

Improving access to and reuse of R&I results, publications and data for scientific purposes

Supporting document for online information event – 26 February 2024

This document has been prepared for the European Commission; however, it reflects the views only of the authors, and the European Commission shall not be liable for any consequence stemming from the reuse.

21 February 2024

Improving access to and reuse of R&I results, publications and data for scientific purposes

SUPPORTING DOCUMENT FOR ONLINE INFORMATION EVENT – 26 FEBRUARY 2024

This supporting document presents draft findings from a 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”, that is currently being finalised. The study contributes to the realisation of the European Commission's objectives as delineated under ¹. It specifically addresses the mandate to “Propose an EU copyright and data legislative and regulatory framework fit for research”. In this context, the study undertakes a comprehensive **analysis to identify impediments and challenges in the access and reusability of publicly funded research and innovation results, inclusive of scientific publications and data**. This is facilitated through a detailed examination of pertinent stipulations under the existing EU copyright and data, as well as 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 extant 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 the study 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 ; **secondly, the EU data and digital legislation**, where the study scrutinises 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).

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 needing 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)**

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

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 for our study was **crucial in 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, including an analysis of academic evidence on the impact of the EU copyright framework on OS, a review of 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), and a comparative legal study of the EU and national copyright laws of 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. The surveys were divided into two parts, the copyright and data and digital legislation parts.

- Researchers were surveyed from 6 October to 30 October 2023, involving 14 000 individuals from Horizon 2020 and Horizon Europe projects, using a balanced stratified sampling method and a pilot survey to ensure equitable representation. The survey respondents were drawn from a contacts database provided by the European Commission on September 19, 2023, which included participant contact (PACO²) details from Horizon 2020 and Horizon Europe projects. 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. Using random selection, 10 000 PACOs were chosen from the list. Later, the selection was boosted by 4 000 individuals to increase the number of responses. Stratified sampling was employed to ensure representation in the sample, dividing the population into subgroups (strata) based on country groups - 1) 5 countries with implemented Secondary Publication Right – SPR³ (Austria, Germany, Belgium, the Netherlands, and France); 2) European Economic Area (EEA) countries (excluding SPR countries and Switzerland); 3) the UK and Switzerland. The total response rate for the copyright legislation part was 6.6%, and for data and digital legislation 6.5%.
- RPOs were surveyed from 6 October to 6 November 2023, contacting the Legal Entity Appointed Representative (LEAR) from the EU/EEA, Switzerland and the UK who had received funds or indicated 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, as well as the person overseeing the organisation's overall Open Access/Open Science policy. The study team reached 4 915 unique organisations. Aside from the invitations dispatched through our email campaign, the research team enlisted the assistance of two organisations, **LIBER**

² 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

³ Secondary Publication Right refers to the right for the author(s) to make their article freely available to the public under certain conditions without the permission of the copyright owner.

Europe and Knowledge Rights 21, to help circulate the survey among their members. The total response rate for the copyright legislation part was 11.4%, and for data and digital legislation 9.3%.

- Publishers were surveyed from 3 to 30 November 2023, targeting 615 scientific publishers. The research team created a list of scientific publishers by utilising the OpenAlex catalogue, which is a comprehensive database for the global research community. This list was cross-referenced with publications from the Horizon 2020 project, identifying a total of 1 269 scientific publishers that had published at least one paper. The list was then refined by filtering for publishers based in the European Union, the European Economic Area, and Switzerland, resulting in a final tally of 615 scientific publishers. The OpenAlex database provided essential information about these publishers, such as their country and website, which facilitated the search for contact details through the Apollo.io tool. Challenges encountered in locating contacts stemmed from non-functional publishers' 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 of the dissemination included the distribution of the survey via the publishers' associations and the LinkedIn outreach - a LinkedIn Sales Navigator in-mail was sent to 50 contacts, the survey was disseminated through the STM Association, the French Publishers Association (SNE), and the French Publishers Journal Association (FNPS). The total response rate for the copyright legislation part was 14.4%, and for data and digital legislation 13.3%.

