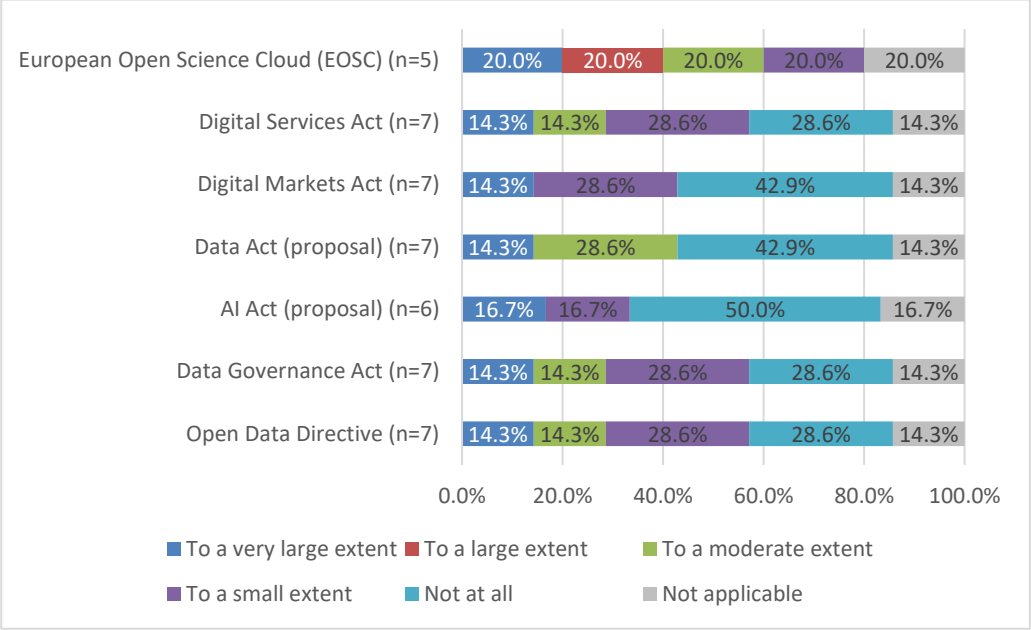
**Table 278. Extent to which laws and frameworks are expected to pose challenges to publishers (institutional publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 2 (40.00%) | 1 (20.00%) | 1 (20.00%) | 0 (0.0%) | 0 (0.0%) | 1 (20.00%) | 5 |
| Data Governance Act | 1 (20.00%) | 2 (40.00%) | 1 (20.00%) | 0 (0.0%) | 0 (0.0%) | 1 (20.00%) | 5 |
| AI Act (proposal) | 2 (40.00%) | 1 (20.00%) | 1 (20.00%) | 0 (0.0%) | 0 (0.0%) | 1 (20.00%) | 5 |
| Data Act (proposal) | 1 (20.00%) | 2 (40.00%) | 1 (20.00%) | 0 (0.0%) | 0 (0.0%) | 1 (20.00%) | 5 |
| Digital Markets Act | 1 (25.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 1 (25.0%) | 4 |
| Digital Services Act | 1 (25.0%) | 1 (25.0%) | 1 (25.0%) | 0 (0.0%) | 0 (0.0%) | 1 (25.0%) | 4 |
| European Open Science Cloud (EOSC) | 2 (33.3%) | 1 (16.7%) | 3 (50.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 6 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

**Non-commercial publishers**

**Figure 262. Extent to which laws and frameworks are expected to pose challenges to publishers (non-commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

