Towards a Digital Knowledge Act

Mapping Policy Options for Legal Risk Mitigation

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Executive Summary

European copyright law, traditionally justified as a framework to incentivise creativity and innovation, is increasingly perceived as a source of constraint within knowledge institutions such as universities, libraries, archives, and research institutes. While its underlying principle of balancing the rights of creators with the public interest is aligned with the missions of such institutions, in practice the regulatory framework in which knowledge institutions operate introduces significant complexity and legal uncertainty. Optional, ambiguous and problematic legal provisions coupled with risk aversion, uneven bargaining positions, aggressive contractual strategies, and the imposition of technological barriers often leave institutions unable to act with confidence. The result is a forced choice between risking potential copyright infringement, with possible legal and reputational consequences, and foregoing valuable educational, scientific and cultural heritage projects. In such an ecosystem, targeted mitigation measures become indispensable to restore predictability and enable knowledge institutions to fulfil their public missions.

Drawing on desk research, stakeholder interviews, and policy analysis, this report identifies and analyses the principal sources of copyright-related uncertainty in the EU copyright system and their implications for knowledge institutions. It considers both the legal framework and ways in which copyright may be strategically leveraged against institutions. Subsequently, the report identifies and evaluates legal mechanisms that may reduce copyright-related uncertainty and create a more predictable environment for knowledge institutions. These mechanisms are: (i) best-practice guidelines; (ii) an advisory and dispute settlement body; (iii) a liability privilege for diligent staff acting in good faith; (v) a country-of-origin rules for cross-border research; and (vi) measures against unfair contract terms. Each mechanism addresses a distinct source of legal uncertainty, yet together they may allow knowledge institutions to move away from a culture of defensive overcompliance towards a position of confident, lawful use of copyright flexibilities.

The report ultimately advances a reform agenda that builds on the existing copyright acquis, emphasising the importance of certainty, fairness, and equitable access to knowledge. Reforms should reaffirm copyright's role as a facilitator of research and innovation and as a protector of the public interest. Without a coherent, enabling regulatory framework that explicitly recognises and mitigates legal risks, the work of the very institutions designed to drive educational and scientific advancement may be impeded. This, in turn, undermines the fundamental purpose of EU copyright law itself.

As the following analysis will show, the plethora of conditions and limiting factors that accompany copyright provisions seeking to support teaching, research and the work of cultural heritage institutions casts doubt upon the effectiveness of these provisions in practice. The minimal degree of legal certainty offered by the provisions for knowledge institutions in EU copyright law raises serious doubts about the potential of the current rules to reconcile the competing fundamental rights at stake. In other words: without appropriate countermeasures, as proposed at the end of this report, the current EU copyright acquis in the field of teaching, research and cultural heritage may be unconstitutional.

Keywords: copyright; right to research, legal risk mitigation; knowledge institutions; dispute resolution; liability.

Contents

List of Abbreviations

API	Application programming interface
CBPR	Regulation 2017/1128 of the European Parliament and of the Council of 14 June 2017, on Cross-border Portability of Online Content Services in the Internal Market (*OJ* 2017, L 168, p. 1)
CDPA	UK Copyright, Designs and Patents Act 1988
CDSMD	Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC (*OJ* 2019 L 130, p. 92)
CFR	Charter of Fundamental Rights of the European Union (*OJ* 2000 C 364, p. 1)
CJEU	Court of Justice of the European Union
CMO	Collective management organisation
DBD	Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996, on the Legal Protection of Databases (*OJ* 1996 L 77, p. 20)
DCADR	Directive 2013/11/EU on alternative dispute resolution for consumer disputes (*OJ* #)
DSA	Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market for Digital Services and amending Directive 2000/31/EC (*OJ* 27.10.2022, L 277, p. 1)
DSC	Digital Services Coordinator
ECL	Extended collective licensing
EDPB	European Data Protection Board
ED	Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the Enforcement of Intellectual Property Rights (*OJ* 2004 L 157, p. 45)
EU	European Union
GDPR	Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (*OJ* 2016 L 119, p. 1)
ISD	Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society (*OJ* 2001 L 167, p. 10)
OBD	Directive 2019/789 of the European Parliament and of the Council of 17 April 2019 laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes (*OJ* 2019 L 130, p. 82)
OJ	Official Journal of the European Union
OWD	Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on Certain Permitted Uses of Orphan Works (*OJ* 2012 L 299, p. 5)
P2BR	Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services (OJ 2019 L 186, p. 57)

RLRD	Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (*OJ* 2006 L 376, p. 28)
SBD	Council Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission (*OJ* 1993 L 248, p. 15)
TDM	Text and data mining
UCTD	Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts (OJ 1993 L 95, p. 29)
WCT	WIPO Copyright Treaty, adopted in Geneva on 20 December 1996, Geneva: World Intellectual Property Organization 1996

1. Introduction

Knowledge institutions operate at the heart of knowledge creation and dissemination. Their core activities, ranging from research and education to digitisation, cross-border collaboration, and long-term knowledge stewardship, depend on regular interaction with copyright-protected material. However, copyright rules may operate not as enablers of institutional missions but as constraints that expose institutions to legal and financial risks.

This report seeks to analyse these dynamics. It explores potential sources of legal uncertainty within the EU copyright system and assesses their potential impact on knowledge institutions. Building on this analysis, the report explores and evaluates legal mechanisms that could be employed to reduce copyright-related uncertainty, facilitating a more predictable environment that enables knowledge institutions to fulfil their public-interest missions.

Methodologically our approach relies on desk research covering legislative texts, case law, and literature, and involves semi-structured interviews with experts from European knowledge institutions who are involved in policy development, legal advice and licensing, or information systems. The interviews aimed to gather insights both on institutional practices and risk management, and perceptions with regard to potential risk reduction mechanisms examined in this study. Whereas the total number of conducted interviews was 17, in several instances institutions suggested to be represented by more than one staff member. This enabled us to collect perspectives from different functions within one and the same knowledge institution, offering a more comprehensive insight into operational aspects. It also increased the total number of interviewed individuals to 20. Interviews were conducted with experts from several EU Member States, including Denmark, Finland, France, Germany, Greece, Ireland, the Netherlands, Slovenia, and Sweden. We also interviewed experts based in the United Kingdom.

The report consists of three parts. In the following chapter 2, we concisely explain the EU copyright framework for knowledge institutions and identify potential sources of legal uncertainty. Our focus targets primarily institutions engaged in research. We consider both the structural features of the copyright framework and ways in which copyright may be leveraged against knowledge institutions. In chapter 3, we conceptualise a series of legal mechanisms that could be employed to reduce legal uncertainty arising from copyright and contractual complexities. In the final chapter 4, we advance our recommendations.

2. EU copyright law and knowledge institutions

The European copyright framework is a highly complex and fragmented system built on a layered construct of directives mixing mandatory and optional provisions, and CJEU jurisprudence. In practice, this legal architecture results in 27 national implementations, each with its own nuances and enforcement practices, and divergent compliance expectations for institutions engaged in research, education, digitisation, cross-border collaboration, and long-term stewardship. Whether a particular act is permissible varies depending on the Member State in which it is carried out, the interpretation of national courts, or the specific terms of contractual agreements. The consequence is well-documented – certainty about what is lawful in one Member State can translate into hesitation or outright abandonment elsewhere.

Yet, uncertainty and risk facing knowledge institutions does not stem from the complexity of the copyright acquis alone. It is equally a product of the practical realities under which institutions negotiate licences, interact with rightsholders, and manage the expectations of their researchers and students. Highly asymmetrical bargaining environments and uneven copyright competence

among staff and users produce a setting in which lawful uses risk being underexercised and contracts take on a regulatory function of their own. Even where the law itself is clear, institutions face persistent policy dilemmas concerning the extent to which contractual provisions may legitimately shape or override statutory rights. In this climate, precaution frequently replaces confidence. Fear of legal, financial, or reputational accountability encourages restraint over initiative, while ambiguity invites strategic behaviour by those able to leverage uncertainty to their advantage.

This part examines the main sources of copyright uncertainty and risk in greater depth, considering both the content of the copyright acquis and the ways in which copyright may be leveraged against knowledge institutions.

2.1 Concept of "knowledge institution"

To lay groundwork for the following analysis, it is important to clarify the concept of "knowledge institution" that we will use as a reference point for the inquiry. The term "knowledge institution" has not been defined in EU copyright legislation. However, the current debate on legal uncertainty in this area indicates how the term is often understood in practice. In COMMUNIA's policy paper *Limitation of liability for knowledge institutions*,[1] reference is made to "educational, research and cultural heritage institutions…".[2] We deduce from this description that "knowledge institution" serves as an umbrella term for at least three types of institutions, namely:

- educational establishments;
- research organisations; and
- cultural heritage institutions.

With regard to these three facets of "knowledge institution", guidance can be found in EU legislation. According to Article 2(1) of the Directive on Copyright in the Digital Single Market (CDSMD), "research organisation" means "a university, including its libraries, a research institute or any other entity, the primary goal of which is to conduct scientific research or to carry out educational activities involving also the conduct of scientific research."[3] The provision requires research organisations to carry out their tasks "on a not-for-profit basis or by reinvesting all the profits in its scientific research." Alternatively, they may operate "pursuant to a public interest mission recognised by a Member State." In any case, access to research results must not be enjoyed on a preferential basis by an undertaking with a decisive influence on the organisation.[4]

Article 2(3) CDSMD clarifies that "cultural heritage institution" should be understood to mean "a publicly accessible library or museum, an archive or a film or audio heritage institution."[5]

With regard to "educational establishments", the CDSMD provides less guidance. In the absence of a legal definition,[6] Recital 20 clarifies that provisions concerning use for educational purposes should "benefit all educational establishments recognised by a Member State, including those involved in primary, secondary, vocational and higher education."[7] However, use privileges should apply only to the extent that the use at issue is "justified by the non-commercial purpose

[1] COMMUNIA (2024), 1-7.
[2] COMMUNIA (2024), 1.
[3] Article 2(1) CDSMD. Cf. Quintais (2025b), 397-398; Rosati (2025), 970-971.
[4] Article 2(1) CDSMD.
[5] Article 2(3) CDSMD; Cf. Rosati (2021) 24.
[6] See the list in Article 2 CDSMD which does not cover "educational establishment". Cf. de la Durantaye (2025a); Rosati (2021) 104-105.
[7] Recital 20 CDSMD.

of the particular teaching activity."[8] The organisational structure and the means of funding of an educational establishment are not decisive in this respect. Privileged use of copyright-protected material under the responsibility of an educational establishment is understood to include use during examinations or teaching activities outside the premises of educational establishments, for example in a museum, library or another cultural heritage institution.[9] Independent teaching activities carried out by institutions without a primary focus on education, such as museums, libraries and NGOs, fall outside the scope of the EU concept of "educational establishment."[10] The same can be said about teachers providing educational services privately – regardless of whether they have a commercial orientation or work *pro bono*.[11]

2.2 Need for Legal Certainty

In today's information society knowledge institutions fulfil central functions that are in the public interest. Providing information resources for teaching, learning and research activities, they are the backbone of personal development and knowledge creation. When knowledge resources enjoy copyright protection, the task of providing access and use opportunities leads to a tension with the protection of copyright as an intellectual property right. At the level of fundamental rights, this tension can be described as a conflict between different legal positions that have been recognised in the CFR.[12]

In the context of the right to property – the right to "own, use, dispose of and bequeath his or her lawfully acquired possessions"[13] – Article 17(2) CFR clarifies that "[i]ntellectual property shall be protected."[14] At the level of fundamental rights, the exclusive rights granted in EU intellectual property law, including copyright legislation, thus fall within the scope of the right to property. The conferred protection is not absolute.[15] It follows from Article 52(1) CFR that the right to property may be limited as long as the limitation is provided for by law and leaves the essence of the right intact. Subject to the principle of proportionality, limitations are possible if they are "necessary and genuinely meet objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others."[16]

More specifically, the CJEU has pointed out in cases concerning freedom of expression and information that a "fair balance" must be found between "the rights and interests of authors on the one hand, and the rights of users of protected subject-matter on the other."[17] Referring to user "rights", the Court clarified that the legal position of users invoking freedom of expression and information was not a priori weaker than the protection status which a holder of copyright enjoys by virtue of EU law. In *Funke Medien* and *Spiegel Online* the Court confirmed that copyright

[8] Recital 20 CDSMD.
[9] Recital 22 CDSMD.
[10] De la Durantaye (2025a); COMMUNIA (2019).
[11] De la Durantaye (2025a).
[12] Cf. Senftleben (2022), 11-12; Geiger/Izyumenko (2020), 292-298.
[13] Article 17(1) CFR.
[14] For a more detailed discussion of this global statement, see Jongsma (2019), 163-168; Griffiths/McDonagh (2013), 75; Geiger (2009), 113.
[15] CJEU, 29 July 2019, case C-469/17, Funke Medien NRW, para. 72; 27 March 2014, C-314/12 UPC Telekabel, para 61; 24 November 2011, C-70/10 Scarlet Extended, para 43.
[16] Article 52(1) CFR.
[17] CJEU, 1 December 2011, case C-145/10, Eva Maria Painer/Standard VerlagsGmbH, para. 132; CJEU, 3 September 2014, case C-201/13, Deckmyn, para. 26; CJEU, 29 July 2019, case C-469/17, Funke Medien NRW, para. 67-76.

limitations serving freedom of expression and information "do themselves confer rights on the users of works or of other subject matter."[18]

Learners at educational establishments, researchers working in research organisations, and users consulting library, museum or archive collections, are "users" who exercise their right to freedom of expression and information in the sense of this jurisprudence. With regard to freedom of information, Article 11(1) CFR clarifies:

> Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers.

Using the terminology of Article 11(1) CFR, it can thus be said that learners, researchers and cultural heritage users exercise their right to "receive and impart information and ideas." In addition to the recognition of freedom of expression and information in Article 11(1) CFR, Article 13 CFR stipulates that "scientific research shall be free of constraint." The provision also underlines that "[a]cademic freedom shall be respected." To be able to realise academic freedom, researchers must be able to choose not only the topic of research and questions to be answered, but also the methods and materials to find those answers, and present and disseminate the results. According to the CJEU, academic freedom has not only this individual dimension but an institutional and organisational dimension reflected in the autonomy of institutions.[19] In this context, universities, libraries and other research institutions emerge as critical facilitators of scientific research. They provide the infrastructure, access to resources, and the organisational freedom necessary for researchers to pursue their inquiries.[20]

Similarly in the context of education, Article 14(1) CFR ensures that everyone has the right to education and to have access to vocational and continuing training. In order for education to respond to evolving societal and technological condition, and to meet the demands of the labour market in any given Member State, educational establishments must be able to design and offer curricula and teaching methods in a manner that reflects current knowledge, professional practice, and technological developments. This entails the organisational capacity to select appropriate pedagogical approaches, determine relevant teaching materials, and ensure access to such resources that educational establishments determine enable learners to acquire those skills that remain meaningful in rapidly changing knowledge environments. Analogously to scientific research, the effectiveness of the right to education depends not only on the formal availability of educational programmes but also on the institutional autonomy and practical ability of educational establishments to adapt content and methods so that education remains responsive to innovation, labour market developments, and the broader public interest in a well-functioning knowledge society.[21]

[18] CJEU, 29 July 2019, case C-516/17, Spiegel Online, para. 54; CJEU, 29 July 2019, case C-469/17, Funke Medien NRW, para. 70. Cf. Senftleben (2024a), 1477-1478; Aplin/Bently (2020), 75-84.
[19] CJEU, 6 October 2020, case C-66/18, European Commission/Hungary, paras 225 and 227.
[20] Szkalej (2025), 309.
[21] Cf. European Commission, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions on the Digital Education Action Plan 2021-2027: Resetting education and training for the digital age COM(2020) 624 final, 30.9.2020; European Commission, Communication from the Commission to the European Parliament, the Council, The Eoprean Economic and Social Committee and the Committee of the Regions on the Digital Education Action Plan COM(2018) 22 final, 17.1.2018; European Skills Agenda https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/european-skills-agenda_en; Osnabrück Declaration on vocational education and training as an enabler of recovery and just transitions to digital and green economies, 2020 < https://vet4eu2.eu/wp-content/uploads/sites/104/2020/12/Osnabrueck_Declaration_EU2020.pdf>.

Taking the fundamental rights provisions relating to freedom of expression, information, science and education together, it seems safe to assume that EU legislation is under an obligation to create a favourable, enabling environment for research and education, and to weigh these fundamental values against other objectives, such as the desire to protect the right to property, including intellectual property.[22]

Interestingly, the CJEU has also explained in which way a proper balance can be struck between copyright protection and the fundamental rights which knowledge institutions support with their work. This further guideline is of particular interest because it clarifies the impact of copyright law and underlines the necessity to devise an adequate regulatory framework that does not stifle the activities of knowledge institutions.

In *Pelham* and *Funke Medien* – cases about freedom of expression and information[23] – the CJEU examined how a fair balance could be established between the property rights of copyright and related rightsholders and conflicting fundamental rights of users. The CJEU emphasised that the required balance had to be established within the system of exclusive rights and exceptions in EU copyright law:

> [t]he mechanisms allowing those different rights and interests to be balanced are contained in Directive 2001/29 itself, in that it provides inter alia, first, in Articles 2 to 4 thereof, rightholders with exclusive rights and, second, in Article 5 thereof, for exceptions and limitations to those rights which may, or even must, be transposed by the Member States…[24]

Therefore, an appropriate balance must be found *within* the EU framework for the protection of copyright.[25] According to the CJEU, it is not the intention to step outside the copyright framework and override the copyright system by exempting use from the control of copyright holders on the basis of a direct reference to fundamental rights in the CFR.[26] Otherwise, the harmonisation objectives underlying the European harmonisation of copyright law would be thwarted and the internal market could be disrupted.[27]

It is therefore indispensable that EU legislation create a favourable, enabling environment for teaching, learning and research – and the knowledge institutions supporting these activities – in copyright law. The required balance between the described fundamental rights must be found within the specific system of protection that follows from copyright legislation. However, a proper balance between the right to intellectual property of copyright holders and the right to freedom of expression, information, science and education which knowledge institutions safeguard by creating conditions for its meaningful exercise can only be achieved if copyright provisions in favour of teaching, learning and research work effectively in practice.

To achieve this goal, copyright exceptions that have been embedded in the copyright system to support the work of knowledge institutions must be configured in a way that allows them to fulfil their tasks in the field of freedom of expression and information, science and education. It is not sufficient that EU copyright law sets forth use privileges for educational establishments, research

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[22] For a more detailed discussion of the right to research in the CFR, see Geiger/Jütte (2023), 24-62.
[23] CJEU, 29 July 2019, case C-476/17, Pelham. Cf. Senftleben (2020b), 751-769.
[24] CJEU, 29 July 2019, case C-476/17, Pelham, para. 60; CJEU, 29 July 2019, case C-469/17, Funke Medien, para. 58. Cf. Geiger/Izyumenko (2020), 292-298.
[25] Cf. ECtHR, 10 January 2013, case 36769/08, Ashby Donald/France, para. 38, and Geiger/Izyumenko (2014), 316, with regard to the necessity to offer room for freedom of expression and information.
[26] For a discussion of the different forms of so-called "internal" and "external" balancing in the field of intellectual property, see Senftleben (2020a), 500-504; Kulk/Teunissen (2019), 126-129; Dreier (2001), 295.
[27] CJEU, 29 July 2019, case C-476/17, Pelham, para. 63. Cf. Senftleben (2024a), 1482-1483.

organisations and cultural heritage institutions *pro forma*. As long as the invocation of these use privileges depends on conditions that render them ineffective in practice, these provisions are mere cosmetics: futile attempts to satisfy the described fundamental rights obligations. If the legal complexity surrounding copyright limitations for knowledge institutions makes them moot in practice, EU copyright law fails to lend sufficient weight to the fundamental rights underlying the work of knowledge institutions and needs to be recalibrated.

As the following analysis will show, the plethora of conditions and limiting factors that accompany copyright provisions seeking to support teaching, research and the work of cultural heritage institutions casts doubt upon the effectiveness of these provisions in practice. The minimal degree of legal certainty offered by the provisions for knowledge institutions in EU copyright law raises serious doubts about the potential of the current legal framework for educational establishments, research organisations and cultural heritage institutions to reconcile the competing fundamental rights at stake. In other words: the current EU copyright acquis in the field of teaching, research and cultural heritage may be unconstitutional.