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 to ensure 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. In total, the study team conducted 26 interviews for the copyright legislation and 18 interviews for the data and digital legislation.

Multi-criteria analysis: The study's 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, 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"⁴.

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.

⁴ https://research-and-innovation.ec.europa.eu/document/download/a5bd70c0-5cc8-45b0-b3f4-0fa35946b768_en?filename=ec_rtd_open_science_monitor_final-report.pdf

Publishers were categorised by their institutional types and the level of revenue. Survey results were complemented with insights from the in-depth interviews.

Conclusions and recommendations concerning copyright

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 Policy Agenda, promoting a single, borderless market for research, innovation, and technology across the EU.

Policy options on Secondary Publication Right

The following policy options are explored:

1. Extend SPR to scientific output beyond journal articles (SPR-01)
2. Reducing the public funding requirement for SPR to a threshold of 50% or less (SPR-02)
3. Expanding the scope of SPR to include the Version of Record (SPR-03)
4. Minimising or entirely removing embargo periods in SPR (SPR-04)
5. SPR to cover all types of uses, moving away from limitations to non-commercial purposes (SPR-05)
6. Developing umbrella licensing and remuneration schemes as an alternative to SPR (SPR-06)

Policy Option SPR-01 proposes a **comprehensive approach to scientific output within the framework of Secondary Publication Rights (SPR)**. This policy option emphasises the importance of including a wide spectrum of scientific contributions, extending beyond the traditional confinement to journal articles in national SPR regimes that can be found in EU Member States. It addresses the limitations of these existing SPR regimes, which predominantly focus on journal articles, with divergent definitions of what constitutes an 'article' and a 'journal'. This variation among Member States poses challenges for relying on SPRs to achieve open accessibility of scientific output across borders. As an alternative to SPR provisions covering only 'journal articles', SPR regimes could include a broader spectrum of publication outlets and scientific outputs, including not only articles but also books and other writings such as research accompanying data that enjoy copyright protection.

Crucially, survey data underscores the research community's support for a more inclusive SPR regime. The collected data indicated that a significant majority of research performing organisations (RPOs) – 92.4% (n=397) – 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% (n=136) of RPO respondents in 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 RPOs' 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 (n=52) 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. 11.9% of publishers expressed that this would require some changes to their business model that would not be fundamental, while 26.2% of publishers stated that this change would not require any substantial changes to their current business model. In terms of

different types of publishers (commercial, non-commercial, institutional publishers⁵), 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 on the impact on their business models was mixed. For publishers earning less than 0.5 million to 2.4 million euros, 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. In the group of publishers with medium-level revenues, ranging from 2.5 to 9.9 million euros, the results showed that 60% felt a need for fundamental restructuring, compared to 20% who saw no need for major adjustments. In the case of publishers with revenues exceeding 10 million euros, a significant majority of 86.7% indicated the necessity for major business model transformations, whereas only 13.3% believed their current operations would not require considerable modifications.

Considering the fundamental right to research following from Articles 11 and 13 of the Charter of Fundamental Rights of the EU,⁶ it is important to ensure that copyright protection regimes, while resting on Article 17(2) of the Charter,⁷ offer sufficient room for open, exploratory research processes and support research autonomy. The confinement of research-related provisions to specific resources, such as the confinement of SPR regimes to specific types of output, can therefore appear problematic in the light of this overarching consideration. To the extent to which the configuration of SPRs in Member States appears overly restrictive from this perspective, it is important to find other, proportionate ways of reconciling copyright protection with the right to research.

Seeking to include Policy Option SPR-01 in the EU copyright acquis, the following interventions could be considered.

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, this harmonised SPR regime at 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

5 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.

6 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.

7 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.

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,⁸ 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 measures 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, the 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 recommends reducing the public funding requirement for SPRs to a threshold of 50% or less. This change addresses issues in the current system where several EU Member States that have introduced an SPR regime require a minimum of 50% public funding for SPR eligibility. The proposed relaxation of funding requirements aims to:

- accommodate diverse funding models across academic disciplines, particularly in public-private partnerships;
- support open access and self-archiving policies by including research with lower levels of public funding, which is beneficial for disciplines like applied sciences where industry collaboration is significant;
- align with the preferences of the research community, as survey results (see data below) show a majority of research organisations favour a lower public funding threshold for SPR to enhance open access.