**Table 279. Extent to which laws and frameworks are expected to pose challenges to publishers (non-commercial publishers)**

| | To a very large extent | To a large extent | To a moderate extent | To a small extent | Not at all | Not applicable | Total |
|---|---|---|---|---|---|---|---|
| Open Data Directive | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 2 (28.6%) | 2 (28.6%) | 1 (14.3%) | 7 |
| Data Governance Act | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 2 (28.6%) | 2 (28.6%) | 1 (14.3%) | 7 |
| AI Act (proposal) | 1 (16.7%) | 0 (0.0%) | 0 (0.0%) | 1 (16.7%) | 3 (50.0%) | 1 (16.7%) | 6 |
| Data Act (proposal) | 1 (14.3%) | 0 (0.0%) | 2 (28.6%) | 0 (0.0%) | 3 (42.9%) | 1 (14.3%) | 7 |
| Digital Markets Act | 1 (14.3%) | 0 (0.0%) | 0 (0.0%) | 2 (28.6%) | 3 (42.9%) | 1 (14.3%) | 7 |
| Digital Services Act | 1 (14.3%) | 0 (0.0%) | 1 (14.3%) | 2 (28.6%) | 2 (28.6%) | 1 (14.3%) | 7 |
| European Open Science Cloud (EOSC) | 1 (20.0%) | 1 (20.0%) | 1 (20.0%) | 1 (20.0%) | 0 (0.0%) | 1 (20.0%) | 5 |

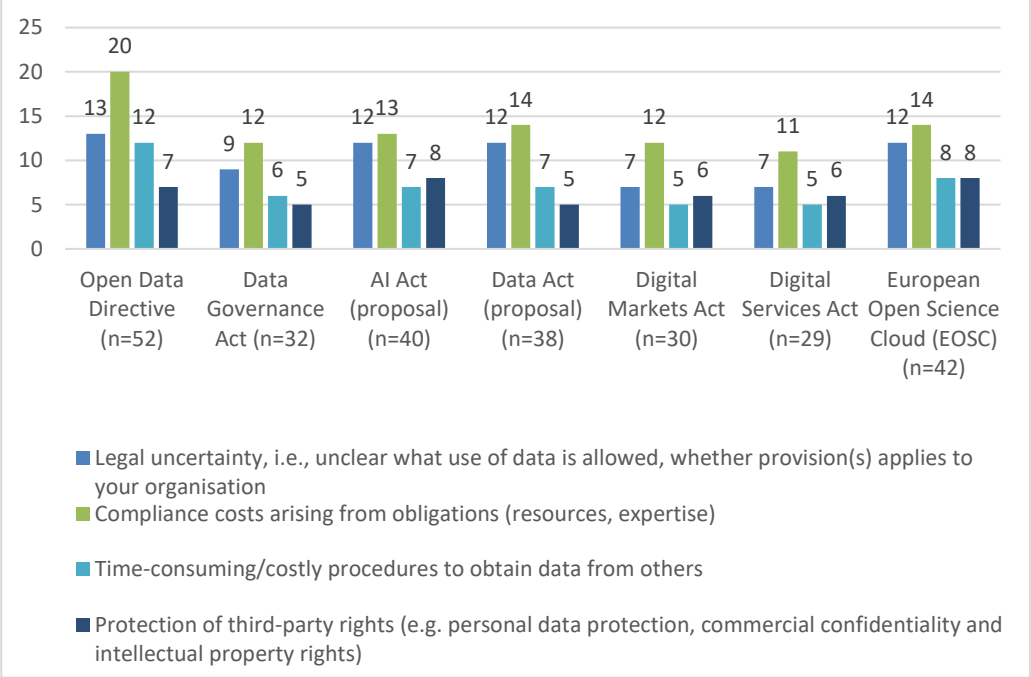
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "To what extent do (you expect) the following laws and framework (to) pose challenges to your organisation (e.g. compliance costs, restrictions on freedom to manage research data)?"*

**QUESTION 49: What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?**

Publishers identified key challenges posed by the laws and frameworks, with legal uncertainty being a common concern. The Open Data Directive leads in this regard (25.0%), followed by the Data Governance Act (28.1%), AI Act (proposal) (30.0%), Data Act (proposal) (31.6%), Digital Markets Act (23.3%), Digital Services Act (24.1%), and EOSC (28.6%).