2.3 Legal uncertainty in EU copyright acquis

A feature of the current EU copyright acquis is that the legal provisions ostensibly designed to support knowledge institutions are often framed in a narrow or conditional manner that of itself generates uncertainty.[28] Provisions are drafted with requirements that are either difficult to interpret, burdensome to comply with, or dependent on external factors, leaving users unsure whether their activities fall inside or outside the scope of the law. Such uncertainty can easily thwart the objective of EU legislation to create breathing space for the work of knowledge institutions and reconcile the competing fundamental rights described in the preceding section. Instead of providing effective, solid use privileges, the copyright exceptions for knowledge institutions *de facto* operate as incentives for educational establishments, research organisations and cultural heritage institutions to bargain the conditions for access and use of knowledge resources, letting contracts become the primary instrument defining the applicable access and reuse regime. Once individual contractual stipulations govern the work of knowledge institutions, however, the public policy objectives underlying pertinent copyright exceptions are forced onto the sidelines. Instead of the aim to reconcile competing fundamental rights, the bargaining position of knowledge institutions determines the chances of arriving at a proper balance.

In this section we briefly illustrate how the configuration of EU copyright exceptions that are relevant to knowledge institutions creates legal uncertainty. We first consider challenges that arise from narrow and complex use privileges, and the territorial and fragmented character of the copyright framework (2.3.1). Then, we discuss the so-called "three-step test" (2.3.2) and the protection of paywalls and other technological fences as additional complicating factors (2.3.3).

2.3.1 Narrow and complex copyright exceptions

In international copyright law, it has been recognized in the 1996 WIPO Copyright Treaty (WCT) that there is a "need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention."[29] In the EU, the 2001 Information Society Directive (ISD) sought to implement the international obligations set forth in the WCT. However, a closer look at ISD provisions addressing

[28] This may be a general feature of the system, which forces courts into a dilemma, and inevitable legal uncertainty, of whether to strictly apply adopted provisions or rely on external mechanisms to flexibilise the approach. See generally Hugenholtz/Senftleben (2011); Rendas (2018).
[29] See WCT, Preamble.

"education, research and access to information" gives rise to concerns. EU legislation may have failed to provide a sound regulatory basis for a proper balance. The fragmented rules for scientific research can serve as an example (2.3.1.1).

After ISD adoption, important elements have been added to the legal framework for knowledge institutions in further EU directives. The 2012 Orphan Works Directive (OWD) and the CDSMD contain important provisions that focus specifically on the work of educational establishments, research organisations and cultural heritage institutions. But the devil is in the detail. The diligent search requirement that is a prerequisite for unlocking the potential of orphan works is a stumbling block in the legislative design of the OWD (2.3.1.2). Scientific research and lawful access requirements in the CDSMD are complicating factors when cultural heritage institutions embark on TDM projects or seek to prepare TDM corpora for future use by researchers (2.3.1.3). The CDSMD rules on out-of-commerce works establish a complex interplay with collective copyright management and require an out-of-commerce assessment in good faith without providing a clear matrix for this evaluation (2.3.1.4). The rules on digital cross-border teaching are a promising step in the right direction because they allow the application of the country-of-origin principle to link the educational use to a specific territory and copyright jurisdiction. However, the interplay with "suitable" and "easily available" licenses is an opaque element in the regulatory design that reduces its effectiveness in practice (2.3.1.5).

2.3.1.1 Fragmented scientific research rules

Use privileges for scientific research are a recurring theme in EU copyright and related rights law. A scientific research exception can be found in as many as four forms, namely in Article 5(3)(a) ISD, Article 10(1)(d) of the Rental, Lending and Related Rights Directive (RLRD) and Articles 6(2)(b) and 9(b) of the Database Directive (DBD). The wording of these provisions is ambiguous and contains outdated requirements.[30] All four provisions permit use for "the purpose of illustration for teaching or scientific research" raising questions as to whether use for scientific research is permitted generally, or can only take place if it takes the form of illustration.[31] The ISD and DBD versions of the exception additionally point out that use is only permitted "as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved," raising doubts about the permissibility of public-private partnerships.[32]

In practice, particular problems can also arise from the fact that all four research exceptions are optional. Member States are not bound to implement these use privilege in a specific, fully harmonized form. Divergent national approaches shed light on the different configurations that are possible. Some Member States have refrained from implementing any of the scientific research exceptions, while others have approached them cautiously, adding requirements that further restrict the scope of the use privilege.[33] As a result, the legal landscape for scientific research – and knowledge institutions seeking to support scientific research – differs from one country to another with regard to beneficiaries, works covered, scope of permitted use, exclusive rights covered, conditions of applicability, remuneration requirements and safeguards against

[30] For an overview of problem areas, see Senftleben/Szkalej et al. (2025), 1335-1339.
[31] See Geiger and Schönherr (2021), §11.99; Hugenholtz and Senftleben (2011), 14-18, on the one hand, and Derclaye (2021), §9.65; Bechtold (2016), 464, on the other.
[32] Angelopoulos (2022), 14-15; Senftleben (2022a), 21; Spindler (2018), 279-280.
[33] Stančiauskas et al. (2024), Annex 1, 90–94, 178-181. See also the mapping and assessment conducted within the H2020 project reCreating Europe by Sganga et al. (2023).

contractual override.[34] In addition, no specific scientific research exception exists for the use of computer programs.[35]

2.3.1.2 Diligent search requirement for orphan works

In the OWD, EU legislation emphasises that publicly accessible libraries, educational establishments and museums, as well as archives, film or audio heritage institutions and public-service broadcasting organisations, contribute to the preservation and dissemination of European cultural heritage by creating large online libraries with electronic search and discovery tools that "open up new sources of discovery for researchers and academics who would otherwise have to content themselves with more traditional and analogue search methods."[36] The Directive also points out the "need to promote free movement of knowledge and innovation in the internal market"[37] and, more specifically, the intention to provide a favourable legal framework for the creation of European digital libraries because:

> the digitisation and dissemination of works and other subject-matter which are protected by copyright or related rights and for which no rightholder is identified or for which the rightholder, even if identified, is not located — so-called orphan works — is a key action of the Digital Agenda for Europe.[38]

Despite this recognition of the important contribution of knowledge institutions and the objective to offer support for large-scale digitisation projects, the OWD sets forth a burdensome "diligent search" requirement in Article 3(1).[39] To establish the orphan work status of a given work and benefit from the digitisation and dissemination privilege in Article 6 OWD, knowledge institutions[40] must first demonstrate that they have exhaustively searched for rightsholders. This gatekeeper requirement has been widely criticised for being overly rigid and administratively impractical for large-scale digitisation projects.[41] On top of the basic diligent search requirement, Article 3(5) OWD stipulates that knowledge institutions must maintain records of their diligent searches and inform the competent national authorities about the results of the diligent searches they have carried out; the use that they make of orphan works; any change to the orphan work status; and relevant contact information.

Quite clearly, these administrative burdens are such that many knowledge institutions will refrain from even attempting to invoke the copyright exceptions laid down in Article 6 OWD. The costs of compliance will often outweigh the benefits of access. Moreover, the OWD does not offer a liability exemption. If a rightsholder later appears and puts an end to the orphan work status in line with Article 5 OWD, the knowledge institution may be exposed to compensation claims under applicable national regulations,[42] reinforcing a chilling effect that deters reliance on the provision.[43] Rather than resolving the rights clearance bottleneck in the area of orphan works,

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[34] Senftleben/Szkalej et al. (2025), 1336; Senftleben (2022a), 19.
[35] Szkalej (2025), 315; Widła (2025), 3.
[36] Recital 1 OWD.
[37] Recital 2 OWD.
[38] Recital 3 OWD.
[39] Cf. van Gompel (2012), 1349, 1359-1361; van Gompel (2007), 669-702; van Gompel/Hugenholtz (2010), 61-71.
[40] See this delineation of the circle of beneficiaries in Article 1(1) OWD.
[41] McGuinn/Sproģe et al. (2021), 88-90. See also European Commission, 6 December 2022, *Report on the Application of the "Orphan Works Directive" 2012/28/EU*, Staff Working Document SWD(2022) 412 final, 9.
[42] Article 6(5) OWD.
[43] As to the discussion on the deterrent effect of legal uncertainty in copyright law, see Senftleben (2020), 135-138; Izyumenko (2020), 440-446; Adler (2016), 566; Aufderheide/Jaszi et al. (2014), 5; Frosio (2014), 378-380; Morrison (2008), 131-136; Gibson (2007), 913; Cohen (2006), 154-156; Aufderheide/Jaszi (2004), 29-30; Lessig (2004), 185-188; Coombe (2003), 1174; Amabile (1996), 115-120; 231-232.

this amalgam of OWD provisions seems to reproduce it in a new form, requiring knowledge institutions to resort to contractual solutions or abstain from use altogether.

2.3.1.3 Scientific research requirement for text and data mining

At first sight, the exception for scientific text and data mining (TDM) in Article 3 CDSMD broadens research freedom significantly.[44] The provision permits reproductions of works and extractions from databases.[45] It seems to offer strong support for computational techniques that are employed to analyse large corpora of scientific publications, digitised cultural heritage materials and other data resources. Yet, the detailed conditions for invoking the provision introduce considerable legal uncertainty.

Article 3 is confined to research organisations and cultural heritage institutions, and applies only when they act for the purposes of scientific research. For cultural heritage institutions, the scientific research requirement raises the question whether they can embark on TDM projects independently and create curated datasets on request[46] or for potential future use in scientific research.[47] With regard to private partners, Recital 11 CDSMD affirms that research organisations and cultural heritage institutions should continue to benefit from the TDM exception when their activities are carried out in the framework of public-private partnerships. They should also be able to rely on their private partners to carry out TDM. However, it remains unclear whether collaborations, such as partnerships in biomedical research or AI development, still fulfil the scientific research requirement when they aim at practical and socially beneficial results that can finally be brought to the market.[48]

Moreover, knowledge institutions must ensure they have "lawful access" to the works and databases mined.[49] Recital 14 CDSMD clarifies that lawful access should be understood to cover open access content and knowledge resources that become available through contractual arrangements with rightsholders, such as subscriptions, "or through other lawful means." The open-ended category of "other lawful means"[50] injects considerable complexity. Does access obtained via interlibrary loan count as "lawful access"? Does a short-term e-book licence constitute a "lawful means" for TDM purposes? Stated in different terms, it remains unclear whether lawful access must apply throughout the TDM process or only at its initial stage of accessing material. As conditions for access are periodically renegotiated, or modified together with the terms and conditions of service, they may change in the course of a TDM project.[51]

Finally, Recital 14 points out that the lawful access concept also covers "access to content that is freely available online," implying that research organisations and cultural heritage institutions may mine any information that is accessible on the internet. In this regard, scholarship observes that the relation of the requirement to the notion of lawful source developed by the CJEU is not

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[44] As to the need for copyright exceptions to enable TDM in research, see COMMUNIA (2023); Flynn/Butler et al. (2022), 951.
[45] Cf. Hugenholtz (2019), 167; Hilty/Richter (2017).
[46] Nederlandse erfgoedinstellingen (2019), §§ 3 and 6.
[47] Stieper (2025), 21-23, arrives at the conclusion that the preparation of TDM corpora for potential future research projects is not permissible. However, see also Higher Regional Court of Hamburg, 10 December 2025, case 5 U 104/24, Kneschke/LAION, which seems to offer a basis for a more flexible approach. Cf. Leistner/Antoine (2025), 1034-1035.
[48] Cf. Rosati (2021), 42-43; Griffiths/Synodinou et al. (2022), 14-15; Senftleben (2022a), 38-39. However, see also the more nuanced positions taken by Stamatoudi/Torremans (2021), §17.94; Margoni/Kretschmer (2022), 24-25.
[49] Stieper (2025), 18.
[50] Recital 14 CDSMD.
[51] Stieper (2025), 20. Cf. Szkalej (2025), 313 noting the open-ended and mercurial character of the term *subscription* used in the recitals and that conditions for access are not determined by the subscriber but by the service provider – a rightholder may fragment markets, price-discriminate, offer a different repertoire in each Member State, or even an entirely different access experience and functionality.

settled[52] Are research organisations and cultural heritage institutions relying on Article 3 CDSMD obliged to make sure that website crawlers identify and avoid content that has been posted online without the rightsholder's authorisation? And, if so, can this obligation be limited to websites which, evidently, offer pirated content?[53]

With these conceptual contours, the lawful access requirement risks becoming a gateway for applying various business strategies that may *de facto* neutralise the copyright exception.[54] Although Article 7(1) CDSMD clarifies that contract terms preventing TDM under Article 3 are unenforceable, this safeguard alone does not prevent negotiation partners of knowledge institutions from defining the legal and technical parameters of access. It also does not prevent attempts to bypass the scientific TDM freedom in Article 3 CDSMD by insisting on the choice of foreign (non-EU) law as the governing law for the contractual relationship.[55]

Considering the needs of research organisations and cultural heritage institutions not only to analyse but also to share, verify, and preserve outputs, further questions arise as to whether the TDM provision for scientific research extends to practices such as depositing corpora in institutional repositories, making collected and processed data available for peer review, or storing mined datasets for long-term reproducibility of scientific results.[56] These are standard elements of scientific integrity and open science, yet the CDSMD is silent on whether such downstream uses fall within the scope of Article 3. Admittedly, Article 3(2) clarifies that copies created in accordance with the scientific TDM exception may be retained for the purpose of scientific research, including for the verification of research results, on condition that they are stored "with an appropriate level of security." At the same time, Article 3 is an exception to the right of reproduction only. Thus, if a corpus has been lawfully mined under Article 3, it remains unclear whether the dataset may be shared with other researchers, archived for verification, or reused for future studies, if these forms of data sharing would amount to an act of making available to the public in the sense of EU copyright law.[57]

2.3.1.4 Collective licensing for out-of-commerce works

Article 8 CDSMD regulates the use of out-of-commerce works held by cultural heritage institutions. The provision introduces a two-tiered system: first, a licensing mechanism based on collective licensing, and second, a mandatory exception that applies when licensing is not possible. The provision responds to the limitations of voluntary licensing, where commercial incentives to license historical or niche works are weak. By introducing measures enabling the use of out-of-commerce works, Article 8 reorients copyright law towards enabling public access where markets have failed to supply it.

In practice, however, the mechanism contains a significant weakness. The licensing mechanism depends on the existence of a sufficiently representative collective management organisation

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[52] Margoni (2024), 181-184; Synodinou (2025).

[53] Cf. CJEU, 14 June 2017, case C-610/15, Stichting Brein (The Pirate Bay), para. 36-39 and 47. As noted by Szkalej (2025), 309 (n 24), an often missed circumstance in the debate is that in the national (criminal) case preceding the application of the operators of The Pirate Bay to the European Court of Human Rights (Neij and Kolmissoppi (TPB) v Sweden ECtHR App. No. 40397/12), the Svea Court of Appeal stated that it had not been shown what proportion of torrent files on the platform led to material made available with rightsholders' consent relative material made available without consent, and that the Court therefore had to assume that that amount was not negligible. Moreover, expert witnesses called in the case provided drastically opposing opinions on the proportion of lawful and unlawful material. See Svea HovR deldom, 26 November 2010, mål B 4041-09 (TPB-målet), 25.

[54] Szkalej (2025), 312.

[55] Szkalej (2025), 313; Stieper (2025), 29-31.

[56] Stieper (2025), 23-24. Cf. Ducato/Strowel (2021), 327; Geiger/Frosio et al. (2018), 819.

[57] Senftleben (2022a), 45-47. For a more restrictive view, see Stieper (2025), 23-24, who sees no basis for providing TDM corpora for different future research projects.

(CMO). Where none exists, the exception can be relied upon. But where a CMO exists yet declines to issue a licence, the system collapses into a regulatory gap: the institution is prevented both from obtaining a licence and from invoking the exception that was designed as a safety net. Unless a Member State has chosen to impose an obligation on CMOs to issue a licence – a step not required by the Directive – institutions may find themselves in a prolonged impasse.

Further uncertainty arises from the definition of what qualifies as "out of commerce."[58] Article 8(5) CDSMD deems material to be out of commerce when it can be presumed in good faith that the whole work is not available to the public through customary channels of commerce after a reasonable effort has been made to determine availability. This standard introduces flexibility, but also significant ambiguity. Even if a "good faith" requirement offers more flexibility, particularly in cases where operational assessments are not made by copyright lawyers, assessing market availability is far from straightforward. This task is particularly challenging given the diversity of works in institutional collections that may range from obscure ephemera to mass-market publications and the absence of standardised tools or databases for verifying commercial status. Market availability can also vary across formats, regions, or languages, complicating determinations. For instance, a work might be commercially available in one Member State but not another, or accessible in print but not digitally. Without clear and uniform benchmarks for what constitutes a "reasonable effort," cultural heritage institutions risk over-cautious exclusion of works even though they fall within the scope of the out-of-commerce concept.

2.3.1.5 Digital cross-border teaching and licence availability

The rules on digital and cross-border teaching in Article 5 CDSMD mark a significant step towards facilitating educational activities in the digital environment. By introducing a mandatory exception that permits the use of works "for the sole purpose of illustration for teaching" and by anchoring such use to the Member State of the educational establishment when it occurs online, the provision seeks to overcome territorial fragmentation and enable modern digital teaching activities. In this respect, Article 5 appears to offer a clear framework for educational establishments operating especially in transnational digital settings.[59]

However, the provision has led to divergent implementations.[60] Moreover, the country-of-origin rule in Article 5(3) localising cross-border use in the Member State where the educational institution is established, applies to "the sole purpose of illustration for *teaching*." Hence it seems that the provision focuses on the use made by the educational establishment and covers mainly the act of communication or making available to the public as harmonised by Article 3 ISD. The use made by the student or pupil when accessing the educational material for the purpose of *learning* only enters the picture indirectly. Reading Article 5(3) in connection with Article 5(1)(a) CDSMD, it becomes apparent that the country-of-origin rule supports a secure electronic environment accessible by "the educational establishment's pupils or students and teaching staff."[61] Recitals 21 and 22 CDSMD clarify that the exception is intended "to support, enrich or complement the teaching, including learning activities"[62] and should cover both "teaching and learning activities carried out under the responsibility of educational establishments."[63] Article 5(1) CDSMD also refers to both acts of making available in the sense of Article 3 ISD (teachers sharing knowledge resources) and acts of reproduction under Article 2 ISD (pupils and students downloading teaching materials for learning). If, despite these indications, it were assumed that

[58] Rosati (2021) 167.
[59] Rosati (2021) 98-99.
[60] Priora/Jütte/Mezei (2022); Trapova (2023).
[61] Article 5(1)(a) CDSMD.
[62] Recital 21 CDSMD.
[63] Recital 22 CDSMD.

the country-of-origin rule focuses on the making available of knowledge resources by teachers, the uses made by students at the receiving end would require the invocation of different copyright exceptions, such as the exemption of temporary acts of reproduction[64] and private copying for study purposes.[65]

An additional complicating factor follows from Article 5(2) CDSMD. The provision allows Member States to make the application of the exception subject to the availability of "suitable licences" that are "easily available" and cover the needs of educational establishments. In Member States that have opted to exercise this discretion, this design introduces a conditionality that shifts the operation of the exception away from a legal entitlement towards a market-dependent assessment.[66] Educational establishments must determine whether their use falls within the scope of "illustration for teaching" and whether licensing solutions exist that displace the exception. To alleviate the administrative burden of monitoring licensing markets and evaluating the appropriateness of licensing terms for a given educational programme, Member States are expected to ensure that licences for cross-border teaching and learning in the sense of Article 5(1) CDSMD are "available and visible in an appropriate manner for educational establishments."[67]

Moreover, in Member States in which the licensing arrangements are intended to operate on the basis of extended collective licensing (ECL),[68] a paradox is created. If the same agreements simultaneously govern educational institutions' initial access to the protected material, which, under the same agreement can subsequently be used for the purpose of illustration for teaching, whenever a rightsholder exercises their legitimate right to withdraw from the ECL arrangement,[69] the educational establishment ought to be entitled to rely on the exception because of a lack of a suitable licence for the specific work. An "opt-out" from the ECL arrangement may thus have the effect of removing the educational establishment's access to the work, rendering the transnational teaching exception in Article 5(1) CDSMD practically irrelevant for the specific work. In the event that the educational establishment still has access to the work, any continued use for teaching, henceforth based on the exception instead, would occur against the evident and explicit exercise of the opt-out prerogative to prevent use that is recognised in the national ECL regime.

2.3.2 Three-step test compliance

In addition to the described legal requirements that follow from the regulatory design of the copyright exceptions for knowledge institutions in EU law itself, it is important to take into account that more general, overarching conditions for the successful assertion of relevant use privileges for educational, research and cultural heritage activities follow from the so-called

[64] The exemption of temporary copying in Article 5(1) ISD is likely to cover temporary reproductions made in the operating memory of a device when pupils and students view material on a computer screen. Cf. CJEU, 4 October 2011, cases C-403/08 and C-429/08, Football Association Premier League/QC Leisure, para. 162-163 and 181. Cf. Hugenholtz (2000), 482.

[65] Downloads may fall within the scope of private copying rules adopted in the recipient's Member State in accordance with Article 5(2)(b) ISD. Cf. CJEU, 11 September 2014, case C-117/13, Technische Universität Darmstadt, paras 48 and 55-57. However, absent the application of the country-of-origin rule, all these acts must be assessed on the basis of the copyright law that applies in the territory of the user at the receiving end.