Overall, SPR-02 seeks to make SPR regimes more inclusive and effective in promoting open access and open science by broadening the eligibility criteria to include research with less public funding.

The collected data indicates that as much as 84.0% (n=387) of RPOs consider that an SPR regime extending over 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 have significant changes. Regarding the type of publishers, this change would result in a fundamental reshaping for 76.9% of commercial publishers, 14.3% of institutional publishers, and 63.2% of non-commercial publishers. Looking at the revenue level, it would require significant reshaping for 42.1% of publishers earning less than 0.5 million to 2.4 million euros, 50% of publishers earning 2.5 to 9.9 million euros, and 81.2% in the case of publishers earning over 10 million euros.

Funding arrangements, and particularly the modalities of public-private partnerships, can vary between academic disciplines. Encouraged by funding schemes in EU Member States that require substantive

⁸ 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.

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% (n=496) 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.

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 highlights that in the case of 26.5% (n=305) 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), it should be considered to **relax the requirement of public funding, in the sense of setting a low threshold, such as 50% (or less) of public funding**. As to the flexibility that is available for lawmaking 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.**⁹ These conceptual questions can impact the policy space that is available for determining thresholds for public funding:

- **Qualifying SPRs as copyright exceptions, the three-step test in international copyright law 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 non-compliance with the assessment criteria following the three-step test. 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, it may still be possible to dispel concerns about a conflict with a normal exploitation or an unreasonable prejudice as long as the private funding does not come from the publisher seeking to commercialise the research output.⁷
- By contrast, **an approach framing the SPR as an author's inalienable right with economic and moral components or regarding this specific publication entitlement as a specific rule of copyright contract law could *ab initio* remain unaffected by funding arrangements and the percentage of public funding**. Arguably, an approach based on an author's economic and moral rights, or copyright contract law, even offers flexibility to abandon public funding

⁹ 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.

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 convincingly. 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 suggests expanding the scope of SPR regimes to include the version of record (VOR) of research outputs rather than limiting it to the author-accepted manuscript (AAM) or earlier versions. This option arises from the varying practices across Member States, with countries like Germany, Austria, France, and Belgium primarily focusing on the AAM and the Netherlands being less specific.

Key considerations for this policy option include: (1) balancing of interests: it is important to balance publishers' commercial interests in controlling access to the published version with the objectives of open access and knowledge dissemination policies; (2) publishers' remuneration and VOR use: in cases where publishers are compensated through article processing charges (APC), allowing researchers to use the VOR for SPR purposes seems justifiable since the publisher has already received payment; (3) research practice considerations: the VOR is the definitive, published version of the research, having undergone final scrutiny and including essential typesetting for referencing and verification. Multiple versions circulating can lead to confusion about the final, definite text. The VOR is also crucial for accurate citations and references.

Data indicates limited support from publishers for this policy option, with 66.3% considering that it would require fundamental changes to their current business models. On the other hand, survey results indicate strong support for this approach among the research community, with 86.7% of RPOs advocating an extension of the SPR regime to the VOR and 78.1% believing that a harmonised SPR covering the VOR would significantly increase the provision of immediate open access to publicly funded research.

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. More specifically, 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.

Legislative measures

An EU approach seeking to enable secondary VOR publications, thus, **requires a careful balancing of the divergent interests of publishers and researchers** in light of the survey results and the considerations explained above. An EU approach also requires an analysis of potential publisher contributions to be taken into account. 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.¹⁰ It is

¹⁰ 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

also conceivable that national law explicitly provides for the protection of the typographical arrangement of published editions.¹¹ 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 (as to alternative approaches focusing on the moral rights dimension or regarding SPRs as a rule of copyright contract law, see 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). As this discussion shows, 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.¹² 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. However, it is important to point out in this respect that the current study results 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-03 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.

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.

11 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.

12 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).