Compliance costs are a major worry, particularly for the Open Data Directive (38.5%), Data Governance Act (37.5%), AI Act (proposal) (32.5%), Data Act (proposal) (36.8%), Digital Markets Act (40.0%), Digital Services Act (37.9%), and EOSC (33.3%). Concerns about time-consuming and costly procedures to obtain data follow a similar pattern, with the Open Data Directive (23.1%), Data Governance Act (18.8%), AI Act (proposal) (17.5%), Data Act (proposal) (18.4%), Digital Markets Act (16.7%), Digital Services Act (17.2%), and EOSC (19.0%). Protection of third-party rights, including personal data protection and intellectual property, is a focus for some publishers, with the Open Data Directive (13.5%) leading in this aspect.

**Figure 263. Aspects from laws and frameworks expected to pose the greater challenges to publishers (all types of publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was, "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

As the question allowed for multiple choices, the overall number of publishers is not specified. However, Table below indicates the total count for each of the options.

**Table 280. Aspects from laws and frameworks expected to pose the greater challenges to publishers (all types of publishers)**

| | Legal uncertainty, i.e. unclear what use of data are allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Total |
|---|---|---|---|---|---|
| Open Data Directive | 13 (25.0%) | 20 (38.5%) | 12 (23.1%) | 7 (13.5%) | 52 |
| Data Governance Act | 9 (28.1%) | 12 (37.5%) | 6 (18.8%) | 5 (15.6%) | 32 |
| AI Act (proposal) | 12 (30.0%) | 13 (32.5%) | 7 (17.5%) | 8 (20.0%) | 40 |
| Data Act (proposal) | 12 (31.6%) | 14 (36.8%) | 7 (18.4%) | 5 (13.2%) | 38 |
| Digital Markets Act | 7 (23.3%) | 12 (40.0%) | 5 (16.7%) | 6 (20.0%) | 30 |
| Digital Services Act | 7 (24.1%) | 11 (37.9%) | 5 (17.2%) | 6 (20.7%) | 29 |
| European Open Science Cloud (EOSC) | 12 (28.6%) | 14 (33.3%) | 8 (19.0%) | 8 (19.0%) | 42 |

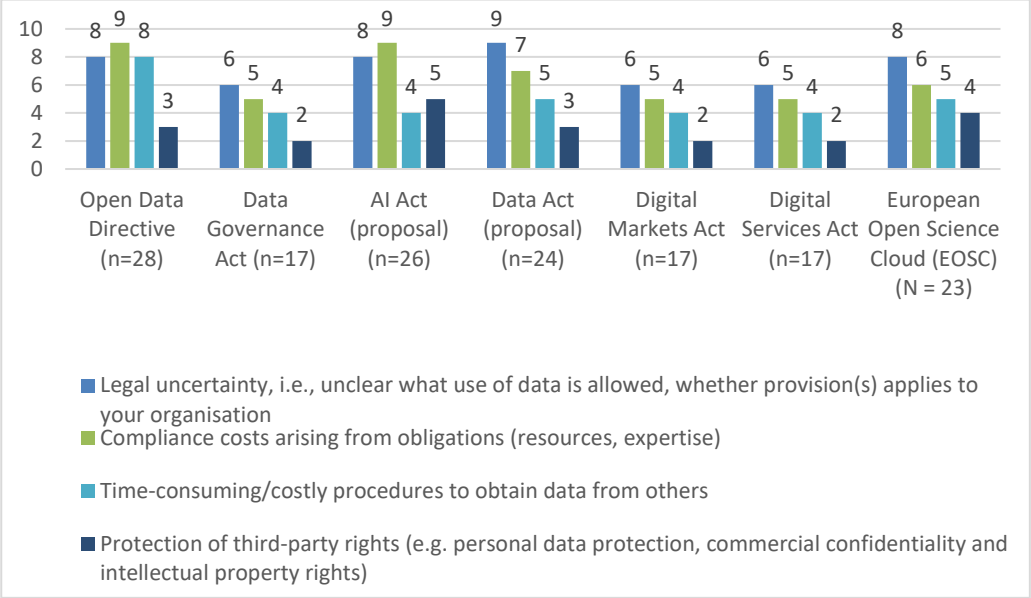
*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