[66] Cf. COMMUNIA (2019).

[67] Article 5(2), second subparagraph, CDSMD.

[68] Article 12(1) CDSMD. As an example, see the national implementation in Sweden; 13 § 2 st. Lag (1960:729) om upphovsrätt till litterära och konstnärliga verk; Cf. Axhamn (2024), 539-541.

[69] Article 12(3)(c) CDSMD. Cf. The Swedish transposition in 42 c § 2 st. Lag (1960:729) om upphovsrätt till litterära och konstnärliga verk.

"three-step test" in EU copyright law.[70] This provision applies horizontally across all copyright exceptions in the EU acquis. The three-step test, laid down in Article 5(5) ISD,[71] reads as follows:

> The exceptions and limitations provided for in paragraphs 1, 2, 3 and 4 shall only be applied in certain special cases which do not conflict with a normal exploitation of the work or other subject-matter and do not unreasonably prejudice the legitimate interests of the rightholder.

With its open-ended criteria, the three-step test adds considerable complexity to the assessment of use privileges for educational, research and cultural heritage work. Does a given form of use which a knowledge institution wants to carry out, constitute a "special case" in the sense of Article 5(5) ISD? What is a "normal" exploitation of literary and artistic works? When does use for educational, research or cultural heritage purposes enter into "conflict" with a normal exploitation? Which competing rightsholder interests can be deemed "legitimate"? When does a prejudice to these legitimate interests reach an impermissible, "unreasonable" level?

In the absence of sufficient legal guidance on the right interpretation of these elastic criteria, the three-step test can easily become a source of legal uncertainty. Even if a form of use complies with all requirements of a copyright exception, rightsholders may still challenge the permissibility of the use on the ground that one of the requirements following from Article 5(5) ISD is not fulfilled.[72] In practice, the application of the three-step test as a yardstick by judges has become a widespread practice in the EU because the provision stipulates that copyright exceptions, including those establishing use privileges for knowledge institutions, "shall only be applied" when the use is compatible with the three-step test. Arguably, this determination of compliance at the level of applying a use privilege is the task of the judge hearing a case about copyright infringement. To this day, however, the CJEU has not seized the opportunity of providing concrete guidelines for the right interpretation of the individual assessment criteria forming the three-step test – despite several decisions in which the Court has relied on the three-step test to support its decision.[73]

In the absence of clear definitions and assessment factors, the open-ended criteria following from the three-step test offer various starting points for rightsholders to challenge the compliance of a given form of educational, research or cultural heritage use with Article 5(5) ISD. For instance, it may be argued that scientific research that requires large-scale use of copyright-protected data resources, such as TDM cannot be qualified as a special case in the sense of the first test ("certain special cases") because the use is not sufficiently confined from the quantitative perspective which the WTO Panel introduced. At the same time, the openness of the test criteria offers room for counterarguments. While the number of works may reach a large volume in TDM cases, the circle of beneficiaries – scientific researchers without a commercial orientation – is narrowly drawn and specific.[74] From a qualitative, normative perspective, it may be added that use for scientific research, by definition, constitutes a special case in the sense of Article 5(5) ISD because breathing space for use in this category is indispensable to arrive at a proper balance between

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[70] CJEU, 11 September 2014, case C-117/13, Technische Universität Darmstadt, para. 47. Cf. Westkamp (2008), 1; Senftleben (2022a), 21-25; Stieper (2025), 11-13.

[71] See also the reference in Article 7(2) CDSMD which brings use privileges in the CDSMD under the control of the three-step test. Cf. Wymeersch (2023), 631.

[72] Cf. Senftleben/Szkalej et al. (2025), 1139.

[73] For an overview of relevant CJEU decisions, see Senftleben (2021), 83-105. For a discussion of assessment criteria that have evolved in WTO Dispute Settlement decisions, see World Trade Organization, 15 June 2000, *United States – Section 110(5) of the US Copyright Act*, Report of the Panel, WTO Document WT/DS160/R. Cf. Geiger/Gervais/Senftleben (2014), 593-597; Kur (2009), 287; Senftleben (2006), 407; Senftleben (2004), 134-230; Ficsor (2002), 111; Lucas (2001), 430; Oliver (2002), 119; Brennan (2002), 213; Ginsburg (2001), 13; Ricketson (2002), 31; Bornkamm (2002), 29.

[74] As to the debate on the three-step test and copyright exceptions for TDM, see Senftleben (2026), 67-107; Dornis/Lucchi (2025), 1800-1840; Lucchi (2025), 34-35, 43; Rosati (2024), 263–266, 272; Abbamonte (2024), 279.

copyright protection and the guarantee of freedom of expression and information, freedom of sciences, and the right to education in Articles 11, 13 and 14 CFR.[75]

This facet of the broader spectrum of discussion points that can be derived from the three-step test already indicates that the open-ended provision allows the development of various non-compliance arguments that can be advanced in educational, research and cultural heritage contexts. The three-step test in Article 5(5) ISD is thus a source of legal uncertainty that can have a corrosive effect on use privileges for knowledge institutions. Even if non-compliance arguments can finally be rebutted, the three-step test offers rightsholders a broad arsenal of ammunition to cast doubt upon use privileges for educational, research and cultural heritage purposes, and destabilise the legal position of knowledge institutions.[76]

2.3.3 Technological protection measures

Besides the legal arguments that can be derived from the three-step test in Article 5(5) ISD, rightsholders can also rely on technological measures to prevent or restrict use which they have not specifically authorised. Article 6(3) ISD assimilates such measures to access control or other protection processes, "such as encryption, scrambling or other transformation of the work or other subject-matter or a copy control mechanism." However, this illustration reflects the state of technology in 2001, when the ISD was adopted. Nowadays, TPMs embody a more complex set of technological solutions that rest on four pillars: access control technologies (conditional access), encryption, content identification and tracing technologies, and copy control.[77] Generally and functionally, these technologies refer to the chain of hardware and software services and technologies *governing* the authorised use of digital content and *managing* any consequences of that use throughout the *entire life cycle* of the content.[78] Although these technologies offer the opportunity for secure exchange and control of information in order to support an efficient use of exclusive rights in the digital environment, how the technologies are ultimately configured to govern use is a matter of business decision. When they are designed to achieve a level of protection and control beyond the confines of copyright,[79] they leave hardly any room for educational, scientific and cultural heritage use on the basis of a copyright exception.[80] A password-protected website with knowledge resources designed in a way that forces the user to view the material page by page on the service without being able to extract or download the material can serve as an example of a technical protection measure – an electronic "fence" – that restricts access and use possibilities substantially.[81] Article 6(1) ISD explicitly protects copyright holders against the circumvention of effective technological measures:

> Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective.

[75] For a more detailed discussion of the fundamental rights impact on the analysis, see Geiger/Gervais/Senftleben (2014), 581-626; Geiger/Griffiths/Hilty (2008), 707; Geiger (2006), 371.
[76] Senftleben (2022a), 24-25.
[77] Szkalej (2021), 137; Hartung/Ramme (2000). For a different typology, but discussing essentially the same technologies, see Diehl (2012), 21-23 who distinguishes between *access control*, *asset protection*, *forensic marking* and *scouting*.
[78] Szkalej (2021), 137.
[79] Article 6(4), subparagraph 4, ISD. Cf. Hilty (2006), 187. See also Litman (1998), 940-941; Cohen (1998), 1142-1143; Elkin-Koren (1997), 108-113; O'Rourke (1997), 77-81.
[80] Geiger/Frosio/Bulayenko (2018), 826.
[81] For further examples see Szkalej (2025), 313-314 referring to 'technological parameters of use that shape the specific form of lawful access' and 'tools of inconvenience'.

Article 6(2) ISD further strengthens the position of rightsholders by offering additional protection against the provision of equipment or services that can be employed to circumvent technological measures.

Admittedly, the protection of technological measures is not intended to undermine copyright exceptions. Article 6(4) ISD provides in its first subparagraph that Member States shall take appropriate measures to ensure that rightsholders make available to the beneficiaries of several copyright exceptions, including, for instance, the use privilege for research in Article 5(3)(a) ISD, the means of benefiting from that copyright exception, where the user has legal access to the protected material at issue. It is unclear, however, to which extent this safeguard clause shields privileged users in knowledge institutions effectively from the erosion of applicable statutory use permissions in national law.[82]

Even more importantly, the safeguard clause for certain use privileges, including the exemption of research use by virtue of Article 5(3)(a) ISD, is no longer applicable when access to protected works is offered on demand. This follows from Article 6(4), subparagraph 4, ISD:

> The provisions of the first and second subparagraphs shall not apply to works or other subject-matter made available to the public on agreed contractual terms in such a way that members of the public may access them from a place and at a time individually chosen by them.

In practice, this means that users (researchers in the case of Article 5(3)(a) ISD) can no longer insist on access to websites with necessary data sources, such as large databases belonging to academic publishers, online music stores and audiovisual services, in a manner that supports the exercise of a use privilege when the rightsholder makes protected content available on demand behind a technical fence and offers access on the condition that the researcher enter into a contractual agreement first.[83] In other words: rightsholders may use the protection of technological protection measures following from Article 6(1) and (4), subparagraph 4, ISD to deny access to literary and artistic works that constitute important data sources for teaching, learning, and research in a manner that is necessary to appropriately engage in these uses.[84] Therefore, the protection of technological measures has the potential to pose major obstacles to data access and data use. It constitutes an additional factor that adds legal complexity and uncertainty.

2.3.4 Overview of complicating factors

As the discussion has shown, the current regulatory framework for the work of knowledge institutions contains several sources of legal uncertainty that can make it particularly difficult to rely on statutory use permissions for teaching, learning, research and cultural heritage work:

- narrowly circumscribed and complex copyright exceptions raise the question whether a given form of use falls within the scope the statutory use permission;
- even if a copyright exception, arguably, covers the envisaged use, rightsholders can destabilise the invocation of the copyright exception by doubting full compliance with the open-ended criteria of the three-step test;

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[82] Cf. Margoni/Kretschmer (2021), 26; Geiger/Schönherr (2021), §11.109.
[83] Cf. Hilty (2006), 187.
[84] With regard to TDM projects, however, EU law has explicitly declared subparagraph 4 inapplicable. See Article 7(2) CDSMD. At the same time, Article 3(4) CDSMD authorises rightholders to ensure the security and integrity of the networks and databases where the protected material is hosted. This leads to definitional inconsistency and causes further uncertainty as to the extent to which users or Member States can rely on the protections embedded in Article 6(4) first paragraph ISD. See further Szkalej (2025), 313-315; Nederlandse erfgoedinstellingen (2019), §§ 3 and 6.

- in addition, technological protection measures, such as electronic fences, may make it impossible to rely on use permissions set forth in copyright exceptions.

However, this cascade of risk factors in the regulatory design of the EU copyright acquis is not the full picture. To provide a complete overview, it is necessary to take into account contractual terms that regulate access and use of knowledge resources. As explained above, certain copyright exceptions are only applicable when licences are not available. In addition to this interplay of copyright rules and contracts – established by the law itself – knowledge institutions may resort to licensing in order to escape the legal uncertainty and potential infringement risks that arise from the copyright framework.

Against this background, the following section explores in more detail how contractual practices and a risk-averse attitude of knowledge institutions contribute to a culture of defensive compliance with contractual arrangements rather than an active assertion of user rights evolving from statutory copyright exceptions.[85]

2.4 Legal uncertainty in contractual relations

In addition to the legal complexity arising from narrow copyright exceptions, the open-ended criteria of the three-step test and the solid protection of technological protection measures (see the analysis in the preceding section), contracts for the use of knowledge resources and related information platforms constitute a further source of legal uncertainty for knowledge institutions. To provide examples of destabilising contractual arrangements, we discuss clauses seeking to override statutory use permissions in EU copyright law (2.4.1), indemnity clauses that impose broad liability risks on knowledge institutions (2.4.2), jurisdiction and forum choices that designate the law and courts of a non-EU country (2.4.3) and the need to navigate a whole "stack" of overlapping contracts concerning available content portfolios, access conditions on use platforms, and APIs (2.4.4). Enforcement measures adopted by rightsholders, such as user monitoring, access blocking and service suspension, can moreover lead to a situation where permitted use is no longer carried out because control systems implemented by rightsholders do not offer sufficient flexibility (2.4.5). In addition, every contract renewal cycle may bring new terms and conditions. With the current trend towards shorter contract duration, knowledge institutions cannot rely on continuity. They may have difficulty to provide stability for users, such as researchers in long-term projects (2.4.6).

2.4.1 Contracting out (mandatory) copyright exceptions

EU copyright law makes certain copyright exceptions mandatory, such as the exemption of TDM for scientific research.[86] Nonetheless, publishers and service providers may insert contractual clauses that restrict or erode statutory use permissions in practice. "AI clauses" in terms of service can serve as an example of contractual stipulations that seek to regulate or prohibit the use of licensed materials for developing AI systems. Knowledge institutions thus face the dilemma of either contesting the terms and risking a disruption of service and a legal dispute, or acquiescing to them and limiting use of this knowledge resource even though the law explicitly sets forth a use permission.[87]

[85] CJEU, 29 July 2019, case C-516/17, Spiegel Online, para. 54; CJEU, 29 July 2019, case C-469/17, Funke Medien NRW, para. 70. Cf. Senftleben (2024a), 1477-1478; Aplin/Bently (2020), 75-84.
[86] Articles 3(1) and 7(1) CDSMD. Cf. Senftleben (2022a), 37.
[87] As to the question whether the TDM rule in Article 3(1) CDSMD can be invoked for AI training, see Schack (2024), 114–115; Dornis (2025), 75-76; Dornis/Lucchi (2025), 7 and 20-23 on the one hand, and Regional Court Munich, 11

The interviews indicate that, in practice, knowledge institutions often opt for the latter approach, sacrificing the use privilege granted in copyright law and reinforcing over-compliance culture in which statutory rights are subordinated to contracts. Interviewees confirm that AI/TDM clauses become more and more widespread and differ by publisher and even by year.[88] The feeling that such clauses contradict the statutory baseline is shared among interviewees and especially those with a legal background. Some clauses that the interviewees came across in their work even "exclude any use in connection with AI," thereby potentially restricting not only AI training but also routine scholarly uses, such as translations or use of spread sheets with formulas.[89] One interviewee highlighted that to some service providers, TDM and AI development were one and the same thing, despite the fact that TDM, as defined in EU legislation,[90] clearly includes other uses. Referring to the educational sector, another interviewee gave the example of publishers asking for anti-copying protection in electronic learning environments (which are accessible only for students and lecturers) because they fear that students would feed publishers' content to generative AI systems, such as ChatGPT. Interviewees add that these discussions about TDM and AI-related use create hesitancy in practice: staff cannot always tell whether AI use and AI-related workflows (local vs external models; storage and sharing of derived artefacts) can be permitted in the light of statutory TDM exceptions or must be avoided because they would breach AI prohibitions in licences. They also note that, regardless of the legislative framework, publishers may deny TDM requests when teachers or researches seek clarification.[91]

Further uncertainty arises when licence terms explicitly leave key issues open. For example, a clause announcing to revisit the question of lawful AI use "periodically as needed" effectively reserves discretion to the rightsholder using this open-ended clause, leaving knowledge institutions unable to give a clear answer to users. Such interpretative issues are aggravated by capacity constraints that vary from institution to institution. As one interviewee observed: "There aren't a lot of legal staff in a library. So a lot of questions with little resources."[92]

2.4.2 Use of broad indemnity clauses

Another practice that surfaces from the interviews is the frequent use of indemnity clauses. This practice shifts risk onto institutions. While indemnity clauses are a standard element of contracts in the private sector, they can pose particular difficulties for knowledge institutions, in particular when it is necessary to navigate between legal traditions and different ways of contract drafting. One interviewee remarked that there was a "huge conflict of what is normally done within the [United] States and what is normal practice in Europe." [93] Indemnity clauses may oblige knowledge institutions to indemnify their contractual partner against virtually any legal claim arising from use of the licenced material, including potentially infringing acts of individual researchers and students. If a user were to breach the terms of use, a broad indemnity clause may expose a knowledge institution to open-ended financial risk. These provisions, thus, create uncertainty because institutions cannot predict the scope of potential liability, nor assess whether overly broad indemnity obligations are enforceable.[94] In one case reported during the interviews, the breadth of an indemnity clause provoked the question whether an indemnity insurance would be necessary to make the legal risk manageable. Due to heavy administrative burdens (such as

November 2025, case 42 O 14139/24, GEMA/OpenAI; Stieper (2025), 6-13; Senftleben (2025), 26-27; Szkalej (2025), 311; Quintais (2025a).

[88] Expert interviews, transcript in project archive.

[89] Expert interviews, transcript in project archive.

[90] Article 2(2) CDSMD.

[91] Expert interviews, transcript in project archive.

[92] Expert interviews, transcript in project archive.

[93] Expert interviews, transcript in project archive.

[94] Expert interviews, transcript in project archive.

requiring engaging the rector of the university), this avenue turned out to be unavailable in the end.[95] In another case obtaining indemnity insurance would have required permission from the relevant government department, which also proved impossible in the light of the public nature of the institution and the expectation to act in full compliance with the law.[96]

Larger consortia of knowledge institutions may try to curb the problem by adopting acquisition principles that reject responsibility for user behaviour.[97] Instead of accepting blanket indemnities, they may seek to soften overly burdensome clauses or insist on formulations that merely oblige them to assist rightsholders in addressing misuse – without exposure to unlimited damages.[98] According to interviewees, publishers may refuse to enter into contracts under these conditions, in particular when they have important publication portfolios that give them a strong bargaining position.[99]

If knowledge institutions do not have sufficient bargaining power, broad indemnity clauses operate as deterrents and encourage over-compliance not only with contractual terms but also with rightsholders' broader expectations. In practical terms, institutions may adopt highly conservative approaches that impose strict internal compliance procedures. One interviewee provided the example of a university adopting an internal policy requiring users to sign that they would not exceed a certain download limit for articles from (procured) databases.[100]

2.4.3 Designation of foreign laws and courts

Licensing contracts often include governing law and jurisdiction clauses that designate the law of a non-EU country and the courts of that country as competent. These stipulations raise two types of risks: uncertainty about whether statutory use permissions given under EU copyright law will be recognised, and the deterrent effect of litigation in unfamiliar jurisdictions. According to one interviewee, if an agreement is governed by US law, it is unclear whether mandatory copyright exceptions would prevail, with legal experts offering conflicting views.[101] This creates significant uncertainty because it is not clear whether a mandatory exception will be recognised in disputes adjudicated outside the EU. These types of contractual law and forum determinations weaken confidence in the very rights EU law seeks to guarantee. Even where substantive EU law might still be found applicable in the end, the prospect of having to litigate in a foreign court with unfamiliar, potentially expensive, procedures may be enough to inhibit institutions from asserting their rights.

The result is a pragmatic form of risk aversion: knowledge institutions comply with contractual restrictions as specified in the contract, regardless of their compatibility with national law implementing EU provisions, because the costs and uncertainties of challenging these contractual stipulations abroad are prohibitive. Only some institutions seem capable of pushing back on foreign jurisdiction and forum choices in individual cases.[102] While some interviewees note that US law offers the prospect of invoking the open-ended fair use defence in Section 107 of the US Copyright Act,[103] interviewees generally express a clear preference for their national law because

[95] Expert interviews, transcript in project archive.
[96] Expert interviews, transcript in project archive.
[97] See for example the policy by FinELib, a consortium of Finnish university and libraries: https://www.kiwi.fi/spaces/finelib/pages/337510678/Acquisition+Requirements
[98] Expert interviews, transcript in project archive.
[99] Expert interviews, transcript in project archive.
[100] Expert interviews, transcript in project archive.
[101] Expert interviews, transcript in project archive.
[102] Expert interviews, transcript in project archive.
[103] As to copyright flexibilities that the fair use doctrine may offer, see Samuelson (2024), 1488-1493; Sag (2012), 47; Senftleben (2010), 67; Gervais (2009-2010), 499; Samuelson (2009), 2537; Beebe (2008), 156. However, see also the

of its contents (such as the existence of explicit legal provisions that render certain contractual terms unenforceable) and familiarity with the national framework and procedures.

2.4.4 Amalgam of composite contracts

Licensing in the educational, research and cultural heritage sectors rarely consists of one single contract. Instead, knowledge institutions and their users must often navigate a whole "stack" of contracts. At the top level stands the institutional licence, which is usually negotiated by a library or national purchasing body. Yet, when researchers log in, they may encounter separate terms of use for a specific service, or "click-through" conditions tied to their personal institutional account. In addition, modern forms of computational analysis, such as TDM, may require compliance with a third layer of contractual rules, namely terms regulating the use of a publisher's application programming interface (API).