Policy Option SPR-04 proposes minimising or entirely removing embargo periods in SPR regimes. The literature review and the survey results highlighted the following aspects:

- Diverse embargo periods in countries that have implemented SPR: ranging from twelve months in countries like Germany and Austria to six to twelve months in France and Belgium. The Netherlands adopted a more flexible approach.
- RPOs' preference for shorter/non-existent 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 framework of the survey shed light on the considerations underlying this preference. For instance, one of the respondents from RPOs indicated that SPRs seem to be *"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 leave 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."*
- Potential high 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 embargos 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 the 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**.¹³ 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

¹³ 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/>>.

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. As the discussion of APC payments under option SPR-02 has already shown, remuneration mechanisms can have a deep 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 research limitations 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 roundtables 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 advocates a broader application of SPRs to allow open-access publication for all types of uses, moving away from the current limitation to non-commercial purposes seen in some EU Member States. 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 the Netherlands and Belgium do not specify use purposes.

The proposal responds to the evolving landscape of academic publishing and research practices, where collaborations with private partners are increasingly common, making the non-commercial use restriction seem outdated and overly restrictive. Research community preferences and the shifting dynamics in academic publishing, moving towards models based on subscription fees and article processing charges, support the removal of use limitations. Survey results indicates that a significant majority of research organisations (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. When it comes to publishers, 70.1% of scientific publishers noted that open access publications covering all types of uses would result in 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 the 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 is not clear to some of the respondents, for instance *“[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 also requires a careful analysis of potential legal

requirements. 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. Changing business models in the publishing sector – from a focus on individual works to the aggregation of comprehensive work repertoires and the offer of databases and related 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 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 at the outset that, considering the diversity of issues to be addressed 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 lumpsum remuneration regimes (copyright holders receive a pre-determined lumpsum 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, the following observations can be made:

- **Power Imbalance:** 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;
- **Unpredictability and Fragmentation:** the terms of publishing contracts can be unstable due to changes in the publishing industry and may vary nationally or locally, adding complexity to access conditions.

Against this background, results from the publishers’ survey indicate little support for umbrella licensing and remuneration schemes. 70.6% (n=68) of responding publishers indicate that specific licensing arrangements, such as extended collective licencing or lumpsum remuneration regimes, would not be acceptable as an alternative to introducing an EU-wide SPR, while 29.4% of publishers indicate it would be acceptable. A comparable distribution can be observed for the specific categories of publishers. To 76.3% (n=38) of commercial publishers, alternative approaches based on umbrella licensing or remuneration regimes would not be acceptable, while this alternative would be acceptable to 23.7%; however, in the case of institutional publishers, 33.3% (n=6) are against while 66.7% are favourable to this alternative approach. In the case of non-commercial publishers and publishers not falling into any previous categories, 68.8% (n=16) and 75% (n=6), respectively are against, and 31.2% and 25% are in favour.

When it comes to RPOs, respondents indicated that they would very strongly accept (38.0%, n=170) or rather accept (39.6%, n=177) that copyright law facilitates umbrella licensing solutions or lumpsum 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 divergent results, the implementation of licensing solutions and/or remuneration regimes as an alternative to the adoption of an EU-wide SPR is sought, the following interventions could be considered:

Legislative measures

With the adoption of specific copyright contract rules in Articles 18 to 23 of the on copyright and related rights in the Digital Single Market Directive (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 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's open access and open science agenda**. 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 a normal exploitation of protected works 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 lawmaking discourse.¹⁴

Non-legislative measures

It is conceivable to develop **non-legislative measures to 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 Scandinavian 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 the 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) with regard to¹⁵¹⁶

Policy Options on Copyright and Related Rights (CRR)

The following policy options are explored:

1. Strengthening open-ended and flexible research exceptions (CRR-01)
 - 1.1. Introduction of a fully harmonized, mandatory, and general exemption of scientific research applicable across the Information Society Directive (ISD), Rental and Lending Directive (RLD), Database Directive (DBD), and the Software Directive (CRR-01.1)
 - 1.2. Clarify the spectrum of legitimate access avenues and the potential of general research exceptions to support the use of these legitimate forms of access (CRR-01.2)
 - 1.3. Removing barriers posed by technological protection measures (CRR-01.3)

¹⁴ 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.