Aspects from laws and frameworks expected to pose the greater challenges to publishers (Breakdown by commercial, institutional, and non-commercial publishers)

Commercial publishers share these concerns but emphasise legal uncertainty in the Open Data Directive (28.6%), compliance costs in the Open Data Directive (32.1%), and time-consuming procedures in the Open Data Directive (28.6%). Institutional publishers are notably concerned about compliance costs in the Data Governance Act (40.0%), legal uncertainty in the Open Data Directive (28.6%), and time-consuming procedures in the Open Data Directive (14.3%). Non-commercial publishers express diverse concerns, with legal uncertainty in the Open Data Directive (12.5%) and compliance costs in the Data Governance Act (50.0%) being prominent. Overall, legal uncertainty, compliance costs, and procedural challenges are common themes, but the degree of concern varies among different publisher types.

**Commercial publishers**

**Figure 264. Aspects from laws and frameworks expected to pose the greater challenges to publishers (commercial publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

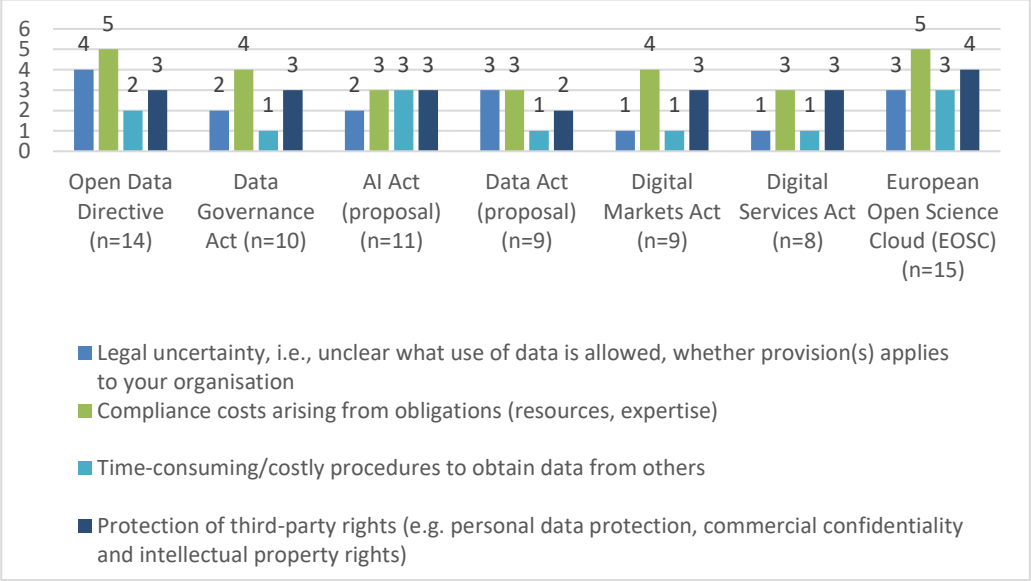
**Table 281. Aspects from laws and frameworks expected to pose the greater challenges to publishers (commercial publishers)**