An API is essentially a controlled gateway for machine-to-machine communication. While it can facilitate secure data access, interviewees report that in individual instances, publishers make the use of their API a mandatory condition for TDM. While ensuring the security and integrity of data hosting systems is a prudent element of information governance,[104] "the real problem is that you're not able to carry out TDM without access collaboration from the publisher."[105] Technical system design may also make access dependent on specific use conditions, additional payments, or content quotas, such as a download cap of 100 journal articles per day.[106]

The accumulation of contractual layers through institutional licences, additional terms for individual platform use, and API conditions creates what can be called "composite contracting." In such an environment, knowledge institutions may have to decide on hierarchy and priority: which provisions should supersede, which ought to yield, and on what basis are such decisions to be made? To find practical solutions, institutions may advise researchers to comply with the strictest applicable terms, thereby potentially sacrificing broader rights secured under the general institutional licence. A further complication is that contracts may also include security or audit requirements, such as an obligation to meet specific technical standards, or tolerate on-site inspections of tools and software.[107] For institutions, such obligations increase costs and create new risks, especially in respect of IT governance and data protection.

In addition, it must be considered that knowledge institutions, such as libraries and universities, typically integrate dozens of licensed services, each governed by their own layers of terms and conditions, into a single discovery platform or local information system. Normally, users do not know the specific terms of contractual agreements. If contractual stipulations are brought to their attention, the question arises whether they have the legal expertise necessary to fully understand the contents and practical implications of contract terms regulating access and use. Sharing the specific conditions attached to an individual knowledge resource in a meaningful way, may therefore be difficult in practice. Nonetheless, an interviewee noted that they had made an attempt to flag individual use conditions for users at the point of access.[108]

nuances added in United States District Court for the Northern District of California, 25 June 2025, case 23-cv-03417-VC, Richard Kadrey/Meta Platforms Inc., part VI.B and C; US Copyright Office (2025), 61-73; Sag (2024), 1916-1920; Rosati (2025), 978, with regard to modern forms of use, such as TDM for AI training.

[104] Cf. Article 3(3) CDSMD.

[105] Expert interviews, transcript in project archive.

[106] Expert interviews, transcript in project archive.

[107] Expert interviews, transcript in project archive.

[108] Expert interviews, transcript in project archive.

2.4.5 User monitoring and access blocking

Whilst composite contracting governs how access is formally structured, user monitoring and access blocking illustrate how it is enforced in practice. Publishers and service providers deploy technical systems that monitor user behaviour and intervene automatically. The most common consequence is the sudden suspension of institutional, or as the case may be, campus-wide access upon detection of what is understood to be excessive content retrieval. Many interviewees confirm incidents, with some reporting dozens per year, where large downloads from services to which an institution has procured access, triggered an automated block.[109] A 2024 survey exploring the use of various access technologies in this sector itemises as triggers for account suspension high download activity (46% of reported suspensions), TDM by researchers affiliated with the institution (11%), use of bibliometric or other automated software tools (11%), large numbers of access requests (11%), requests from unusual IP ranges (6%), and suspensions for no discernible reason (8.5%).[110] One interviewee noted that "it is not always based on clear contractual language specifying that they are allowed to do it and on what conditions they are allowed to do it. They just do it."[111] According to interviewees, ad-hoc restoration occurs after an institution intervenes, often triggering first discussions over liability for user actions or their identity in order to take action.[112] According to an interviewee, renegotiating access to an e-resource can take time – from a few days to several weeks.[113]

As the entire institution may be suspended from access, this practice certainly creates strong incentives for compliance, as earlier studies also indicate.[114] Pressure from below compounds these dynamics. Some interviewees note that when access to a service is interrupted or suspended, researchers and other users tend to immediately turn to librarians and administrators, with urgent demands that prioritise continuity of access over legal nuance. Likewise, users may also press institutions to secure new services without appreciating the legal implications of the contractual terms. This dynamic pushes institutions into accepting contractual terms as the price of meeting user expectations.

Disputes about the suspension of service can also be seen as exponents of legal uncertainty about the legitimacy of use on the basis of statutory copyright limitations. The TDM exceptions,[115] for instance, require lawful access as a precondition to be applicable.[116] When knowledge institutions procure access to content services, this requirement is met. However, when rightsholders retain unilateral power to monitor and block use in respect of activities that legitimately fall under a mandatory copyright exception, such as the TDM rule covering scientific research use, the balance of interest struck in the copyright system is shifted away from its intended design. The result is a climate where institutions may avoid testing the boundaries of exceptions altogether, for fear of triggering automated enforcement that cuts the institution off from the service.

The manner in which monitoring and blocking systems are used transform legal uncertainty into direct operational risk that pushes institutions towards strict compliance, potentially discouraging use which the legislator explicitly exempted from the control of rightsholders when introducing a copyright exception. For example, uncertainty around whether computational data

[109] Expert interviews, transcript in project archive.
[110] Erickson/Stobo (2024), 31.
[111] Expert interviews, transcript in project archive.
[112] Expert interviews, transcript in project archive.
[113] Expert interviews, transcript in project archive.
[114] Erickson/Stobo (2024), 31.
[115] Articles 3 and 4 CDSMD.
[116] Cf. Margoni (2024), 181-184; Szkalej (2025), 307; Synodinou (2025).

analysis[117] or AI-related activities fall under the copyright exceptions for TDM,[118] or breach restrictive licence clauses, implies that staff of knowledge institutions cannot give definitive guidance.[119] In practice, the risk of triggering a service disruption can result in conservative advice or suspension of planned projects. In one case, researchers who sought clarification from publishers about TDM were refused and abandoned their project altogether.[120] Another interviewee noted that, in order to minimise institutional risks, copyright specialists at knowledge institutions may prefer to discourage activities if there is legal risk surrounding the intended use.[121]

2.4.6 Recurring nature of contracting, no retroactivity

Licensing agreements are rarely permanent; they are time-limited bargains that must be renewed. For knowledge institutions this creates a distinctive form of uncertainty that is less about what the contract says and more about how long it will last. Typical contract durations now range from 1 to 3 years, with a recent trend towards shorter terms. Interviewees explained that publishers insist on short cycles because business models, and with that the use of "AI clauses", are evolving rapidly.[122] Every renewal cycle brings new terms and conditions, often introduced unilaterally by rightsholders. Because these changes apply often only prospectively, institutions cannot rely on continuity – what was permissible under one contract for content governed by that contract may be prohibited under the next covering new content.[123]

This constant flux renders contractual use permissions unpredictable and undermines long-term planning. Research projects spanning several years may be disrupted when licence terms change midstream. Institutions may become reluctant to commit to activities that depend on stable access rights. A solution is to negotiate use in perpetuity. However, this stability comes at a price and requires more financial resources. One interviewee observed that in individual instances, publishers offer price reductions if perpetuity rights are surrendered.[124]

2.5 Conclusion

The EU copyright acquis exposes knowledge institutions to considerable legal uncertainty. Combining narrow and complex copyright exceptions with additional scrutiny in the light of the three-step test and protection of paywalls and other electronic fences, it establishes a regulatory environment that can hardly be described as favourable and encouraging. In several cases, knowledge institutions can rely on copyright exceptions only if (collective) licences are unavailable.[125] In other cases, contractual definitions of permissible use enter the picture because lawful access is a precondition for invoking the copyright exception.[126] Finally, contractual terms

[117] Cf. Dermawan (2024), 53-57; Thongmeensuk (2024), 283-284; Senftleben (2022b), 1495-1502; Lemley/Casey (2021), 772-773 and 779-780; Craig (2022), 26-27; Ueno (2021), 150-151; Ducato/Strowel (2021), 334; Carroll (2019), 954

[118] As to the current discussion on this topic, see Schack (2024), 114–115; Dornis (2025), 75-76; Dornis/Lucchi (2025), 7 and 20-23 on the one hand, and Regional Court Munich, 11 November 2025, case 42 O 14139/24, GEMA/OpenAI; Stieper (2025), 6-13; Senftleben (2025), 26-27, on the other.

[119] Expert interviews, transcript in project archive.

[120] Expert interviews, transcript in project archive.

[121] Expert interviews, transcript in project archive.

[122] Expert interviews, transcript in project archive.

[123] Expert interviews, transcript in project archive.

[124] Expert interviews, transcript in project archive.

[125] Articles 5(2) and 8(3) CDSMD; Cf. Rosati (2021) 123-124 & 197.

[126] Article 3(1) CDSMD.

may prevail over copyright exceptions when they are combined with technological protection measures regulating online access and use.[127]

Next to these scenarios where the law itself requires applying an amalgam of copyright exceptions and contracts, or allows combinations of contracts and technological protection measures to neutralise statutory use permissions, the legal uncertainty surrounding copyright exceptions for knowledge institutions may be so high that they resort to bargaining and licensing because contractual negotiation is left as the only reliable avenue for enabling the envisaged use. Stated differently, legal uncertainty often neutralises statutory use permissions in practice and makes contractual agreements with rightsholders the norm – even though, on its face, the law exempts the use in question from the control of copyright holders.

The combined effect of narrow and complex copyright exceptions, institutional caution, and broad user demands is that knowledge institutions have become dependent on licence agreements and negotiations with publishers in which they are placed in a structurally weak bargaining position. Compliance and risk avoidance becomes not only the safest course of action but also appears as the most rational avenue, even if it erodes statutory use permissions for educational, research and cultural heritage work.

In sum, our risk analysis has identified the following sources of legal uncertainty in the regulatory design of the EU copyright acquis and contractual practices that have evolved in the area of education, research and cultural heritage:

- difficulty to determine the scope and reach of narrowly circumscribed and complex copyright exceptions;
- obligation to ensure full compliance with the open-ended criteria of the three-step test;
- protection of technological protection measures;

- contractual arrangements that:
    - seek to override statutory use permissions;
    - contain indemnity clauses that impose broad liability risks;
    - designate the law and courts of a non-EU country;
    - consist of several layers with individual terms and conditions;
    - involve user monitoring, access blocking and service suspension;
    - have a short duration and bring new terms and conditions with renewals.

This interplay of legal uncertainty arising from both EU copyright law and contractual stipulations has far-reaching consequences. Once knowledge institutions no longer rely on statutory use permissions and enter into licensing negotiations, the delicate balance between exclusive rights and copyright exceptions is put at risk. This is a crucial point. Highly asymmetrical bargaining environments and a weaker bargaining position of knowledge institutions can lead to a situation where statutory use permissions are under-exercised and private contractual terms thwart public policy goals which the lawmaker sought to achieve by introducing a copyright exception. As explained above, EU legislation is bound to establish a proper balance between the property right of copyright holders[128] and competing freedom of expression, information, science and education underlying the activities of knowledge institutions.[129] If this overarching policy objective can no longer be realised because of a dysfunctional regulatory and contractual environment in which

[127] Article 6(4), subparagraph 4, ISD. Cf. Hilty (2006), 187. See also Litman (1998), 940-941; Cohen (1998), 1142-1143; Elkin-Koren (1997), 108-113; O'Rourke (1997), 77-81.
[128] Article 17(2) CFR. Cf. Jongsma (2019), 163-168; Griffiths/McDonagh (2013), 75; Geiger (2009), 113.
[129] Articles 11(1), 13, 14(1) CFR. Cf. CJEU, 29 July 2019, case C-476/17, Pelham, para. 60; CJEU, 29 July 2019, case C-469/17, Funke Medien, para. 58.

knowledge institutions must operate, the whole legal framework for educational establishments, research organisations and cultural heritage institutions is at risk of imposing restrictions that are unconstitutional.

Therefore, the foregoing analysis gives rise to the question whether rightsholders should have the opportunity to impose contractual terms that reshape, curtail, or even override statutory user rights.[130] If knowledge institutions themselves pursue an "ask-or-don't-do" approach even in cases where a copyright exception is applicable,[131] EU legislation should intervene to safeguard the regulatory design that provides certain use privileges for knowledge institutions in order to offer sufficient breathing space for freedom of expression, information, science and education in copyright law. Against this backdrop, we turn to a discussion of risk mitigation measures that could support the work of knowledge institutions and re-establish the balance that is indispensable from a fundamental rights perspective.

3. Mechanisms to reduce legal uncertainty

To mitigate the regulatory and contractual frictions identified in the preceding chapter, several legal and governance mechanisms can be considered. Before turning to a more detailed discussion of different options, it seems important to point out that, as public bodies, knowledge institutions tend to take a cautious approach. They may also be particularly sensitive to reputational damage. This can lead to a situation where, instead of testing the waters and adopting a broad interpretation of copyright exceptions and contractual permissions, knowledge institutions only carry out those forms of use that are uncontested – both from a copyright and contractual perspective. Developments in CJEU jurisprudence, such as the decision in *IT Development*, strengthen this risk-averse attitude by confirming that breach of a copyright licence amounts to copyright infringement,[132] thereby exposing knowledge institutions not only to remedies available for breach of contract but also to remedies and sanctions typically associated with violations of intellectual property rights.

Against this backdrop, it is of particular importance to explore legal mechanisms that could reduce the legal uncertainty surrounding copyright exceptions, as well as mechanisms to limit exposure to damages and other sanctions. In the sections that follow, we analyse several potential risk mitigation tools in more detail. For each, we explain why it merits consideration, how it could potentially be designed and implemented, what benefits it could bring, and what risks it entails. The discussion is based on insights gathered during the interviews with specialists at knowledge institutions:

- adopting best-practice guidelines (3.1);
- establishing a copyright advisory and dispute settlement body for knowledge institutions (3.2);
- adopting a general liability exemption (3.3);
- placing a cap on damages (3.4);
- introducing country-of-origin rules for cross-border collaboration (3.5);
- prohibiting unfair terms in contracts with knowledge institutions (3.6).

[130] For an in-depth discussion of this question, see Guibault (2002).
[131] Expert interviews, transcript in project archive.
[132] CJEU, 18 December 2019, case C-666/18, IT Development SAS/Free Mobile SAS, para. 49.

3.1 Best-practice guidelines

A first conceivable mechanism to mitigate legal uncertainty for knowledge institutions is the adoption of comprehensive best-practice guidelines, tailored specifically to the needs of research organisations, educational establishments and cultural heritage institutions. This option appears attractive because a significant share of legal uncertainty in the knowledge institution sector does not stem from a total lack of copyright norms seeking to support their work, but rather from difficulties in interpreting and determining the exact scope of existing provisions. Arguably, best-practice guidelines offer an appropriate soft-law route to reduce legal ambiguity.

Interview evidence suggests that some institutions already try to fill this gap locally. For instance, one expert gave the example of a specialised university advisory group for AI-related queries that, navigating legal complexities with the support of a lawyer, gives tentative answers to researchers' questions. Another interviewee observed that in copyright law the answer is very often "it depends" and that the law changes, which complicates the identification of reliable information.[133] The interviewee also shared that an internal copyright expert group had been set up at their institution, meant to operate as a forum for administrative staff to discuss copyright challenges. Some interviewees also provided examples of recommendations for AI licence agreements. Nevertheless, other interview partners observed that "there's no one libraries can really ask"[134] and that staff of knowledge institutions must often venture their best guess as to valid interpretations of copyright norms because of a lack of in-house expertise.[135]

In the discussion of best-practice guidelines during interviews, knowledge institution experts often looked favourably at this measure, or took a neutral position. Only one interviewee was sceptical. Several interviewees pointed out that guidelines focusing on knowledge institutions specifically could make up for a lack of in-house expertise. Two mentioned flow charts as a concrete form for the guidelines. One interviewee who was neutral to the mechanism stated succinctly that they already had it within their institution, pointing to various interpretative challenges and general copyright competence of its researchers. Those who expressed a more hesitant or negative view described the current copyright framework as too restrictive and narrow, which would result in best practice guidelines that could hardly be expected to promote broader reliance on existing copyright norms. One expert stated that the effectiveness of the solution in practice depended on whether compliance with best-practice guidelines could be relied upon as a defence against infringement claims.[136]

In terms of design, best-practice guidelines could follow various models. A centralised EU-level document, periodically updated and published in all official languages, would provide consistency and comparability across the Union. Alternatively, a decentralised model could be adopted, whereby national expert bodies issue guidelines on national transpositions of exceptions and other mechanisms existing in the relevant Member State, and align their advice with the harmonised EU framework and CJEU case law.

It seems to us that the most effective approach would be a hybrid one, with an EU "core" set of norms, principles and CJEU jurisprudence, supplemented by annexes addressing national variations. This would respect Member State discretion in the case of copyright exceptions that are not mandatory and, thus, not fully harmonised, while ensuring that knowledge institution staff

[133] Expert interviews, transcript in project archive.
[134] Expert interviews, transcript in project archive.
[135] Expert interviews, transcript in project archive.
[136] Expert interviews, transcript in project archive.

and users can find the most solid interpretations of overarching EU rules next to national variations and specific national developments.

The contents of the guidelines would need to be highly practical as its intended recipients ought not to be copyright lawyers but users and knowledge institution practitioners, such as licence acquisition managers that work at the intersection of exclusive rights, copyright exceptions, and contractual bargaining. One possible structure is to organise best-practice advice around "use-case archetypes." These could reflect typical use scenarios, for instance: (i) enabling students to access digital course materials from another Member State; (ii) digitising collections of printed material for long-term preservation; (iii) sharing excerpts of datasets across borders in collaborative research projects; (iv) conducting large-scale TDM on various databases. For each use scenario, the guidelines could map relevant legal provisions, highlight insights from case law and areas of consensus in interpretation, and flag points of divergence that require extra caution. In addition, the guidelines could provide flowcharts or decision trees—"go/no-go" tools that guide teachers, learners, librarians, researchers, and administrators through the compliance process. Moreover, guidelines may provide model artefacts, such as diligence checklists (to demonstrate that lawful access has been verified), template clauses for repository notices, or record-keeping forms that document the steps taken before engaging in a potentially copyright-relevant act.

The creation of such scenario-based guidelines and checklists would not only help institutions act with more confidence but could also serve as evidence of diligence if disputes later arise. The guidelines could thus play a dual role: both preventive, by reducing uncertainty ex ante, and defensive, by equipping institutions and institution users with documentation to demonstrate best efforts to ensure compliance with the copyright framework. Such guidelines could also function as a digital resource for staff and users of knowledge institutions, akin to the "FAQ on copyright" intended for teachers, students, and consumers created and hosted by the European Observatory on Infringements of Intellectual Property Rights.[137]

However, the mechanism is not without risks. Because guidelines are a soft form of regulating behaviour, institutions or institution users may treat them as optional; rightsholders may dismiss them as lacking legal authority.[138] Interviewees voiced this concern, describing how "blanket statements" on permissible uses risk being scrutinised critically and how institutional fear of reputational harm may lead to reticence even where solid copyright advice confirms that a given use privilege covers a certain type of use.[139] Moreover, if the drafting process is dominated by risk-averse expert voices, the guidelines might entrench overly cautious behaviour rather than promoting lawful use of existing breathing space.

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[137] See https://www.euipo.europa.eu/en/observatory/awareness/faqs-on-copyright.

[138] As to soft-law instruments in EU copyright law, strong legal authority can follow from the adoption of guidance and codes of conduct at European level. With regard to copyright, see in particular European Commission, 4 June 2021, *Guidance on Article 17 of Directive 2019/790 on Copyright in the Digital Single Market* COM(2021) 288 final. Cf. Senftleben/Quintais/Meiring (2023), 945-956; Geiger/Jütte (2021), 625. In other areas of EU law, from data protection to consumer protection and financial regulation, the European Commission and agencies have also adopted interpretive guidelines or codes of conduct. For example, see European Data Protection Board, 11 September 2025, *Guidelines 3/2025 on the interplay between the DSA and the GDPR*; European Commission, 29 July 2025, *Guidelines on the definition of an artificial intelligence system established by Regulation (EU) 20241689 (AI Act)*, C(2025) 5053 final; *EU Code of Conduct on countering illegal hate speech online*; *EU Code of Conduct on countering illegal hate speech online+*; *Code of Practice on Disinformation*. See also European Commission, 26 April 2018, *Communication on tackling online disinformation: a European approach* COM(2018) 236 final; European Commission, 10 September 2020, *Assessment of the Code of Practice on Disinformation – Achievements and areas for further improvement*, SWD(2020) 180 final. For the broader debate at the international level, see Senftleben (2024b), 81-89; Höpperger/Senftleben 2007, 61-76; Wichard 2005, 263.

[139] Expert interviews, transcript in project archive.

These risks need not be insurmountable hurdles. They can be mitigated by ensuring balanced representation of different copyright approaches in the advisory bodies developing the guidelines, making the process transparent, and providing periodic updates to reflect the latest legal and technological developments. In cases where copyright experts involved in the development of the guidelines cannot reach full agreement, concrete examples of alternative approaches showing the practical impact of both cautious and assertive interpretations can be given in the guidelines. In this way, knowledge institutions receive an overview of different approaches: from conservative, rather restrictive interpretations to more flexible approaches that may trigger more discussion when implemented in practice.