¹⁶ 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. Relaxing or abandoning the requirement of “non-commercial purpose” (CRR-02)
 3. Providing guidance for Text and Data Mining (TDM) provisions as laid out in Articles 3 and 4 of the Copyright in the Digital Single Market Directive (CDSMD) (CRR-03)
 4. Umbrella licensing solutions and remuneration regimes to enhance access to knowledge resources for research purposes (CRR-04)

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 harmonized, 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 publisher survey presents a more divided perspective on Policy Option CRR-01.1, with a notable portion of publishers expressing strong opposition to open-ended research exceptions. Overall, 58.3% of publishers would not support at all and 13.3% would rather reject CRR-01.1. Among the different types of publishers, the results varied significantly. In the group of commercial publishers, 75.7% would not support at all, and 10.8% would rather reject this policy option. The majority of institutional and non-commercial publishers support open-ended research exceptions. In the area of institutional publishers, 0% would not support at all, and 14.3% would rather reject. For non-commercial publishers, 36.4% would not support at all, and 9.1% would rather reject. This result highlights the need for a careful balancing of interests between enabling scientific research and protecting the rights of copyright holders. However, further research is necessary to understand the perception and impact on other rightsholders not covered by the present study. The proposed legislative measures involve using existing general provisions as a template for a harmonised, mandatory research exemption, ensuring uniform application across Member States and covering various acts, including reproduction and making available to the public. The necessity to adhere to the three-step test, as outlined in Article 5(5) ISD, acts as a conceptual boundary, ensuring that the exemption does not adversely impact the normal exploitation of protected knowledge resources or unreasonably prejudice the legitimate interests of copyright holders. Non-legislative measures, such as best-practice guidelines and recommendations, are also suggested to promote flexible application of existing general provisions in the EU copyright acquis and encourage voluntary approximation of national legislation within the existing EU framework. These measures are aimed at fostering an environment conducive to scientific research while maintaining the integrity and 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).

Policy Option CRR-01.2 addresses the challenge of lawful access in scientific research, a critical issue highlighted by the responses to the researcher survey. The survey revealed that 80% of researchers face significant barriers due to the lack of subscriptions to access copyrighted knowledge resources. This substantial feedback suggests that national legislation might not be fully utilising the potential of general research provisions in the EU copyright acquis. Article 5(3)(a) ISD, along with similar provisions in Article 10(1)(d) RLD and Articles 6(2)(b) and 9(b) DBD, does 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.¹⁷ However, the survey results indicate a lack of awareness among researchers about these access possibilities, suggesting they primarily rely on subscription-based permissions.

In response, Policy Option CRR-01.2 proposes measures to clarify the spectrum of legitimate access avenues and the potential of general research exceptions to support the use of these legitimate forms of access.

The survey of the publishers revealed that they are mostly opposing the changes with regard to Policy Option CRR-01.2. 58.3% of the publishers (35 out of n=60) indicated that they were strongly against the further development of open-ended research exceptions. 13.3% (8 respondents) opted for the answer category “rather reject”. Thus, the majority of publishers were not willing to support this policy option. However, 21.7% of the publishers (13 respondents) indicated that they were very strongly in favour of an open-ended exemption of research use. 5.0% (3 respondents) expressed support (“rather favour”) for an open-ended clause that generally permits use for research purposes. Thus, around 25% of the publishers indicated support for the further development of the general research exceptions in the EU copyright acquis. When it comes to RPOs, 47.8% of RPOs would strongly support and 33.6% would rather support the further development of open-ended research exceptions. Only 1.8% of RPOs would not support this development at all.

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 a template 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 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. Restrictive confinement of an overarching research provision to specific types of use, such as use for illustration purposes, seems 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**.