| | Legal uncertainty, i.e. unclear what use of data are allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Total |
|---|---|---|---|---|---|
| Open Data Directive | 8 (28.6%) | 9 (32.1%) | 8 (28.6%) | 3 (10.7%) | 28 |
| Data Governance Act | 6 (35.3%) | 5 (29.4%) | 4 (23.5%) | 2 (11.8%) | 17 |
| AI Act (proposal) | 8 (30.8%) | 9 (34.6%) | 4 (15.4%) | 5 (19.2%) | 26 |
| Data Act (proposal) | 9 (37.5%) | 7 (29.2%) | 5 (20.8%) | 3 (12.5%) | 24 |
| Digital Markets Act | 6 (35.3%) | 5 (29.4%) | 4 (23.5%) | 2 (11.8%) | 17 |
| Digital Services Act | 6 (35.3%) | 5 (29.4%) | 4 (23.5%) | 2 (11.8%) | 17 |
| European Open Science Cloud (EOSC) | 8 (34.8%) | 6 (26.1%) | 5 (21.7%) | 4 (17.4%) | 23 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

### Institutional publishers

**Figure 265. Aspects from laws and frameworks expected to pose the greater challenges to publishers (institutional publishers)**




*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

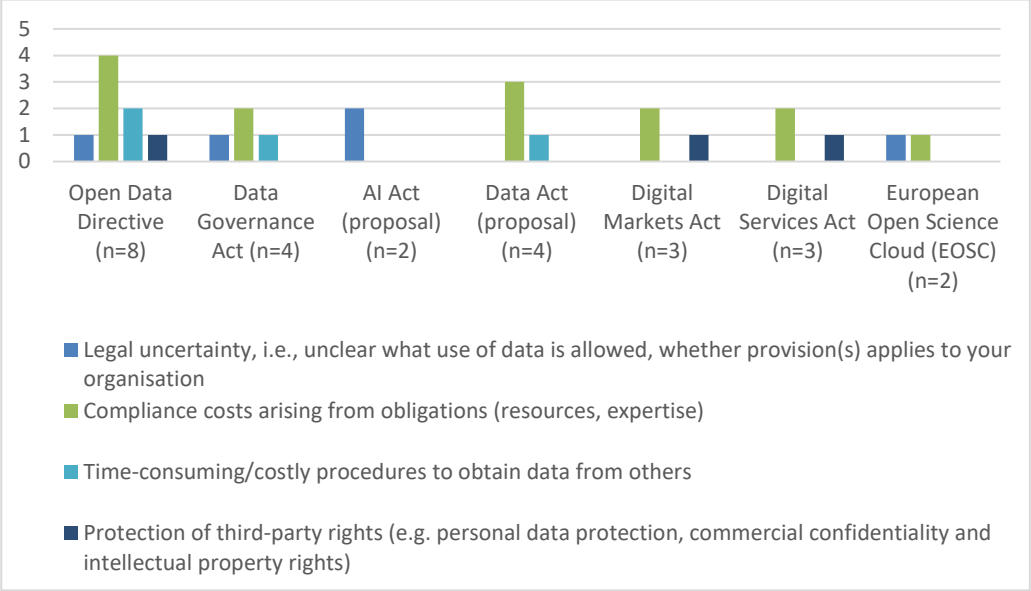
**Table 282. Aspects from laws and frameworks expected to pose the greater challenges to publishers (institutional publishers)**

| | Legal uncertainty, i.e. unclear what use of data are allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Total |
|---|---|---|---|---|---|
| Open Data Directive | 4 (28.6%) | 5 (35.7%) | 2 (14.3%) | 3 (21.4%) | 14 |
| Data Governance Act | 2 (20.0%) | 4 (40.0%) | 1 (10.0%) | 3 (30.0%) | 10 |
| AI Act (proposal) | 2 (18.2%) | 3 (27.3%) | 3 (27.3%) | 3 (27.3%) | 11 |
| Data Act (proposal) | 3 (33.3%) | 3 (33.3%) | 1 (11.1%) | 2 (22.2%) | 9 |
| Digital Markets Act | 1 (11.1%) | 4 (44.4%) | 1 (11.1%) | 3 (33.3%) | 9 |
| Digital Services Act | 1 (12.5%) | 3 (37.5%) | 1 (12.5%) | 3 (37.5%) | 8 |
| European Open Science Cloud (EOSC) | 3 (20.0%) | 5 (33.3%) | 3 (20.0%) | 4 (26.7%) | 15 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