At the same time, it is important to underline that best practice guidelines can only be as good as the legal framework they are intended to operate in. They do not change the optional nature of copyright exceptions (leading to potentially divergent implementations in EU Member States), nor do they broaden narrow definitions of use privileges that appear restrictive from the perspective of knowledge institutions. Best-practice guidelines represent a support tool. Without any need for legislative interventions, they can be developed and updated, making complex copyright provisions more accessible and predictable in practice. Arguably, such a tool can significantly reduce hesitation in institutions struggling with legal uncertainty on a daily basis, empower lawful use, and provide a first line of defence in an environment where copyright is often perceived as a barrier rather than an enabler of teaching and research.

3.2 Copyright advisory and dispute settlement body

A second conceivable mechanism for mitigating legal uncertainty is the establishment of a specialised advisory or dispute settlement body, at European and/or national level. This option deserves careful consideration because knowledge institutions frequently face situations where decisions cannot be delayed. Researchers preparing a publication, librarians digitising a collection, or universities entering into cross-border collaborations often need answers within days or weeks, not years. In such contexts, legal uncertainty or a threat of legal action regardless of merit can exert a disproportionate chilling effect and dissuade legitimate use in favour of over-compliance.[140] The rationale for an advisory and dispute-settlement body is to translate copyright rules into practical, context-specific guidance and provide a structured space where disagreements can be addressed before they escalate into costly and adversarial litigation.

Although diverse in design and overlapping in function, existing national bodies with an advisory and/or dispute settlement function can be grouped into four functional clusters that together illustrate how copyright governance can operate beyond the courts:

- at one end of the spectrum are supervisory and regulatory authorities, which primarily oversee the functioning of CMOs. For example, the Belgian *Service de Contrôle des sociétés de gestion*, [141] the Dutch Copyright Supervisory Board (*College van Toezicht Auteursrecht*),[142] or the Greek Hellenic Copyright Organisation.[143] Their common task is to ensure transparency, accountability, and lawful operation of CMOs, thereby maintaining trust in collective rights management and royalty distribution;

[140] As to the discussion on the deterrent effect of legal uncertainty in copyright law, see Senftleben (2020), 135-138; Izyumenko (2020), 440-446; Adler (2016), 566; Aufderheide/Jaszi et al. (2014), 5; Frosio (2014), 378-380; Morrison (2008), 131-136; Gibson (2007), 913; Cohen (2006), 154-156; Aufderheide/Jaszi (2004), 29-30; Lessig (2004), 185-188; Coombe (2003), 1174; Amabile (1996), 115-120; 231-232.

[141] https://economie.fgov.be/fr/themes/propriete-intellectuelle/droits-de-propriete/droits-dauteur-et-droits/droits-dauteur/service-de-controle-des

[142] <https://www.cvta.nl/>.

[143] https://opi.gr/en/hco/about-o-p-i/

- a second cluster consists of tariff-setting and remuneration bodies that anchor the copyright system in administrative governance rather than litigation. These bodies either set tariffs or step in when negotiations between rightsholders and users break down and a neutral mechanism is needed to establish appropriate tariffs. For example, the Austrian Urheberrechtssenat,[144] the Belgian *Commission consultative pour la copie privée*,[145] the Dutch *Stichting Onderhandelingen Thuiskopievergoeding*,[146] the French *Commission pour la rémunération de la copie privée*,[147] the German *Schiedsstelle beim Deutschen Patent- und Markenamt*,[148] the Polish *Komisja Prawa autorskiego*,[149] the Slovenian *Svet za avtorsko parvo*,[150] or the Spanish *Comisión de Propiedad Intelectual*;[151]

- a third cluster is made up of advisory and expert opinion bodies that, rather than resolving disputes, clarify legal uncertainties and provide authoritative guidance, helping market actors interpret the legal framework, anticipate legal risks and avoid unnecessary disputes. Some of these bodies are established under law while others are industry bodies. The Belgian *Conseil fédéral de la propriété intellectuelle*, [152] the Finnish *Tekijänoikeusneuvosto*, [153] and the Swedish *Svensk Forms Opinionsnämnd* [154] (which is industry established) can serve as examples;

- a fourth cluster includes arbitration, mediation and conciliation bodies that establish an alternative to lengthy litigation, such as the Danish *Ophavsretslicensnævnet*,[155] the Dutch *Geschillencommissie Auteurscontractenrecht*[156] and the Estonian *Autoriõiguse komisjo*.[157] The UK Copyright Tribunal[158] represents another example of a body resolving licensing disputes between copyright holders and users.

For knowledge institutions, the model underlying the third cluster – a body providing advice and expert opinions on complex copyright issues – seems particularly important. The advantage is flexibility and focus on details: it is conceivable to establish advisory bodies which can respond more quickly than statutory regulators and provide advice on specific use dilemmas brought to their attention by knowledge institutions.

The approach underlying the fourth cluster – a specific mediation and arbitration body – could give knowledge institutions reassurance that controversies with regard to the scope of a use privilege in copyright law, or a contractual use permission, need not inevitably lead to long and

144 See https://www.justiz.gv.at/aufsichtsbehoerde/aufsichtsbehoerde-fuer-verwertungsgesellschaften/beschwerdemoeglichkeiten/urheberrechtssenat.2c94848a5af59e24015c1a6ff6b95298.de.html.
145 See https://economie.fgov.be/fr/themes/propriete-intellectuelle/institutions-et-acteurs/commissions-droit-dauteur/commission-consultative-pour-0.
146 See https://www.onderhandelingthuiskopie.nl/.
147 See https://www.culture.gouv.fr/nous-connaitre/organisation-du-ministere/commission-pour-la-remuneration-de-la-copie-privee.
148 See https://www.dpma.de/digitaler_jahresbericht/2021/jb21_en/arbitration_boards.html#schiedsstellen_2.
149 See https://www.gov.pl/web/kultura/komisja-prawa-autorskiego-informacje-ogolne.
150 See https://www.gov.si/zbirke/delovna-telesa/svet-za-avtorsko-pravo/.
151 See https://www.cultura.gob.es/cultura/propiedadintelectual/informacion-general/gestion-en-el-ministerio/comision-propiedad-intelectual.html.
152 See https://economie.fgov.be/fr/themes/propriete-intellectuelle/institutions-et-acteurs/conseil-de-la-propriete.
153 See https://okm.fi/tekijanoikeusneuvosto.
154 See https://svenskform.se/en/opinionsnamnd/.
155 See https://kum.dk/ministeriet/organisation-og-institutioner/bestyrelser-raad-naevn-og-udvalg/ophavsretslicensnaevnet.
156 See https://www.degeschillencommissie.nl/over-ons/commissies/auteurscontractenrecht/.
157 See https://www.epa.ee/en/copyright/copyright/copyright-committee.
158 See https://www.gov.uk/government/organisations/copyright-tribunal.

costly litigation. However, beneficial practical effects of a mediation and arbitration body will depend on whether knowledge institutions can bring a dispute before the national or European institution set up for this purpose even if the contract concluded with a rightsholder, such as an academic publisher, contains the choice of a different forum.

In the EU copyright acquis, Article 13 CDSMD already provides for a negotiation mechanism that requires Member States to establish or designate impartial bodies or mediators to facilitate agreements between rightsholders in the audiovisual sector and video-on-demand services, thereby lowering transaction costs and helping to overcome licensing deadlocks. Article 21 CDSMD requires the existence of voluntary alternative dispute resolution procedures in cases concerning the transparency obligation and contract adjustment rights of authors and performers, with representative organisations empowered to act on their behalf.

Outside the copyright framework, for example Article 21 of the Digital Services Act (DSA) establishes a broader system of out-of-court dispute settlement enabling users to contest online platform content moderation decisions (e.g. removals under Article 20 DSA). It gives users the right to bring disputes before certified independent bodies instead of relying solely on the platform's internal complaint system. While not requiring Member States to establish such bodies,[159] the provision creates a framework that enables interested market participants to create them. However, the provision requires that any such bodies be impartial, expert, accessible, efficient, and certified by the national Digital Services Coordinator (DSC). DSCs supervise, certify, monitor, and when necessary revoke these bodies, while the Commission publishes a Union-wide list.[160] In the area of consumer protection law, the Directive on Consumer Alternative Dispute Resolution (DCADR) sets up a framework for access to, and procedures for, out-of-court resolution of domestic and cross-border disputes originating from contractual obligations between consumers and traders. Unlike the DSA, this latter Directive requires Member States to facilitate access to alternative dispute resolution entities and procedures,[161] and similarly builds on the principles of expertise, independence, and impartiality.[162]

These examples show that advisory and dispute-resolution bodies can be tailored to different needs. Their legitimacy depends on a careful balance of independence, expertise, and stakeholder involvement. The aforementioned CDSMD and DSA provisions reflect a preference for structured, non-judicial mechanisms that offer impartial, accessible expertise and provide for procedural safeguards in alternative dispute resolution, without affecting any rights to bring formal legal proceedings in court.

In our interviews, two experts were in favour of a designated advisory and dispute settlement body for the knowledge institution sector, on condition that its decisions were binding. Otherwise, they would not carry sufficient weight. Two other experts were hesitant towards a dispute settlement body but very favourable towards an advisory body. Another expert noted that while a dispute settlement body may seem beneficial in theory, disputes were generally resolved before escalation in practice. This reality would reduce the value of such a mechanism. This observation was echoed by other experts, one of whom explained that such a body existed in their Member State but did not change the equation because waiting times were long, and it was possible to go to court afterwards.[163] In contrast to these sceptical views, the majority of respondents were neither strongly against nor in favour of a specific advisory and dispute settlement body.

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[159] Recital 59 DSA.
[160] See further https://digital-strategy.ec.europa.eu/en/policies/dsa-out-court-dispute-settlement.
[161] Article 5 DCADR.
[162] Article 6 DCADR.
[163] Expert interviews, transcript in project archive.

From a practical perspective, designing a specific advisory and dispute settlement body for the knowledge institution sector requires choices about structure, scope, and authority.[164] A centralised EU-level body would provide consistency, visibility, and a single point of reference. It could issue advisory opinions and maintain a public repository of anonymised cases. This model would be particularly effective in addressing cross-border projects, where fragmentation creates the greatest friction from a pan-European perspective. However, such a body might be perceived as remote from national practices and less accessible for smaller institutions. An alternative model would be a network of national advisory bodies, each providing guidance within its jurisdiction, coordinated through a European board to ensure convergence, mirroring the structure of the European Data Protection Board[165] and national supervisory authorities (data protection authorities) under the General Data Protection Regulation (GDPR). This would be more responsive to local legal realities. At the same time, it risks perpetuating divergence if coordination is weak. A hybrid model may therefore seem most promising: national nodes handling day-to-day queries, supported by an EU-level entity that curates common standards, produces comparative analyses, and facilitates dispute resolution in cross-border cases.

The functions of the body should be diverse but complementary. First, it is conceivable that it issues advisory opinions. These would be non-binding but reasoned analyses that institutions can rely upon when deciding whether to proceed with a project. An advisory body opinion would not prevent a rightsholder from challenging the use at issue in court, but it would provide persuasive evidence that the institution acted diligently and in good faith. Second, it may facilitate mediation and early neutral evaluation. Many friction points between institutions and publishers revolve around questions of scope or licensing conditions. It is conceivable that a neutral forum could help parties reach pragmatic settlements without recourse to litigation. At the same time, many interviewees recognised that litigation was not widespread in the knowledge institution sector. While many reasons may explain this, one interviewee remarked that knowledge institutions and content providers needed to build a relation of trust.[166] This statement sheds light on the mutual dependency of knowledge institutions and content providers that possibly shapes both parties' behaviour. As another expert put it, "[w]e both try to stay friends. Publishers want our money, we want their information. So we don't start any lawsuits."[167] In individual instances concerning particularly large knowledge institutions that often have significant copyright expertise, lack of litigation is accounted for as a positive factor in risk assessments..[168] At the same time, some institutions with such expertise follow developments in more litigious jurisdictions. Third, an advisory and dispute settlement body may act as a horizon scanner, collecting data on recurring problems, such as choice-of-law clauses that override EU copyright exceptions, and feeding this evidence back into the policy process. Fourth, the body and its advisory opinions could support evidence collection in connection with other mechanism that we consider in this study. As two interviewees implied, linking the advisory mechanism to a liability shield or to authoritative best-practice materials would strengthen its practical impact and legitimacy.[169]

The operational design of the body would need to ensure timeliness and transparency. As mentioned above, several interviewees expressed concerns about long waiting times.[170] Accordingly, service-level targets could be introduced; for example that advisory opinions be delivered within 30 days, with accelerated procedures for urgent cases. Summaries of opinions

[164] In case of expert groups set up by a decision of the European Commission, the horizontal rules in Commission Decision C(2016) 3301 final establish the necessary framework.
[165] See https://www.edpb.europa.eu/edpb_en.
[166] Expert interviews, transcript in project archive.
[167] Expert interviews, transcript in project archive.
[168] Expert interviews, transcript in project archive.
[169] Expert interviews, transcript in project archive.
[170] Expert interviews, transcript in project archive.

could be published, anonymised where necessary, to build up a body of "soft precedent" that institutions can consult. Some experts also raised concerns that the composition of an advisory body could make it susceptible to external influence, potentially leading to an approach that aligns more closely with industry perspectives on copyright.[171] To dispel this concern, strict transparency obligations could be adopted, requiring balanced stakeholder participation and conflict-of-interest declarations.

In sum, an advisory and dispute settlement body could make copyright provisions for knowledge institutions more predictable and resilient against commercial strategies seeking to destabilise use privileges for educational establishments, research organisations and cultural heritage institutions. It would create a channel through which systemic problems in the copyright system could be identified and addressed. In an era where teaching, learning and research are increasingly collaborative, cross-disciplinary, digital, and cross-border, such a mechanism may be an important step towards more effective use of existing flexibilities in the EU copyright acquis.

At the same time, certain risks must be recognised. There is a danger of capture, with one group of stakeholders dominating the advice work, as pointed out by many interviewees. This would have to be mitigated by ensuring balanced representation and full transparency about the process of recruiting experts for the advisory body. The non-binding nature of advisory opinions poses additional difficulties. It might limit their authority. However, this could be offset if funders, national authorities, and courts recognise them as persuasive evidence. There is also a resource risk: if the advisory body becomes overloaded with queries, delays could undermine its value in practice. This requires careful triage, scalable staffing, and the publication of reusable materials to avoid duplication. The interviews indicate that, in the end, beneficial effects of an advisory and dispute settlement body may depend less on its formal legal powers than on its operational credibility, timeliness, and neutrality.

3.3 Liability privilege

A third mechanism to mitigate legal uncertainty in the area of copyright is the introduction of a statutory liability privilege for staff of knowledge institutions acting diligently and in good faith. The development of this mechanism seems advisable because copyright is a regime of strict liability: infringement does not depend on bad faith or other subjective intentions. It can occur even without intent and awareness of copyright protection. Remedies may be sought regardless of whether the act was negligent.

In practice, this means that teachers, researchers, librarians, and other staff working within knowledge institutions, or alternatively the knowledge institutions themselves, may be exposed to liability and damage claims even though they engage in an act of use that, to the best of their knowledge, is legitimate. Even when they had reasonable grounds to believe their use was lawful, the potential for being threatened with legal action can have a chilling effect.[172] This dynamic offers the possibility of using allegations of copyright infringement as a negotiation tactic, having regard to the fact that knowledge institutions and staff will often prefer to avoid any risk. Where the use of copyright-protected material is characterised by high information asymmetry between

[171] Expert interviews, transcript in project archive.
[172] As to the discussion on the deterrent effect of legal uncertainty in copyright law, see Senftleben (2020), 135-138; Izyumenko (2020), 440-446; Adler (2016), 566; Aufderheide/Jaszi et al. (2014), 5; Frosio (2014), 378-380; Morrison (2008), 131-136; Gibson (2007), 913; Cohen (2006), 154-156; Aufderheide/Jaszi (2004), 29-30; Lessig (2004), 185-188; Coombe (2003), 1174; Amabile (1996), 115-120; 231-232.

users and rightsholders,[173] the complexity of the copyright framework is moreover likely to have a dissuasive effect in a risk-averse environment.

Interview evidence confirms that this perception is widely shared. The majority of interviewees emphasised that a liability exemption could be helpful. More specifically, it could allow knowledge institutions to make a proper risk assessment in the light of diligence requirements and copyright compliance checks in their own workflows. At the same time, many interviewees stressed that the effectiveness of a specific liability privilege would depend on the conditions of application and the definition of diligence. Aligning with these concerns, some interviewees wondered how one could document diligence. Others brought up the relationship between staff and institutional responsibility, noting the different uses made by institutions, especially libraries and users, and asking whether diligence assessments and documentation should take place on an individual or institutional level. One interviewee considered that with large-scale digitisation projects, it might become unfeasible to demonstrate diligence if proof was required for each individual work.[174]

Conversely, other respondents argued that knowledge institutions should not rely on liability privileges to solve structural problems. One interviewee suggested that instead of seeking to mitigate consequences, knowledge institutions had to acknowledge their copyright responsibility and strengthen their capacity to manage copyright risk through targeted legal training. This was indirectly echoed by another interviewee who noted that there was the issue of sufficient copyright expertise and that there were not a lot of lawyers working in knowledge institutions. Others viewed a liability exemption as a pragmatic complement rather than a substitute for measures to enhance copyright knowledge. One interviewee linked the mechanism to the problem of broad indemnity clauses, noting that it could provide much-needed relief in situations where knowledge institutions assumed disproportionate contractual risks.[175] According to the expert, these situations created significant stress but were difficult to avoid given their responsibility to offer teachers, learners and researchers broad access to knowledge resources.

Considering these interview insights, a liability exemption would primarily serve the objective to recalibrate the standard risk distribution resulting from the configuration of copyright law,[176] and acknowledge the complex realities in which knowledge institutions must operate, fostering an environment of greater certainty and confidence in decision-making. For example, the work of librarians extends beyond the physical stewardship of books and archives to management and governance of digital knowledge resources. As explained in the preceding chapter, this requires the ability to navigate a complex landscape of licensing agreements, copyright restrictions, and technological infrastructures to ensure that researchers and the wider public enjoy reliable and lawful access to information. It may involve routines such as negotiating access terms with publishers, configuring authentication systems that balance ease of use with security, curating metadata to make digital collections discoverable, or developing policies that align institutional practices with broader open access and data governance frameworks. These activities require both technical precision in maintaining the integrity and interoperability of digital collections, and normative judgment to realise and safeguard the institution's mission. Shielding diligent staff from liability may encourage broader reliance on use privileges in copyright law and give more confidence to carry out legitimate activities, without the fear of becoming embroiled in legal disputes.

Seeking to devise a well-functioning liability privilege for knowledge institutions, it is of particular importance to define diligence criteria appropriately. In comparative perspective, existing risk

[173] Szkalej (2025), 313; Stančiauskas et al. (2024), 147.
[174] Expert interviews, transcript in project archive.
[175] Expert interviews, transcript in project archive.
[176] For a more detailed discussion of this objective, see Senftleben (2024a), 1505-1507.

reduction regimes in the UK and the US offer potential sources of inspiration. The copyright laws of these countries already contain certain mechanisms that recalibrate liability for knowledge institutions in specific circumstances.

In the UK, Section 42A of the Copyright, Designs and Patents Act 1988 (CDPA) allows a librarian to rely on a signed declaration from a user requesting a single copy of published material that it will be used for lawful purposes (non-commercial research or private study), if the librarian is not aware that the declaration is false. If the declaration later proves false, the user, not the librarian, bears liability.[177] For unpublished works, a comparable provision appears in Section 43 CDPA. This additional rule applies to librarians and archivists.[178] Both rules are confined to small-scale, individual acts of copying.