Non-legislative measures

Non-legislative measures seeking to identify best practices could be developed to encourage the CJEU and national judges and authorities to apply the existing general research provisions in a flexible manner. For instance, it could be pointed out that Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD

¹⁷ 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.

should not be misunderstood to only cover use for illustration purposes. Best-practice guidance based on **positive experiences in Member States 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 conceptual differences in the EU *acquis*, such as the limitation of Article 9(b) DBD to acts of extraction. 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**. On the one hand, it is conceivable to argue that the exceptions and decompilation rules in Articles 5 and 6 of the Software Directive are specific provisions and the final word on the matter. 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 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.

It is important to note that, as the example of potential changes to the Software Directive shows, this policy option may affect different rightsholder groups other than scientific publishers. Thus, we would recommend going beyond the confines of the present study (focusing on scientific publishers) and further study the views and the impact on a broader spectrum of rightsholder groups.

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 researcher survey indicates that 59.6% of participants find paywalls and electronic fences a major obstacle in accessing copyright-protected 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.

Additionally, respondents to the RPOs survey answered that 47.3% strongly accept and 34.4% rather accept that 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. As for publishers, 15.3% accept and 10.5% rather agree with that statement (commercial publishers: 13.2% accept or rather accept, institutional publishers: 83.3% accept, non-commercial publishers: 40% accept or rather accept).

In response, Policy Option CRR-01.3 proposes several legislative measures to alleviate the barriers posed by TPMs. A key step involves expanding the list of research-related copyright exceptions in Article 6(4) ISD, which would include the temporary reproduction rule in Article 5(1) and the right of quotation in Article 5(3)(d) ISD. Additionally, Article 7(2) of the Copyright in the Digital Single Market Directive (CDSMD) serves as a precedent for further action, particularly in excluding the applicability of subparagraph 4 of Article 6(4) ISD. This exclusion would prevent contractual arrangements from overriding Member States' obligations to facilitate access under research exceptions. Moreover, broadening the intervention options in Article 6(4) ISD to include EU authorities could provide more comprehensive solutions to TPM-related access issues.

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.

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 step seeking to strengthen access and reuse of knowledge resources for scientific research purposes could consist of **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) and the right of quotation in Article 5(3)(d) ISD.

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. 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**.

Even if this step is taken and contractual interferences are banned, however, researchers may still be confronted with access and use obstacles as long as Member States refrain from invoking Article 6(4) ISD and take measures to ensure that researchers can benefit from statutory research exceptions.¹⁸ Therefore, it could be considered to **broaden the intervention option established in Article 6(4) ISD and entitle not only Member States but also EU authorities, such as the Commission acting on the basis of a delegated act, to take appropriate measures to prevent TPMs from interfering with access and use of knowledge resources for research purposes** falling under an EU copyright exception. This centralised institutional oversight and intervention option seems necessary if the goal is to facilitate public policy goals relating to research, innovation and scientific discourse. The measures following the EU delegated act could constitute minimum harmonisation – in the sense that Member States are free to also adopt measures as long as these national measures offer broader access and reduce use restrictions more effectively than the EU minimum.

Non-legislative measures

While non-legislative interventions seem incapable of changing 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 effectively¹⁹.

Policy Option CRR-02 addresses the challenges posed by the non-commercial use requirement in current EU copyright provisions, specifically in the context of scientific research. The existing research exceptions in the EU copyright acquis, such as Article 5(3)(a) ISD and Articles 6(2)(b) and 9(b) DBD, mandate that the use be for non-commercial purposes. This requirement has become a source of legal uncertainty 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

¹⁸ 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.

¹⁹ 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.

encouraged and even required by European and national research funding schemes. This trend raises doubts about the applicability of the copyright exception when a research project includes industry funding or such partnerships. Furthermore, the commercialisation potential 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.

The researcher survey suggests that collaborations with industry partners (10.3% of respondents) might deter the use of copyright-protected resources due to the non-commercial use requirement. RPO responses further clarify the issue, indicating that while industry collaborations do not always conflict with the non-commercial use requirement, problems arising from it are not uncommon. Consequently, there is a strong inclination among RPOs for a policy intervention that explicitly expands copyright exceptions to cover research conducted in public-private partnerships. This preference aligns with the trend of European and national funding schemes promoting industry collaboration, indicating a mismatch between the current legal framework and the reality of contemporary research practices.