**Non-commercial publishers**

**Figure 266. Aspects from laws and frameworks expected to pose the greater challenges to publishers (non-commercial publishers)**




*Source: Compiled by the study team using data from publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

**Table 283. Aspects from laws and frameworks expected to pose the greater challenges to publishers (non-commercial publishers)**

| | Legal uncertainty, i.e. unclear what use of data are allowed, whether provision(s) applies to your organisation | Compliance costs arising from obligations (resources, expertise) | Time-consuming/costly procedures to obtain data from others | Protection of third-party rights (e.g. personal data protection, commercial confidentiality and intellectual property rights) | Total |
|---|---|---|---|---|---|
| Open Data Directive | 1 (12.5%) | 4 (50.0%) | 2 (25.0%) | 1 (12.5%) | 8 |
| Data Governance Act | 1 (25.0%) | 2 (50.0%) | 1 (25.0%) | 0 (0.0%) | 4 |
| AI Act (proposal) | 2 (100.0%) | 0 (0.0%) | 0 (0.0%) | 0 (0.0%) | 2 |
| Data Act (proposal) | 0 (0.0%) | 3 (75.0%) | 1 (25.0%) | 0 (0.0%) | 4 |
| Digital Markets Act | 0 (0.0%) | 2 (66.7%) | 0 (0.0%) | 1 (33.3%) | 3 |
| Digital Services Act | 0 (0.0%) | 2 (66.7%) | 0 (0.0%) | 1 (33.3%) | 3 |
| European Open Science Cloud (EOSC) | 1 (50.0%) | 1 (50.0%) | 0 (0.0%) | 0 (0.0%) | 2 |

*Source: Compiled by the study team using data from the publishers' survey, the question in the survey was "What aspects of the laws and framework (are expected to) pose challenges for your organisation the most?"*

**QUESTION 50: Would you have any other observations that were not covered in this survey to share?**

This open-ended question received 45 responses.

Several publishers expressed concerns and criticisms. One common theme was the perceived limitations and biases in the survey questions, with publishers suggesting that the survey reflected a pre-determined agenda rather than a genuine interest in identifying barriers to access and reuse of scientific publications. Publishers pointed out that some questions were vague, lacked nuance, or did not consider the diversity of publishing models and disciplines. Concerns were raised about the survey's focus on Secondary Publication Rights (SPR) and the potential negative impact on existing publishing models, with some arguing that a legislative route might not be the most effective approach.

Some publishers highlighted specific challenges with certain questions, such as the inability to differentiate between types of articles in question 9 or the difficulty in providing accurate answers due to the complexity of publishing models. Others emphasised the need for a more in-depth discussion or interview to address the nuances and complexities of their publishing practices. Some publishers suggested that direct licensing between customers and publishers could be a more effective and flexible approach than legislative interventions.

There were also comments expressing frustration with the lack of consideration for different disciplines, such as the distinction between STEM and humanities, and the impact on academic book publishing. Publishers urged the Commission to explore a broader range of options and conduct a detailed impact analysis before settling on any single approach. Additionally, concerns were raised about the potential negative consequences of legislative interventions on smaller, non-profit publishers.

Overall, the feedback indicated a diversity of perspectives among publishers, with a common thread of scepticism toward the survey's methodology, focus, and potential legislative solutions explored by the survey.

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This report supports ERA Policy Agenda 2022-2024, aiming at an EU framework for copyright and data fit for research. It analyses barriers to accessing and reusing publicly funded research, evaluating EU copyright and data legislation, along with regulatory frameworks. Presented measures aim to enhance the current framework, aligning it with scientific research and open data principles. It offers a comprehensive overview of the EU's research and innovation legal landscape, providing insights for policymakers, researchers, and research organisations.

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