In the US, § 504(c)(2) of the Copyright Act[179] governs statutory damages, allowing courts to reduce the minimum award to 200 USD per work[180] where the infringer "was not aware and had no reason to believe that his or her acts constituted an infringement of copyright."[181] A further sentence in the same subsection provides that a court shall not award any statutory damages against an employee or agent of a nonprofit educational institution, library, or archive acting within the scope of their employment who "believed and had reasonable grounds for believing"[182] that his or her use of the copyright-protected work was a fair use in the sense of the US fair use doctrine laid down in § 107.[183] It is important to emphasise that § 504(c)(2) does not constitute a full liability exemption for staff of knowledge institutions. It merely limits the availability of statutory damages and leaves unaffected other remedies, such as actual damages, profits, or injunctions.[184] Nonetheless, because statutory damages may be awarded without proof of actual loss,[185] the provision reflects the legislative intent to shield non-profit knowledge institutions from disproportional financial exposure arising from misinterpretations of copyright law in good faith.[186]

As the wording of § 504(c)(2) of the US Copyright Act demonstrates, the crux of a liability privilege lies in the formula used to define the requirement of diligence and good faith. A liability privilege can hardly be expected to reduce legal uncertainty and encourage broader reliance on copyright exceptions supporting the work of knowledge institutions, if the criteria for establishing diligence and good faith are vague and open to divergent interpretations themselves. The diligence formula in § 504(c)(2) – "was not aware and had no reason to believe" and "believed and had reasonable grounds for believing" – leads to tests of awareness and reasonableness that can be interpreted in different ways. Which degree of copyright knowledge serves as a reference point for making the assessment? Should the test be based on an average teacher, researcher, librarian, archivist etc. who, without being a lawyer or copyright expert, has some knowledge of relevant provisions in the EU copyright acquis? If so, how much digging and use of copyright information is necessary to form a good faith belief that a given use does not amount to infringement? Which information on

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[177] s. 42A(5) CDPA 1988. See further Caddik/Harbottle/Suthersanen (2024), 8-197 – 8-199, opining however that compliance with the conditions increases staff costs , whilst arguably doing little to prevent abuses of the system.
[178] Further Caddik/ Harbottle/Suthersanen (2024), 8-202 – 8-206.
[179] US Copyright Act, 17 U.S.C.
[180] Ninth Circuit Jury Instructions Committee, *Manual of Model Civil Jury Instructions for the District Courts of the Ninth Circuit*, 2017 (updated March 2025), 537 (17.35), available at https://www.ce9.uscourts.gov/jury-instructions/sites/default/files/WPD/Civil_Instructions_2025-03.pdf .
[181] US Copyright Act, 17 U.S.C. § 504(c)(2).
[182] US Copyright Act, 17 U.S.C. § 504(c)(2).
[183] As to the US fair use doctrine, see Samuelson (2024), 1488-1493; Sag (2012), 47; Senftleben (2010), 67; Samuelson (2009), 2537; Gervais (2009-2010), 499; Beebe (2008), 156.
[184] Reese (2007), 183.
[185] The statutory damages regime offers an alternative to recovering actual damages, as follows from US Copyright Act, 17 U.S.C. § 504(a). *See further* on statutory damages in copyright law Depoorter (2019), 400.
[186] Samuelson/Wheatland (2009) 474-475.

copyright is sufficiently accessible, accurate, balanced and reliable to constitute a source which the average staff member is expected to consult?[187]

Despite these difficulties, the benefits of a liability privilege seem significant. By shielding diligent staff and knowledge institutions from liability for copyright infringement and breaches of complex contractual terms,[188] a specific liability rule for the sector would remove one of the most significant tools for strategic leverage from publishers and other copyright holders: threat of (personal) liability. This could rebalance negotiations and bring institutional compliance into focus rather than individual struggles with complex copyright and contract frameworks. It may also encourage teachers, researchers, librarians and archivists to pursue innovative projects, knowing that they will not be personally targeted as long as they act responsibly. Knowledge institutions, in turn, would have incentives to adopt clear and robust policies with regard to copyright diligence as their liability would be contingent on being able to demonstrate that staff operated under appropriate procedures.

Nevertheless, challenges exist. As already pointed out, there is a risk that the burden of proving diligence and good faith becomes too heavy. If the threshold for compliance is set too high, the liability privilege loses much of its practical value. In this respect, one interviewee observed that some knowledge institutions already find existing diligence requirements, such as the rules for out-of-commerce materials[189] and orphan works,[190] overly burdensome. A liability rule with a comparable level of complexity may remain ineffective in many cases.[191] To mitigate this risk, several approaches could be taken:

- *best-practices guidelines and advisory body opinions*: as suggested by several interviewees,[192] the liability privilege could be linked with other measures discussed above. Best-practice guidelines could be developed to create clarity about diligence requirements. If an advisory body for knowledge institutions is established, it could also provide diligence protocols and issue advisory opinions. Teachers, researchers, librarians and archivists could rely on these guidelines and protocols to ensure that they fulfil the diligence requirements for invoking the liability privilege;
- *larger institutions developing and sharing diligence protocols*: in the absence of best-practice guidelines and advisory body opinions, larger knowledge institutions with solid copyright expertise may be able to develop diligence protocols for different types of uses and different complexities in copyright and contract frameworks. If these protocols are shared in the sector, smaller institutions can benefit as well. Knowledge institutions can also pool copyright expertise in specialist workshops where diligence protocols that have been developed in different institutions are compared, discussed and harmonised;

[187] As to similar questions arising in the context of out-of-commerce materials and orphan works, see the diligent search requirements in Article 3 OWD and the conditions for an out-of-commerce presumption in Article 8(5) CDSMD. Cf. Rosati (2021), 172-174; Van Gompel (2012), 1349, 1359-1361; Beunen/Guibault (2011), 223; Van Gompel (2007), 669-702; Van Gompel/Hugenholtz (2010), 61-71.

[188] As to the interplay between contractual terms and copyright infringement, see CJEU, 18 December 2019, case C-666/18, IT Development SAS/Free Mobile SAS, para. 49.

[189] As to diligence and good faith requirements in this area, see Article 8(5) CDSMD stipulating that: "[a] work or other subject matter shall be deemed to be out of commerce when it can be presumed in good faith that the whole work or other subject matter is not available to the public through customary channels of commerce, after a reasonable effort has been made to determine whether it is available to the public."

[190] See Article 3(1) OWD specifying that "[f]or the purposes of establishing whether a work or phonogram is an orphan work, [publicly accessible libraries, educational establishments and museums, as well as archives, film or audio heritage institutions and public-service broadcasting organisations] shall ensure that a diligent search is carried out in good faith in respect of each work or other protected subject-matter, by consulting the appropriate sources for the category of works and other protected subject-matter in question."

[191] Expert interviews, transcript in project archive.

[192] Expert interviews, transcript in project archive.

- *notice-and-takedown models*: under existing EU legislation, cultural heritage institutions must first conduct a diligent search that fulfils specific criteria [193] and verify the unavailability of protected works in customary channels of commerce[194] before they can make out-of-commerce materials and orphan works available on the internet.[195] With regard to webpages and other online materials that become part of cultural heritage collections as a result of webharvesting,[196] a different approach is conceivable.[197] This alternative approach could be modelled on the notice-and-takedown system known from the regulation of online platforms (not being online content-sharing service providers)[198] hosting third-party content:[199] as long as the hosting platform does not have knowledge and is not aware of copyright infringement, it is only obliged to take immediate action and remove infringing content when a rightsholder sends a sufficiently substantiated notification.[200] With regard to online resources collected in national domain crawls and other webharvesting projects, this notice-and-takedown approach has already proven to greatly enhance the accessibility of historical versions of the internet.[201] Without the liability privilege, cultural heritage institutions are likely to limit access to harvested webpages etc. to dedicated reading terminals on their premises.[202]

3.4 Cap on damages

A fourth conceivable mechanism to reduce legal uncertainty is the introduction of a statutory cap on damages, or at least a structured and predictable methodology for calculating potential damages owed by knowledge institutions. This option merits consideration because the chilling effect of copyright risk [203] is not only a matter of legal ambiguity but also of financial unpredictability. Institutions can often tolerate some level of uncertainty about whether an activity is lawful. What they find intolerable is the possibility that, if they are wrong, the resulting damages award could be ruinous. The threat of large, unquantifiable damages claims creates a powerful incentive to avoid even borderline lawful uses, risks leading to over-compliance and the abandonment of valuable scientific projects.

Article 3(2) of the Enforcement Directive (ED) requires damages to be effective, dissuasive, and proportionate. In practice, however, courts across the EU apply damage rules differently, ranging from awards based on lost profits to lump sums calculated on hypothetical licence fees.[204] For

[193] Article 3 OWD.
[194] Article 8(5) CDSMD; Cf. Rosati (2021) 172-173.
[195] As to out-of-commerce works, see the copyright exception in Article 8(2) CDSMD. However, see also the collective licensing proviso in Article 8(3). As to orphan works, see Article 6(1) OWD.
[196] For a discussion of webharvesting practices, see Vlassenroot/Chambers et al. (2019), 85-111; Rogers (2019), 42-58; de la Durantaye (2018), 139-140; Brügger (2018); Brügger/Laursen/Nielsen (2017), 64.
[197] As to the need for a different approach in the light of insurmountable licensing hurdles, see de la Durantaye (2014), 252-253.
[198] As to this specific category, see Articles 17 and 2(6) CDSMD. Cf. Senftleben/Quintais/Meiring (2023), 938-939.
[199] Article 6(1) DSA.
[200] Cf. CJEU, 22 June 2021, joined cases C-682/18 and C-683/18, YouTube and Cyando, paras 84-87, 132-143; CJEU, 23 March 2010, case C-236/08, Google France and Google, 2010, paras 114–18; CJEU, 12 July 2011, case C-324/09, L'Oréal/eBay, paras 120–22. For commentary, see Senftleben/Angelopoulos (2020); Kulk (2018); Angelopoulos (2016); Husovec (2017); Peguera (2009), 481.
[201] Cf. Senftleben/van Gompel et al. (2021), 146.
[202] Article 5(3)(n) ISD. Cf, Senftleben/van Gompel et al. (2021), 145.
[203] Cf. Senftleben (2020), 135-138; Izyumenko (2020), 440-446; Adler (2016), 566; Aufderheide/Jaszi et al. (2014), 5; Frosio (2014), 378-380; Morrison (2008), 131-136; Gibson (2007), 913; Cohen (2006), 154-156; Aufderheide/Jaszi (2004), 29-30; Lessig (2004), 185-188; Coombe (2003), 1174; Amabile (1996), 115-120; 231-232.
[204] See on the different practices within the Member States the comparative report prepared by EUIPO (OHIM) in 2014 after implementation of Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 [2004] OJ L157/45 OHIM, *Observatory Update on Costs and Damages* (2014), available at

knowledge institutions acting in good faith and without commercial intent, these methods can still generate significant and unpredictable liability. Introducing a cap or formula specific to the educational, scientific and cultural heritage sector would create greater certainty. Importantly, such a mechanism would not deprive rightsholders of compensation. It would merely keep liability within foreseeable limits where knowledge institutions have acted responsibly.

As in the case of a liability exemption, a fundamental issue is caused by the contractual dimension of damages. Whereas damages constitute a standard remedy for infringement of a (intellectual) property right, they may also be regulated in agreements and concern both infringement of a right and breach of contract. In a legal system governed by freedom of contract, it is usually up to the parties to determine the consequences of breach of contract, which may incentivise commercial contractual partners of knowledge institutions to set forth broad indemnity clauses, flanked by considerable contractual penalties. Our interviews confirmed this practice. Against this backdrop, it seems appropriate to introduce a damages cap concerning both liability for copyright infringement as well as liability arising out of contract.[205]

Several design variants are conceivable. One option is a hard cap, setting an absolute maximum (for instance, a fixed amount or a percentage of a project budget) for damages in cases involving non-commercial institutional use. Another is a tiered cap, with lower ceilings for first-time or inadvertent infringements and higher ceilings for repeated or reckless conduct. A third option is a formulaic methodology whereby damages are calculated based on a reasonable licence fee in the sector. It is imaginable that these approaches could be complemented by a settlement safe harbour whereby knowledge institutions benefit from a reduction of exposure to damage claims when they submit to mediation through the advisory body discussed above and agree to corrective steps.

While a cap on damages does not constitute a carte blanche to infringe copyright, it would allow knowledge institutions to evaluate projects with more confidence, knowing the maximum exposure in case their diligent appreciation of the lawfulness of use turns out to be incorrect. Interview responses revealed, however, that this mechanism is controversial. Only one expert was clearly favourable, considering that a cap on damages would add a valuable new facet to the risk equation.[206] One other expert echoed that benefit in the context of concretising risk while negotiating the terms of a licence or seeking consultation from in-house legal counsel to be able to make a decision, providing the example of an access contract for 1000 EUR per year to a small title accessed by only a handful of users but to which was attached a liability clause for "huge damages."[207] However, that same expert expressed concern that it would be very difficult to include such a cap in the licence itself. Other experts noted that publishers often introduced caps themselves, but "only for their liability,"[208] with one expert suggesting that, to achieve symmetry, "automatic reciprocity might be useful here; if publishers apply such a cap, then it should apply on both sides."[209] A further expert explained that when knowledge institutions cannot negotiate a risk away, they seek to quantify it by clarifying what the maximum amount of acceptable compensation is.[210] Informal soft caps discussed in negotiations, thus, already play a role as risk-

https://www.euipo.europa.eu/en/publications/observatory-update-on-cost-and-damages. See also an analysis of CJEU case law Szczepanowska-Kozłowska (2023).

[205] Cf. CJEU, 18 December 2019, case C-666/18, IT Development SAS/Free Mobile SAS, para. 49.

[206] Expert interviews, transcript in project archive.

[207] Expert interviews, transcript in project archive.

[208] Expert interviews, transcript in project archive.

[209] Expert interviews, transcript in project archive.

[210] Expert interviews, transcript in project archive.

limiting devices. From this perspective, a cap on damages appears as an extension of existing contractual practice.

The large majority of interviewees were neutral to hesitant; three were mainly negative. Several interviewees doubted the behavioural impact of the measure. One interviewee considered that a cap would not add much because "we are risk averse. If you still have to pay some amount, we won't do it."[211] This was echoed by other interviewees. One noted that "even a limited amount can still very much frighten an institution,"[212] while another stated succinctly that "any fine is too high."[213] Another concern was reputational risk. Several interviewees worried that introducing a cap on damages could undermine trust among rightsholders and jeopardise access to licensed resources. One expert explained that, even if embedded in legislation, a cap on damages might be perceived as "openness to bend the rules."[214] Others warned that it "might very well damage relations with rightholders"[215] and "could make us fearful of not getting licence agreements at all."[216] One interviewee summed up this shared concern as follows: "it would be very bad if publishers don't provide access anymore if they don't trust us."[217]

3.5 Country-of-origin rule for research

A fifth conceivable mechanism is the adoption of country-of-origin rules, linking an act of use to one specific territory instead of requiring compliance with different sets of copyright exceptions in several countries.[218] The Satellite Broadcasting Directive (SBD) and Online Broadcasting Directive (OBD) apply country-of-origin principles to certain transmissions (and in case of the latter also reproductions), ensuring that acts are deemed to occur where the broadcaster is established.[219] The Cross-Border Portability Regulation (CBPR) allows consumers to access services across borders by deeming use to occur in the Member State of subscription.[220] With regard to the activities of knowledge institutions, the CDSMD already deems the use of protected works for digital and cross-border teaching, and the use of out-of-commerce works, to solely occur in the Member State where the educational establishment or cultural heritage institution is established.[221]

Considering this recognition of a need for country-of-origin rules in the knowledge institution sector, it could be considered to extend the mechanism to research activities. Country-of-origin rules seem particularly important with regard to transnational consortia jointly carrying out research across Member State borders. In this scenario, specific national use privileges for research – with different scope and requirements – can easily multiply legal uncertainty. A project that involves partners in five Member States may need to account for five different sets of copyright exceptions. Even if each jurisdiction is individually manageable, the cumulative burden

[211] Expert interviews, transcript in project archive.
[212] Expert interviews, transcript in project archive.
[213] Expert interviews, transcript in project archive.
[214] Expert interviews, transcript in project archive.
[215] Expert interviews, transcript in project archive.
[216] Expert interviews, transcript in project archive.
[217] Expert interviews, transcript in project archive.
[218] One can discuss terminology. We consider that "country-of-origin" and "localisation" rule refer essentially to the same principle in cross-border situations. In the examples that follow, legislation in the area of broadcasting tends to refer to country-of-origin (designating the law of the Member State where a broadcast originates from), whereas more recent legislation that regulates either reliance on an exception or contract by a copyright user refers to localisation (localising the effect of use to one Member State). In the latter case the rule is normally formulated as an artificial limitation of the cross-border effect, deeming the regulated act to occur "solely" in one Member State. Article 9 CDSMD, exemplifying the latter category, uses no term and refers generally to "cross-border uses".
[219] Article 1(2)(b) SBD; Article 3(1) OBD.
[220] Article 4 CBPR.
[221] Articles 5(3) and 9(2) CDSMD.

of ensuring compliance across all national systems involved in the project can make cross-border collaborations challenging and reduce available breathing space for research to the smallest common denominator of all copyright systems involved. Anchoring research activities in a single jurisdiction through a country-of-origin rule would streamline compliance obligations, alleviate copyright management and enhance legal certainty.

A country-of-origin rule could deem acts carried out by researchers to occur solely in the Member State where the research organisation leading the project is established, i.e. the Member State where the principal investigator is based. In line with this approach, a university in France leading a research project with German and Polish partners would only have to ensure that use of copyright-protected materials falls within the scope of research exceptions in French copyright law. In Germany and Poland, compliance with the research framework in France would be sufficient to establish the lawfulness of the use, preventing rightsholders from exploiting national divergences to licence or prohibit uses within the project.

This approach implies that, in cases where a given Member State has not implemented an optional research exception in the EU catalogue,[222] consortium partners in this Member State could still benefit from a copyright exception that exists in the Member State where the research organisation of the principal investigator is established. Considering this dynamic, it may be advisable to combine the introduction of a country-of-origin rule for research with the further harmonisation of research exceptions, removing in particular the optional nature of central provisions, such as the general research rule in Article 5(3)(a) ISD.[223] Moreover, it must be considered that a country-of-origin rule for scientific research can have repercussions on contractual use permissions, such as subscriptions, where a copyright exception sets forth a lawful access requirement.[224] When compliance with the lawful access requirement is assessed in the light of the copyright rules in the country where the principal investigator is based (France in our example), it makes sense to take into account all subscriptions held by consortium members. Otherwise, the principal investigator in France may have difficulty to demonstrate lawful access with regard to knowledge resources in Germany and Poland, even though the German and Polish project partners may have all contractual permissions necessary to satisfy the lawful access requirement.[225]

Interview responses show moderate support for this mechanism. While several interviewees were favourable, others took a neutral position and one was negative, stating that it would not strike at the root of the problem.[226] According to this interviewee, typical copyright controversies in research concern licence agreements where authorised users are members of only one research organisation, for which reason, in case of co-operations or cross-border activities, colleagues who are members of another research organisation would not get access. At the same time, the interviewee noted that they have successfully negotiated such uses for research projects in case of researchers from other universities. Another interviewee, while acknowledging that the mechanism may be helpful, pointed out that he had not experienced big problems with cross-border uses, but also recognised that the issue of cross-border research use was not seen as the main problem at their institution.[227]

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[222] For instance, see the general research clause in Article 5(3)(a) ISD which is optional and has not been implemented in all Member States. Cf. Senftleben/Szkalej et al. (2025), 1335-1336; Stančiauskas et al. (2024), Annex 1, 189-190.
[223] Cf. Senftleben/Szkalej et al. (2025), 1353.
[224] For instance, see Article 3(1) CDSMD and the accompanying Recital 14 which explicitly refers to subscriptions. Cf. Margoni (2024), 181-184.
[225] With regard to a more general proposal to universalise contractual use permissions within cross-border research consortia, see Senftleben/Szkalej et al. (2025), 1341-1345, 1353.
[226] Expert interviews, transcript in project archive.
[227] Expert interview, transcript in project archive..