Particularly in relation to sharing knowledge resources, 39.7% (n=297) 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. In the case of cross-border use, 48.3% (n=387) 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. 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; more specifically, 15.6% (n=794) 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.

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. It only 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 obsolete 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.²⁰ 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.”

To achieve this goal, **the approach adopted in the CDSMD would have to be universalised and implemented across all research provisions in the ISD, DBD and the Software Directive**. This more 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, however, should 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 using 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.²¹

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.²²

Policy Option CRR-03 focuses on providing guidance for Text and Data Mining (TDM) provisions as laid out in Articles 3 and 4 of the Copyright in the Digital Single Market Directive (CDSMD), aiming to enhance awareness of these provisions among the research community and establish a more uniform approach across Member States. This policy option emphasises the development of guidelines or recommendations that address the nuances and potential ambiguities of the TDM provisions, particularly in the context of “lawful access” as required by Article 3 CDSMD. This aspect is especially pertinent for research organisations involved in broader, transnational research consortia, where access to copyrighted materials often relies on subscriptions.

20 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. Senfleben, ‘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.

21 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.

22 Cf. E. Rosati, *Copyright in the Digital Single Market*, Oxford: Oxford University Press 2021, 42-43.

Survey results highlight the beneficial effects of clarifications. Many researchers expressed hesitation in utilising TDM tools due to fears of copyright infringement, indicating a lack of full exploration of the potential offered by the new TDM provisions. Furthermore, the responses suggest that there is confusion about sharing knowledge resources and data with consortium partners under the current TDM rules. RPOs and publishers have also shown strong support for guidance on these provisions. The results of the RPO questionnaire indicate that 90% (n=489) 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%, n=59) 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. The potential for legal uncertainty in the context of public-private partnerships and the effectiveness of TDM provisions in addressing data-sharing concerns may also merit clarification. Non-legislative interventions could focus on several key areas: clarifying the "lawful access" requirement in Article 3 CDSMD, including the validity of a single subscription within a research consortium for all consortium members; detailing the differences between "lawful access" and "lawfully accessible" in Articles 3 and 4 CDSMD; elucidating the concept of "machine-readable means" in Article 4(3) CDSMD; addressing divergent approaches to data sharing based on general research exceptions like Article 5(3)(a) ISD; encouraging stakeholder dialogues for rights reservation practices and TDM research; and considering the applicability of TDM rules to investigative journalism. Non-legislative interventions can be expected to raise awareness and facilitate the effective use of TDM provisions within the research community and reshape the perception of copyright as a barrier to TDM activities.²³

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 above 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. In case this policy option is deemed promising, it seems 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 lumpsum remuneration approaches – was introduced in the surveys as a potential alternative to expanding and strengthening copyright exceptions for research use. The survey results show mixed results. A minority of publishers favour such solutions, but a significant proportion, particularly in commercial publishing, are strongly against them. Conversely, a substantial number of RPOs express strong or moderate support for licensing solutions and remuneration schemes. This divergence suggests that while licensing solutions and remuneration regimes might not be universally favoured, they could play a role in achieving open access and open science goals if implemented appropriately.

The impact on research of Data and Digital Legislation

General overview of the study

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 are 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,

23 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/>.

a data legislative framework fit for research, the protection of academic freedom and the strengthening of research infrastructures are among the key values and policy 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 EU Member States' national law. All of the legal instruments are comparatively recent, with five of them already in force when the study began, one regulation (DA) entered into force during the study execution, and one (AI Act) which is currently – in January 2024 – pending final adoption by the European Parliament. The EOSC is peculiar because it is not a legislative instrument or a purely regulatory framework but consists of multiple initiatives and 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”). In the second phase, 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, it analyses the interplay of the different legal instruments of EU DDL (and copyright law). In the third step, the main opportunities and challenges for research and research organisations are presented. In this final step, researchers and research organisations are assessed both as beneficiaries as well as recipients of specific rights and obligations. This systematization should offer a complete overview of the role that researchers and research organisations may acquire in the research life-cycle and should also provide these organisations with useful best practices needed to comply with this new regulatory framework.