This contrasts with the experience of another interviewee who noted that, within the current copyright framework, clauses that allow research partners from different jurisdictions to download and send material back and forth needed to be defended in every negotiation.[228] Another interviewee looked favourably at country-of-origin rules, observing that this mechanism would remove confusion. With regard to the application of this principle to contractual permissions, the interviewee acknowledged that if it meant that only one university had to get a subscription to research resources and then all other consortium partners in a joint project could access the entire catalogue, that would likely not be accepted by rightsholders.[229]

In general, the interviewees agreed that, if adopted, the mechanism would be particularly useful for scientific research collaborations, especially in clarifying the copyright framework that applies. As to cultural heritage projects, one interviewee observed that cross-border collaborations usually concerned physical collections, such as collaborative exhibitions.[230] Another interviewee noted that a localisation rule akin to Article 9(2) CDSMD (which deems a cross-border use of out-of-commerce works[231] to occur solely in the Member State where the institution is established) would be helpful and aligned with the DNA of the sector.[232] Several interviewees stressed that the benefits of a country-of-origin rule would depend on making it mandatory and ensuring that contractual clauses could not override it.[233] One interviewee brought up the challenge of going beyond the harmonised EU framework and applying such a rule to collaborations with partners outside the EU.[234] While recognising positive aspects of a country-of-origin rule for scientific uses, another interviewee noted that it could be beneficial to be able to apply national European copyright law in transatlantic collaborations for the scientific use taking place in the EU.[235]

3.6 Measures against unfair contract terms

Finally, it may be considered to take measures against imbalanced, unfair contract terms which knowledge institutions may have to accept because they depend on knowledge resources offered by rightsholders and have a weak bargaining position. At the core of this proposal lies the recognition that the educational, scientific and cultural heritage sector shares the characteristics of a concentrated market: knowledge institutions with limited bargaining power must find contractual solutions with a small number of publishers and other providers of knowledge resources in order to fulfil their public interest mission.[236] With regard to content databases, data services and hosting platforms, knowledge institutions may lack a meaningful opportunity to negotiate terms individually. Depending on their own size, they may be placed in a "take-it-or-leave-it" situation.[237] Agreements drafted by copyright holders may include clauses that have the

[228] Expert interviews, transcript in project archive.
[229] Expert interviews, transcript in project archive.
[230] Expert interviews, transcript in project archive.
[231] In the sense of use based on the copyright exception laid down in Article 8(2) CDSMD.
[232] Expert interviews, transcript in project archive.
[233] Expert interviews, transcript in project archive.
[234] Expert interviews, transcript in project archive.
[235] Expert interviews, transcript in project archive.
[236] See generally on market concentration in the scientific and educational sector Larivière/Haustein/Mongeon (2015); Zarif (2023); European University Association, 'The lack of transparency and competition in the academic publishing market in Europe and beyond', Statement of 26 October 2018 addressed to The European Commission (2018), available at <https://www.eua.eu/images/publications/The_lack_of_transparency_and_competition_in_the_academic_publishing_market_in_Europe_and_beyond.pdf>.
[237] McGuigan/Russel (2008), 8-9. Although the authors suggest bargaining through library consortia as a solution to the bargaining position of individual libraries, nationwide cancellations from library or university consortia have taken place in Member States that include a centralised approach, for instance Finland, Germany, the Netherlands, or Sweden. See further the Big Deal Cancellation Tracker managed by the Scholarly Publishing and Academic Resources Coalition (SPARC) at < https://bigdeal.sparcopen.org/cancellations>. The Swedish Bibsam Consortium subsequently evaluated

effect of undermining or neutralising EU copyright exceptions even if it is not their main goal. For example, a licence may be governed by US law, with US courts designated as competent, effectively rendering EU mandatory exceptions irrelevant,[238] or imposing its own definition of TDM and prohibiting uses that may be considered to fall under the mandatory exception.[239]

The EU has already intervened to prevent unfair contract terms, most notably in consumer protection law. The Unfair Contract Terms Directive (UCTD) prohibits clauses that create a significant imbalance to the detriment of the consumer, provides examples of unfair terms, and requires ambiguous clauses to be interpreted in favour of the consumer.[240] More recently, with the Platform-to-Business Regulation (P2BR), the EU has extended principles of fairness, transparency, and effective redress to business-to-business contexts where structural imbalances exist.[241]

A legal-comparative analysis shows that further examples can be found in copyright law. In Singapore, the Copyright Act 2021 contains a structured regime that addresses contractual override of statutory rights. Section 186 provides that a permitted use may only be restricted by a contract term that is fair and reasonable, ensuring that routine standard-form clauses cannot displace statutory safeguards. Section 187 identifies specific uses that are non-derogable by contract, such as "computational data analysis" (the Singaporean equivalent to text and data mining),[242] uses by GLAM institutions, the making of back-up copies of computer programs, and use for certain legal and judicial purposes. In addition, Section 188 renders void any choice-of-law clauses which, if applied, would exclude or restrict a permitted use. Together, these provisions establish three levels of protection. Some user freedoms may only be modified by individually negotiated and reasonable terms, others cannot be contracted out at all, and foreign law clauses cannot be invoked to sidestep these safeguards. Such a layered regulatory design combines the protection of user freedoms with opportunities for negotiating individual contractual arrangements.

In EU law, copyright contract law – focusing on exploitation contracts concluded by authors – offers further reference points. National transpositions of the harmonised rules laid down in Articles 18 to 23 CDSMD[243] – and pre-existing national traditions[244] – differ across Member States.

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the consequences of the cancellation, concluding among other things that researchers were affected in various ways, that cancellation is one of few forms of leverage to oppose offered pricing and terms of agreements and that international collaboration between consortia remains important to put combined pressure on publishers. Frida Jakobsson, Lisa Olsson, Lovisa Österlund, 'Evaluation of cancellation of the Bibsam Consortium's journal agreement with Elsevier', National Library of Sweden, 2020, available at https://urn.kb.se/resolve?urn=urn:nbn:se:kb:publ-52.

[238] For example the Dutch SURF consortium's agreement with the American Chemical Society (ACS) as stipulated in clause 15 (governing law clause) and 9 (arbitration clause), although clause 6.c explicitly excludes TDM <https://www.openaccess.nl/sites/default/files/legacy/documenten/acs_surf_2022-2025_incl_addendum_redacted.pdf>; or with Wiley US, Wiley Read and Publish Agreement, Clause J(2) (governing law and forum clause) available at https://www.openaccess.nl/sites/default/files/legacy/documenten/wiley_randp_agreement_2024-2026_redacted.pdf. See however in case of the latter permissions and conditions for TDM clause C.1.f. as well as Amendmenent to Read and Publish Agreement, clause 7, reference to C.1.f (revised conditions for TDM).

[239] For example the Dutch SURF consortium's agreement with Springer Verlag, Product Terms, Clause 3.1.1 (definition), clause 3.2 (TDM permissions), and clause 4 (prohibited uses in connection with the use of artificial intelligence systems or public-private partnerships).

[240] See Article 6, the Annex, and Article 5 UCTD.

[241] Articles 1-17 P2BR.

[242] Cf. de la Durantaye (2025b), 749-750; Sag/Yu (2025), 1190-1192; Tan/Lee (2021), 1068-1076; Rosati (2025b), 979; Rosati (2024), 271.

[243] Cf. European Copyright Society (2020), 132-148.

[244] Cf. European Copyright Society (2020), 141-144; Dusollier (2024), 34; Xalabarder Plantada (2020), 28; Senftleben (2018), 413-433); Dusollier (2018), 447-448 and 454-455; Gompel/Hugenholtz et al. (2020); Hugenholtz (2022), 472-476).

Seeking to strengthen the bargaining position of authors vis-à-vis publishers, producers and other exploiters of their works, Section 29 of the Finnish Copyright Act,[245] for instance, contains a rule on adjustment of unfair terms. Pursuant to this provision, a contractual term may be modified or disregarded if it is contrary to accepted principles of fair contracting in the sector or otherwise unfair, or if its application would lead to an unfair result. In assessing unfairness, the provision requires consideration of the contract as a whole, the position of the parties, the manner and extent of use of the work, its commercial value, the way remuneration is determined, and the author's contribution to the creation of the work, together with circumstances preceding and following the conclusion of the contract.[246] If the unfair term is of such significance that the remainder of the contract cannot reasonably stand, the entire agreement may be modified or set aside.[247] Although the general contract law of Finland and other Nordic countries contain similar mechanisms,[248] the specific fairness rule in Section 29 of the Finnish Copyright Act responds specifically to the realities of copyright contracting which authors experience in their relationship with exploiters of their works.

It is conceivable that regulations of contract terms in the educational, scientific and cultural heritage sector follow these models that have already been implemented to counterbalance the weak bargaining position of authors.[249] Specific rules for the knowledge institution sector could prohibit contract terms that are incompatible with the official mission of educational establishments, research organisations and cultural heritage institutions, define prohibited items (such as clauses excluding the applicability of copyright exceptions and choice-of-law clauses evading contractual protections available under EU law), and establish grey lists with terms that are suspect unless justified (such as unilateral modification clauses or excessive audit rights). Similarly to Article 6(1) UCTD, a transparency requirement could ensure that terms are drafted in plain, intelligible language and that, given that agreements are often drafted in a standard format, ambiguity could be resolved *contra proferentem*, ensuring that knowledge institutions are not disadvantaged by vague drafting. These two latter aspects would have the potential of addressing the concern voiced by one interviewee giving the example of a complex and confusing contractual term used by the vendor that neither the interviewee nor the vendor was able to fully explain.[250]

In our interviews, measures against unfair contract terms were spontaneously raised by several interviewees themselves. These interviewees regarded them as positive and desirable measures, with none expressing neutrality, hesitation, or outright opposition. One expert saw the introduction of unfair terms regulations as a reaction to a structural power imbalance, stressing that knowledge institutions find themselves in a position comparable to consumers and often act as a conduit for them. Echoing this, another interviewee stated that introducing safeguards against unfair contract terms would be particularly necessary where the power imbalance is as big as in the knowledge institution sector. Another interviewee was equally supportive of the

[245] Laki tekijänoikeudesta kirjallisiin ja taiteellisiin teoksiin 404/1961.
[246] 29 § 2 mom Laki tekijänoikeudesta kirjallisiin ja taiteellisiin teoksiin 404/1961.
[247] 29 § 3 mom Laki tekijänoikeudesta kirjallisiin ja taiteellisiin teoksiin 404/1961.
[248] 36 § Laki varallisuusoikeudellisista oikeustoimista (228/1929); 36 § Lag (1915:218) om avtal och andra rättshandlingar på förmögenhetsrättens område (Sweden), § 36 Lov om avslutning av avtaler, om fuldmagt og om ugyldige viljeserklæringer 31. mai 1918 nr. 4. (Norway), § 36 Lov om aftalers indgåelse og gyldighe, lov nr. 193 af 2. juni 1999 (Denmark),
[249] See Recital 72 CDSMD recognising that "[a]uthors and performers tend to be in the weaker contractual position when they grant a licence or transfer their rights, including through their own companies, for the purposes of exploitation in return for remuneration…"
[250] Expert interviews, transcript in project archive.

potential benefits of the mechanism but sceptical about its political feasibility, anticipating considerable resistance from rightsholders and other commercial actors.[251]

With protections against unfair contract terms, EU legislation could ensure that the balance struck in EU copyright law, especially in respect of exceptions for research, education, and preservation, cannot be rendered inoperative in practice, in a manner that exploits risk aversion and limited bargaining power of knowledge institutions. As in the case of consumer protection law or regulations of online platform power, it would have the potential of creating a level playing field, especially for institutions that cannot negotiate bespoke terms or are dependent on the technical infrastructure provided by private sector actors. Consequentially, it is conceivable that measures against unfair contract terms could align lawmaking in the copyright sector with broader EU policy trends, which increasingly recognise that freedom of contract cannot justify systemic imbalances that undermine public interests. Article 7 CDSMD, which stipulates that any contractual provision contrary to the TDM exception in Article 3 is unenforceable, exemplifies how policymaking in copyright law may already be part of this trend.

Naturally, risks include potential resistance from publishers and service providers, who may argue that contractual freedom is being curtailed, as noted by individual interviewees. However, the EU has already shown that such arguments do not outweigh the need to protect weaker parties in structurally imbalanced markets. Another challenge is defining the boundary of unfairness. In this regard, oversight could be entrusted to the advisory body considered above, which could maintain a repository of problematic terms and issue guidance.

Implementation at EU level would be most effective to ensure uniformity and preventing Member States from adopting divergent approaches. As this is an area that, so far, has remained outside of the EU copyright acquis, it is possible for Member States to adopt measures at the national level. The situation is comparable to developments in the area of copyright contract law where national precursors existed prior to the harmonisation in Articles 18-23 CDSMD.[252]

4. Policy recommendations

Knowledge institutions – educational establishments, research organisations and cultural heritage institutions – occupy a central position in Europe's research and innovation ecosystem. Yet their everyday operations are conducted under a regulatory climate characterised by legal complexity, fragmentation, contractual asymmetry, and technological control leading to considerable legal uncertainty and exposure to chilling effects that may prevent them from fulfilling their public interest mission. The analysis in this report demonstrates that legal uncertainty is not a marginal inconvenience but a systemic condition: it distorts institutional behaviour, discourages legitimate reliance on copyright exceptions, and culminates in a culture of defensive compliance.

This result is alarming. Under the Charter of Fundamental Rights, EU legislation is bound to create a favourable, enabling environment for teaching, learning and research – and the knowledge institutions supporting these activities – in copyright law. To achieve this goal, copyright limitations that have been embedded in the protection system to support the work of knowledge institutions must be configurated in a way and be flanked with legal guidance that allows

[251] Expert interviews, transcript in project archive.
[252] Cf. Peifer (2016), 6-8; Terhorst (2015), 162-168; Dietz (2015), 315-316; Dietz (2007), 469-474; Schulze (2005), 828 (2005); Hugenholtz/Guibault (2004), 55-60; Schack (2001), 453-466.

educational establishments, research organisations and cultural heritage institutions to fulfil their tasks in the field of freedom of expression and information, science and education. It is not sufficient that EU copyright law sets forth use privileges for educational establishments, research organisations and cultural heritage institutions *pro forma*. As long as the invocation of these use privileges depends on conditions that render them ineffective in practice, these provisions are mere cosmetics. If the legal complexity surrounding copyright limitations for knowledge institutions makes them moot in practice, EU copyright law and institutions capable of supporting the use of copyright flexibilities fail to lend sufficient weight to the fundamental rights underlying the work of knowledge institutions and needs to be recalibrated.

Against this background, we propose a reform package aimed at restoring predictability of legal outcomes, trust in statutory use permissions, and confidence in the copyright framework as an enabling environment for educational, scientific and cultural heritage work. Each mechanism responds to a distinct driver of risk, consisting of interpretive ambiguity, bargaining asymmetry, liability exposure, or cross-border complexity. Yet they are mutually reinforcing. Their combined effect would be to move knowledge institutions away from an approach where they avoid relying on use privileges in the EU copyright acquis, towards a proactive engagement with copyright law.

- **Develop sector-specific best-practice guidelines**

As the report shows, uncertainty often arises not from the absence of legal norms that grant knowledge institutions specific use privileges, but from difficulties in interpreting existing ones. Provisions such as the general clause for scientific research, the TDM provisions, the rules for orphan works and out-of-commerce materials and cross-border teaching activities, are drafted in complex and conditional terms, require compliance with open-ended criteria laid down in the three-step test and an interplay with contractual arrangements that demand legal assessments beyond the capacity of many institutional actors. Interview evidence confirms that even experienced experts hesitate.

Practice-oriented guidelines can translate these abstract, complex legal requirements into clear, manageable compliance protocols. They may be developed around use case archetypes that mirror recurrent institutional practices, such as scraping and webharvesting, digitisation and long-term preservation of collections, large-scale TDM on licensed and own resources, cross-border data sharing and transnational teaching programmes. For each archetype, the guidelines could map the relevant provisions, and propose decision trees and diligence checklists. They would have a preventive function by steering projects through lawful pathways before they begin, and a defensive function by documenting the steps taken to demonstrate diligence if questions arise later.

While non-binding, best-practice guidelines can derive their authority from transparency as to the roles and positions of experts involved in the process, balanced drafting, and continuous updating. The guidelines should include illustrative examples of lawful conduct and develop diligence criteria in the light of the various tasks and user expectations that shape the work of knowledge institutions.

- **Establish a copyright advisory and dispute settlement body**

We propose a second measure to address the lack of authoritative, timely interpretation of the norms impacting the work of knowledge institutions. As demonstrated throughout the report, legal uncertainty persists not only because copyright norms are complex but also because litigation is often avoided. Instead of openly entering into a dispute, copyright conflicts may be internalised and finally "resolved" through over-compliance and quiet withdrawal from planned activity. As the interviews have shown, knowledge institutions are not looking for yet another

forum for adjudication but for a trustworthy, authoritative source of interpretive guidance that provides operational support to all stakeholders involved.

Accordingly, we recommend the establishment of a Copyright Advisory Body for the Educational, Scientific and Cultural Heritage Sector composed of independent experts with a mandate to issue non-binding yet reasoned opinions and to coordinate interpretive standards across Member States. The advisory opinions should lead to a solid corpus of "soft precedent" that organically leads to greater predictability of copyright outcomes within the sector.

Although the body could also facilitate mediation in cases where licensing negotiations stall, this function should remain ancillary. The empirical evidence suggests that conflicts hardly ever escalate to formal disputes. As already indicated, the greater value lies in preventing escalation through interpretive clarity. Therefore, the advisory function of the proposed body should be prioritised over potential conciliation procedures.

The body could also inform policy by identifying recurring or most pressing problems, such as contractual overrides, jurisdictional asymmetries, or misuse of technological access controls, creating a continuous feedback loop between practice and regulation. Once its practical utility is demonstrated, it could be formalised through hard legislation. For the initial establishment of the advisory body, however, this does not seem necessary. It could also result from informal practice: knowledge institutions seeking advice and aligning their decisions and procedures with the opinions of the advisory body. It is conceivable that an advisory body could operate as a separate entity within a knowledge institution consortium or other sectoral organisation.

- **Introduce a liability privilege for staff of knowledge institutions**

The analysis reveals that institutional caution in complex copyright and contractual matters is often driven by the fear of exposure to substantial damage claims and reputational harm, causing overcompliance and, potentially, also abandonment of activities. A liability exemption for diligent staff acting in good faith could shift this risk calculus while preserving incentives for diligence. The exemption should apply when staff acts within their institutional mandate and in good faith, having demonstrably exercised sufficient care. This approach would encourage knowledge institutions to adopt clear and robust policies with regard to copyright and contract diligence as their liability would be contingent on being able to demonstrate that staff operated under appropriate procedures.

To establish appropriate diligence protocols and procedures, several approaches can be taken:

- *best-practices guidelines and advisory body opinions*: the liability privilege could be linked to other measures. In particular, best-practice guidelines could create clarity about diligence requirements. If an advisory body for knowledge institutions is established, it could also provide diligence protocols and issue advisory opinions. Teachers, researchers, librarians and archivists could rely on these guidelines and protocols to ensure that they fulfil the diligence requirements for invoking the liability privilege;
- *larger institutions developing and sharing diligence protocols*: in the absence of best-practice guidelines and advisory body opinions, larger knowledge institutions with solid copyright expertise may be able to develop diligence protocols for different types of uses and different complexities in copyright and contract frameworks. If these protocols are shared in the sector, smaller institutions can benefit as well. Knowledge institutions can also pool copyright expertise in specialist workshops where diligence protocols that have been developed in different institutions are compared, discussed and harmonised;
- *notice-and-takedown models*: with regard to webpages and other online materials that become part of cultural heritage collections as a result of webharvesting, a liability privilege could also be modelled on the notice-and-takedown system known from the EU

regulation of online hosting platforms not being online content-sharing service providers in the sense of the CDSMD: as long as the hosting platform does not have knowledge and is not aware of copyright infringement, it is only obliged to take immediate action and remove infringing content when a rightsholder sends a sufficiently substantiated notification.[253]

By linking a liability privilege to compliance with best practice guidelines or advisory opinions, the mechanism would create a positive compliance feedback loop whereby knowledge institutions that systematise internal governance are rewarded with greater certainty. Based on interview insights gathered with regard to a cap on damages, we believe that this approach focusing on a liability privilege addresses the psychological and procedural roots of overcompliance far more effectively than abstract damage limitations. It recognises that the fear of infringement is not solely economic but institutional, rooted in the reputational sensitivity of public bodies and their hierarchical accountability structures.

- **Adopt country-of-origin rules for defined research uses**

After precedents in the SBD and the CBPR, Article 5(3) CDSMD has introduced a country-of-origin rule with regard to digital cross-border teaching activities. We propose to extend this principle to research activities relying on copyright exceptions in order to enhance legal certainty for transnational research consortia. Cross-border collaboration increases the complexity and legal uncertainty evolving from divergent national implementations of optional copyright exceptions for scientific research. A given act of use may be lawful in the light of copyright exceptions adopted in one Member State and infringing in another which did not introduce a congruent use privilege. A country-of-origin rule would anchor the copyright compliance analysis in the law of the Member State where the lead institution is established (and where the principal investigator is based), clarifying the applicable legal framework for ascertaining compliance with copyright rules. Properly calibrated, this mechanism would transform the current patchwork of national use permissions and restrictions into one predictable legal baseline for cross-border research.

- **Adopt measures against unfair contract terms**

A central source of legal uncertainty identified in the interviews is the use of contractual terms that neutralise statutory use permissions given in copyright law through overbroad indemnities, foreign law and forum clauses, or technical access restrictions. These practices create a de facto regulatory layer with the potential to override statutory use privileges and shift disproportionate risk to knowledge institutions.

A sector-specific regulation seeking to ban unfair contract terms would level the playing field by identifying and invalidating clauses that defeat the purpose of EU copyright exceptions on which knowledge institutions depend to carry out their public interest missions. Drawing inspiration from existing regulatory models in EU consumer protection and copyright contract law, as well as precursors in other regions, such a framework could combine:

- a black list of unenforceable clauses;
- a grey list of presumptively unfair clauses;
- a reasonableness test for individually agreed, bespoke terms; and

[253] Article 6(1) DSA.

- transparency obligations requiring the use of plain and intelligible language and *contra proferentem* interpretation of ambiguities.

This mechanism directly targets the contractual leverage problem documented in interviews, composite contracting strategies, and indemnity clauses that public bodies cannot realistically perform. It would complement, rather than displace, negotiation freedom by establishing baseline fairness standards.