The study concludes with a set of recommendations aimed at different stakeholders (law and policy makers, 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, that were derived from the analytical sections of this study.

The interplay between data and digital legislation with 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 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. 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 organizations, 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 characterizes 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-making process. The study 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.

Research as user and as providers of data and digital technologies

This part of the study is structured according to the two different perspectives that researchers and research organisations commonly occupy vis-à-vis EU data and digital legislation.²⁴ Under the first perspective, researchers and research organisations are considered as *users* of data and digital technologies, with these assets becoming the input for research activities. An example of this perspective are 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.

Research Organisations and Researchers as <i>users</i> of data and digital technologies		Research Organisations and Researchers as <i>providers</i> of data and digital technologies	
Opportunities	Challenges	Opportunities	Challenges
Wider availability and re-usability 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

Overarching key findings and recommendations

²⁴ See: Institute for Information Law (2023). Information Law and the Digital Transformation of the University. Part I. Digital Sovereignty. Amsterdam: September 2023, p. 49.

The study has identified a growing complexity of provisions from the EU DDL relating to research activities. Research, however, is often not addressed as a self-standing and autonomous regulatory objective. On the contrary, it receives partial, overlapping and potentially inconsistent attention. Legal uncertainty, lack of systematic classification and subject matter ambiguity can negatively affect the compliance with legal obligations. Some of the key recommendations are listed below.

- 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.
- 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. It is advisable to evaluate the feasibility of developing a coordinated, homogeneous and horizontal set of data access and reuse provisions for scientific research (Business to Research, B2R).
- Scientific research 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).
- Going forward, due consideration should be given to the fundamental right to academic freedom, ensuring that DDL adequately safeguards academic freedom at the level of institutions and researchers.

Key findings and recommendations: Instrument-specific

The study concludes with a set of key findings and recommendations aimed at different stakeholders. Examples of the key findings and recommendations of this study are provided below.

	Key findings	Recommendation	Addressed to
ODD	Art. 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 burdens.	RPOs are encouraged to 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.	Research organisations
DGA	The DGA regulates the re-use of certain categories of protected data, codifies data intermediation services and provides for voluntary data altruism organisations.	Obtain legal advice and clearing before releasing protected data as open research data since the protected nature of data must be preserved under all circumstances.	Researchers
DSA	The DSA includes several transparency provisions which are of potential relevance to researchers and RPOs. Article 40 DSA, which is specifically dedicated to researchers, has the potential to offer major opportunities to researchers and RPOs. The status of RPOs as providers of services under the DSA is currently characterised by elements of complexity which could pose challenges in organising DSA compliance.	Regulators (national Digital Services Coordinators and the Commission) should promote discussion on the status of RPOs-provided services under the DSA, including by engaging with the relevant RPOs, and provide clarifications on their obligations under the DSA framework.	Law- and policymakers
DMA	The DMA includes a number of transparency provisions which are of potential relevance for researchers and RPOs as they allow for some form of	The Commission, as regulator competent to enforce the DMA, should provide guidance and raise	Law- and policymakers

	data access. However, a low level of awareness of this legal framework, and possible procedural complexities could limit the potential benefits of these provisions for researchers and RPOs.	awareness on the transparency provisions under the DMA. These initiatives could increase the potential positive impact of the DMA on researchers and RPOs.	
DA	The B2G sharing obligations identify the possibility of sharing data obtained in the context of an exceptional need with research organisations or statistical bodies creating an important data access regime for researchers and research organisations. However, this access regime is limited in various ways, the most serious appear to be the obligation to erase the data after a certain amount of time, which frustrates the objective of scientific research.	Consider the removal of the obligation for research organisation to erase data (Art. 21.4), or, subordinately, to create the possibility to retain the data under specific security measures (perhaps drawing inspiration from the provision contained in the TDM exceptions of Art. 3 and 4 CDSMD).	Law- and policymakers
AIA	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”. 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.	Research organisations should strive to develop best practices 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.	Research organisations