- **Combine the mechanisms to arrive at a coherent framework**

Each of the proposed mechanisms can be viewed as a specific remedy for legal uncertainty. To enhance benefits in practice, however, it is advisable to combine several mechanisms (or all of them), recognising their interdependence:

- best-practice guidelines translate complex law into operational clarity;
- an advisory body validates interpretations of complex copyright rules and contractual clauses, providing tailor-made, authoritative guidance and reassurance;
- a liability privilege rewards diligent behaviour and reliance on copyright flexibilities in good faith. It also encourages knowledge institutions to develop standardised compliance protocols and procedures in the light of their mission and practice;
- measures to ban unfair contract terms reduces vulnerabilities in negotiations that may arise from a weak bargaining position. It minimises exposure to contractual excesses;
- a country-of-origin rule for scientific research supports transnational, cross-border collaborations by allowing consortium members to operate under one single regime of copyright exceptions.

Together, these measures construct an ecosystem of lawful confidence where knowledge institutions, while acting responsibly, can benefit from copyright flexibilities to a larger extent. Rightsholder interests are preserved through diligence rather than deterrence. Copyright can serve the advancement of knowledge and culture, as envisaged in the regulatory design underlying the EU system of exclusive rights and use privileges for educational, research and cultural heritage activities.

5 Bibliography

Abbamonte GB (2024), "The Application of the Copyright TDM Exceptions and Transparency Requirements in the AI Act to the Training of Generative AI", *European Intellectual Property Review* 46 (2024), 279

Adler A (2016), "Fair Use and the Future of Art", *New York University Law Review* 91, 559

Agi C, Beurskens M et al. (2024), *Arrangements on Artificial Intelligence in Licence Agreements*, Hanover: TIB – Leibniz Information Centre for Science and Technology 2024, available at: https://doi.org/10.5281/zenodo.13837688

Amabile TM (1996), *Creativity in Context*, Boulder: Westview Press

Angelopoulos C (2016), *European Intermediary Liability in Copyright: A Tort-Based Analysis*, Alphen aan den Rijn: Kluwer Law International 2016

Angelopoulos C (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, Brussels. https://data.europa.eu/doi/10.2777/891665

Aplin T, Bently L (2020), *Global Mandatory Fair Use: The Nature and Scope of the Right to Quote Copyright Works*, Cambridge: Cambridge University Press 2020

Aufderheide P, Jaszi P (2004), *Untold Stories: Creative Consequences of the Rights Clearance Culture for Documentary Filmmakers*, Washington D.C.: American University

Aufderheide P, Jaszi P et al. (2014), *Copyright, Permissions, and Fair Use in the Visual Arts Communities: An Issues Report*, Washington D.C.: American University, available at: https://cmsimpact.org/wp-content/uploads/2016/01/fair_use_for_visual_arts_communities.pdf

Axhamn J (2024), "Extended Collective Licensing for Use of Copyrighted Works for Machine Learning", *Columbia Journal of Law and the Arts* 48 (2024), 523

Bechtold S (2016) Information Society Directive. In: Dreier T, Hugenholtz PB (ed), *Concise European Copyright Law*. 2nd ed, Wolters Kluwer, Alphen aan den Rijn

Beebe B (2008), "An Empirical Study of U.S. Copyright Fair Use Opinions, 1978-2005", *University of Pennsylvania Law Review* 549 (2008), 156

Beunen A, Guibault LMCR (2011), "Brussels Memorandum of Understanding inzake digitalisering en online beschikbaarstelling van out-of-commerce boeken en tijdschriften", *Tijdschrift voor auteurs-, media- en informatierecht* 2011, 221

Brennan DJ (2002), "The Three-Step Test Frenzy: Why the TRIPS Panel Decision might be considered Per Incuriam", *Intellectual Property Quarterly* 2002, 213

Brügger N (2018), *The Archived Web: Doing History in the Digital Age*. Cambridge, MA: MIT Press 2018

Brügger N, Laursen D, Nielsen J (2017), "Exploring the domain names of the Danish web", in: Brügger N, Schroeder R (eds) *The Web as History: Using Web Archives to Understand the Past and the Present*. London: UCL Press 2017

Bornkamm J (2002), "Der Dreistufentest als urheberrechtliche Schrankenbestimmung – Karriere eines Begriffs", in: Ahrens HJ, Bornkamm J et al, (eds.), *Festschrift für Willi Erdmann zum 65. Geburtstag*, Munich: Carl Heymanns 2002, 29

Caddik N, Harbottle G, Suthersanen U (2024), *Copinger and Skone James on Copyright*, 19th ed., London: Sweet and Maxwell 2024

Carroll MW (2019), "Copyright and the Progress of Science: Why Text and Data Mining Is Lawful", *U.C. Davis Law Review* 53 (2019), 893

Cohen JE (1998), "Copyright and the Jurisprudence of Self-Help", *Berkeley Technology Law Journal* 13 (1998), 1089

COMMUNIA (2019), "The Education Exception was Gutted During the Trilogues", Brussels: *COMMUNIA Blog* 27 February 2019, available at: https://communia-association.org/2019/02/27/education-exception-gutted-trilogues/

COMMUNIA (2023), *Policy Paper #15 on Using Copyrighted Works for Teaching the Machine*, 26 April 2023, Brussels: COMMUNIA 2023, available at: https://communia-association.org/policy-paper/policy-paper-15-on-using-copyrighted-works-for-teaching-the-machine/

COMMUNIA (2024), *Policy Paper #18 on Limitation of Liability for Knowledge Institutions*, 7 May 2024, Brussels: COMMUNIA 2024, available at: https://communia-association.org/policy-paper/policy-paper-18-limitation-of-liability-for-knowledge-institutions/

Coombe RJ (2003), "Fear, Hope, and Longing for the Fututre of Authorship and a Revitalized Public Domain in Global Regimes of Intellectual Property", *DePaul Law Review* 52 (2003), 1171

Craig CJ (2022), "The AI-Copyright Challenge: Tech-Neutrality, Authorship, and the Public Interest", *All Papers: Osgoode Hall Law School of York University* 360 (2022), 1

De la Durantaye K (2014), *Allgemeine Bildungs- und Wissenschaftsschranke*, Münster: Verlagshaus Monsenstein und Vannerdat 2014

De la Durantaye K (2018), „Das kulturelle Gedächtnis als Kollateralschaden der ‚Copyright Wars'", In: Klimpel P (ed), *Mit gutem Recht erinnern: Gedanken zur Änderung der rechtlichen Rahmenbedingungen des kulturellen Erbes in der digitalen Welt*, Hamburg: Hamburg University Press 2018

De la Durantaye K (2025a), "Unlocking Potential: Why and How We Should Revise Copyright Exceptions for Educational Purposes in the EU", *Verfassungsblog* 13 November 2025, available at: https://verfassungsblog.de/copyright-teaching-cdsm/ (DOI: 10.17176/20251113-142114-0)

De la Durantaye, Katharina (2025b), "Exceptions for Training Generative AI", *International Review of Intellectual Property and Competition Law* 56 (2025), 737

Depoorter B (2019), "Copyright Enforcement in the Digital Age: When the Remedy Is the Wrong", *UCLA Law Review* 66 (2019), 400

Derclaye E (2021) The Database Directive. In: Stamatoudi I, Torremans P (eds) EU Copyright Law – A Commentary. 2nd ed, Edward Elgar, Cheltenham

Dermawan A (2024), "Text and Data Mining Exceptions in the Development of Generative AI Models: What the EU Member States Could Learn From the Japanese 'Nonenjoyment' Purposes", *Journal of World Intellectual Property* 27 (2024), 44

Dietz A (2007), „Das Urhebervertragsrecht in Deutschland", in: Hilty RM, Geiger C (eds), *Impulse für eine europäische Harmonisierung des Urheberrechts*, Heidelberg: Springer 2007, 465

Dietz A (2015), „Schutz der Kreativen (der Urheber und ausübenden Künstler) durch das Urheberrecht oder Die fünf Säulen des modernen kontinentaleuropäischen Urheberrechts", *Gewerblicher Rechtsschutz und Urheberrecht – International* 2015, 309

Dornis TW (2025), "The Training Of Generative AI Is Not Text And Data Mining", *European Intellectual Property Review* 47 (2025), 65

Dornis TW, Lucchi N (2025), "Generative AI and the Scope of EU Copyright Law: A Doctrinal Analysis in Light of C-250/25", *International Review of Intellectual Property and Competition Law* 56 (2025), 1800-1840, available at: https://doi.org/10.1007/s40319-025-01649-7

Diehl E (2012), *Securing Digital Video: Techniques for DRM and Content Protection*, Berlin/Heidelberg: Springer 2012

Dreier T (2001), "Balancing Proprietary and Public Domain Interests: Inside or Outside of Proprietary Rights?", in: Dreyfuss RC, Leenheer-Zimmerman D, First H (eds), *Expanding the Boundaries of Intellectual Property. Innovation Policy for the Knowledge Economy*, Oxford: Oxford University Press 2001, 295

Ducato R, Strowel A (2021), "Ensuring Text and Data Mining: Remaining Issues with the EU Copyright Exceptions and Possible Ways Out", *European Intellectual Property Review* 43 (2021), 322

Dusollier S (2018), "EU contractual protection of creators: blind spots and shortcomings", *Columbia Journal of Law and the Arts* 41 (2018), 435

Dusollier S (2024), "Ensuring a Fair Remuneration to Authors and Performers in Music Streaming", *Revue des Juristes de Scienc.es Po* 25 (2024), 34

Elkin-Koren N (1997), "Copyright Policy and the Limits of Freedom of Contract", *Berkeley Technology Law Journal* 12 (1997), 93

Erickson K, Stobo V (2024), *Survey on Technological Protection Measures: Impacts for Researchers, Libraries and Archives,* Glasgow: CREATe Centre 2024, available at: https://ssrn.com/abstract=5064056

European Copyright Society (2020), "Comment of the European Copyright Society addressing selected aspects of the implementation of Articles 18 to 22 of the Directive (EU) 2019/790 on Copyright in the Digital Single Market", *Journal of Intellectual Property, Information Technology and Electronic Commerce Law* 11 (2020), 132

Ficsor MJ (2002), "How Much of What? The Three-Step Test and Its Application in Two Recent WTO Dispute Settlement Cases", *Revue Internationale du Droit d'Auteur* 192 (2002), 111

Flynn SM, Butler B et al (2022), "Legal Reform to Enhance Global Text and Data Mining Research – Outdated Copyright Laws Around the World Hinder Research", *Science* 378 (2022), 951

Frosio GF (2014), "Rediscovering Cumulative Creativity From the Oral Formulaic Tradition to Digital Remix: Can I Get a Witness?", *John Marshall Review of Intellectual Property Law* 13 (2014), 341

Geiger C (2006), "'Constitutionalising' Intellectual Property Law? The Influence of Fundamental Rights on Intellectual Property in the European Union", *International Review of Intellectual Property and Competition Law* 37 (2006), 371

Geiger C (2009), "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

Geiger C, Frosio GF, Bulayenko O (2018), "Text and Data Mining in the Proposed Copyright Reform: Making the EU Ready for an Age of Big Data? Legal Analysis and Policy Recommendations", *International Review of Intellectual Property and Competition Law* 49 (2018), 814

Geiger C, Gervais D, Senftleben MRF (2014), "The Three-Step Test Revisited: How to Use the Test's Flexibility in National Copyright Law", *American University International Law Review* 29 (2014), 581

Geiger C, Griffiths J, Hilty RM (2008), "Declaration on a Balanced Interpretation of the "Three-Step Test" in Copyright Law", *International Review of Intellectual Property and Competition Law* 39 (2008), 707

Geiger C, Izyumenko E (2014), "Copyright on the Human Rights' Trial: Redefining the Boundaries of Exclusivity Through Freedom of Expression", *International Review of Intellectual Property and Competition Law* 45 (2014), 316

Geiger C, Izyumenko E (2020), 'The Constitutionalization of Intellectual Property Law in the EU and the Funke Medien, Pelham and Spiegel Online Decisions of the CJEU: Progress, but Still Some Way to Go!', *International Review of Intellectual Property and Competition Law* 51 (2020), 282

Geiger C, Jütte BJ (2021), "Towards a Virtuous Legal Framework for Content Moderation by Digital Platforms in the EU? The Commission's Guidance on Article 17 CDSM Directive in the Light of the YouTube/Cyando Judgement and the AG's Opinion in C-401/19", *European Intellectual Property Review* 43 (2021), 625

Geiger C, Jütte BJ (2023), "Conceptualizing the Right to Research and its Implications for Copyright Law, An International and European Perspective", *American University International Law Review* 38 (2023), 1

Geiger C, Schönherr F (2021), "The Information Society Directive", in: Stamatoudi I, Torremans P (eds), *EU Copyright Law – A Commentary*, 2nd ed, Cheltenham: Edward Elgar

Gervais D (2009-2010), "Fair Use, Fair Dealing, Fair Principles: Efforts to Conceptualize Exceptions and Limitations to Copyright", *Journal of the Copyright Society of the U.S.A.* 57 (2009-2010), 499

Gibson J (2007), "Risk Aversion and Rights Accretion in Intellectual Property Law", *Yale Law Journal* 116 (2007), 882

Ginsburg JC (2001), "Toward Supranational Copyright Law? The WTO Panel Decision and the "Three-Step Test" for Copyright Exceptions", *Revue Internationale du Droit d'Auteur* 190 (2001), 13

Griffiths J, McDonagh L (2013), "Fundamental Rights and European IP Law – the Case of Art 17(2) of the EU Charter", in: Geiger C (ed.), *Constructing European Intellectual Property – Achievements and New Perspectives*, Cheltenham: Edward Elgar 2013, 75

Griffiths J, Synodinou T et al. (2022), *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*, European Copyright Society 2022, available at: https://europeancopyrightsociety.org/

Guibault LMCR (2002), *Copyright Limitations and Contracts – An Analysis of the Contractual Overridability of Limitations on Copyright*, The Hague/London/New York: Kluwer Law International

Hartung F, Ramme F (2000), "Digital Rights Management and Watermarking of Multimedia Content for M-Commerce Applications", *IEEE Communications Magazine* 79 (November 2000)

Hilty RM (2006), "Das Urheberrecht und der Wissenschaftler", *Gewerblicher Rechtsschutz und Urheberrecht – International* 2006, 179

Hilty RM, Richter H (2017), "Position Statement of the Max Planck Institute for Innovation and Competition on the Proposed Modernisation of European Copyright Rules – Part B: Exceptions and Limitations – Art. 3 Text and Data Mining", *Max Planck Institute for Innovation and Competition Research Paper Series* 2017/2, Munich: Max Planck Institute for Innovation and Competition 2017

Höpperger M, Senftleben MRF (2007), "Protection Against Unfair Competition at the International Level – The Paris Convention, the 1996 Model Provisions and the Current Work of the World Intellectual Property Organization", in: Hilty RM, Henning-Bodewig F (eds.), *Law Against Unfair Competition – Towards a New Paradigm in Europe?*, MPI Studies on Intellectual Property, Competition and Tax Law, Vol. 1, Berlin/Heidelberg: Springer 2007, 61-76

Hugenholtz PB (2000), "Caching and Copyright. The Right of Temporary Copying", *European Intellectual Property Review* 11 (2000), 482

Hugenholtz PB (2019), "Artikelen 3 en 4 DSM-richtlijn: tekst- en datamining", *Tijdschrift voor auteurs-, media- en informatierecht* 2019, 167

Hugenholtz PB (2022), "Regulating Creator's Contracts Under the DSM Directive. What We Can Learn From the Dutch", *Nordiskt Immateriellt Rättsskydd* 4 (2022), 467

Hugenholtz PB, Guibault LMCR (2004), *Auteurscontractenrecht: Naar een Wettelijke Regeling?*, Amsterdam: Institute for Information Law 2004, available at: http://hdl.handle.net/20.500.12832/1434

Hugenholtz PB, Senftleben MRF (2011), *Fair Use in Europe. In Search of Flexibilities*, Amsterdam: Institute for Information Law/VU Centre for Law and Governance 2011, available at: https://hdl.handle.net/11245/1.361180

Husovec M (2017), *Injunctions Against Intermediaries in the European Union—Accountable but Not Liable?*, Cambridge: Cambridge University Press 2017

Izyumenko E (2020), *The Freedom of Expression Perspectives on Intellectual Property in Europe*, Strasbourg: CEIPI 2020

Jongsma DJW (2019), *Creating EU Copyright Law – Striking a Fair Balance*, Helsinki: Hanken School of Economics 2019

Kulk S (2018), *Internet Intermediaries and Copyright Law—Towards a Future-Proof EU Legal Framework*, Utrecht: University of Utrecht 2018

Kulk S, Teunissen P (2019), "Naar een nieuw fundament – hoe het Handvest het auteursrecht hervormt (deel 1)", *Tijdschrift voor auteurs-, media- en informatierecht* 2019, 121

Kur A (2009), "Of Oceans, Islands, and Inland Water – How Much Room for Exceptions and Limitations Under the Three-Step Test?", *Richmond Journal of Global Law and Business* 8 (2009), 287

Larivière V, Haustein S, Mongeon O (2015), "The Oligopoly of Academic Publishers in the Digital Era", *PLoS ONE* 10 (2015), 1.

Lessig L (2004), *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, New York: Penguin Press 2004

Leistner M, Antoine L (2025), "TDM and AI Training in the European Union – From 'LAION' to Possible Ways Ahead?", *Gewerblicher Rechtsschutz und Urheberrecht – International* 2025, 1027

Lemley MA, Casey B (2021), "Fair Learning", *Texas Law Review* 99 (2021), 743

Litman J (1998), "The Tales That Article 2B Tells", *Berkeley Technology Law Journal* 13 (1998), 931

Lucas A (2001), "Le "triple test" de l'article 13 de l'Accord ADPIC à la lumière du rapport du Groupe spécial de l'OMC "Etats-Unis – Article 110 (5) de la loi sur le droit d'auteur"", in: Ganea P, Heath C, Schricker G (eds.), *Urheberrecht Gestern – Heute – Morgen, Festschrift für Adolf Dietz zum 65. Geburtstag*, C.H. Beck: Munich 2001, 423

Lucchi N (2025), *Generative AI and Copyright – Training, Creation, Regulation*, Study requested by the JURI Committee, Brussels: European Parliament, Policy Department for Justice, Civil Liberties and Institutional Affairs, 2025

Margoni T (2024), "TDM and Generative AI: Lawful Access and Opt-outs", *Auteurs & Media* 2024 (2024), 172

Margoni T, Kretschmer M (2021), "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

McGuigan GS, Russel RD (2008), "The Business of Cademic Publishing: A Strategic Analysis of the Academic Journal Publishing Industry and its Impact on the Future of Scholarly Publishing", *Electronic Journal of Academic and Special Librarianship* 9 (2008), available at: https://digitalcommons.unl.edu/ejasljournal/105/

McGuinn J, Sproǵe J et al. (2021), Study on the Application of the Orphan Works Directive (2012/28/EU) – Final Report, Study for European Commission, DG CONNECT, Brussels: Publications Office of the European Union 2021, available at: https://data.europa.eu/doi/10.2759/32123

Morrison DM (2008), "Bridgeport Redux: Digital Sampling and Audience Recoding", *Fordham Intellectual Property, Media and Entertainment Law Journal* 19 (2008), 75

Nederlandse erfgoedinstellingen (2019), "Gezamenlijke reactie van Nederlandse erfgoedinstellingen op het DSM-implementatiewetsvoorstel" (Joint Statement of Dutch Cultural Heritage Institutions Concerning the Proposal for CDSMD Implementation), dated 30 August 2019, available at: https://internetconsultatie.nl/auteursrecht/reactie/d9016ec8-fc3b-4dfd-a853-1d8d360238cb

Oliver J (2002), "Copyright in the WTO: The Panel Decision on the Three-Step Test", *Columbia Journal of Law and the Arts* 25 (2002), 119

O'Rourke M (1997), "Copyright Preemption After the ProCD Case: A Market-Based Approach", *Berkeley Technology Law Journal* 12 (1997), 53

Peguera M (2009), "The DMCA Safe Harbour and Their European Counterparts: A Comparative Analysis of Some Common Problems", *Columbia Journal of Law and the Arts* 481 32 (2009), 481

Peifer KN (2016), „Der Referentenentwurf zum Urhebervertragsrecht", *Gewerblicher Rechtsschutz und Urheberrecht* (2016), 6

Priora G, Jütte BJ, Mezei P (2022), "Copyright and Digital Teaching Exceptions in the EU: Legislative Developments and Implementation Models of Art. 5 CDSM Directive", *International Review of Intellectual Property and Competition Law* 52 (2022), 543

Quintais JP (2025a), "Generative AI, Copyright and the AI Act", *Computer Law Security Review* 56 (2025), no: 106107, available at: https://doi.org/10.1016/j.clsr.2025.106107

Quintais JP (2025b), "What is a 'Research Organisation' and Why It Matters: From Text and Data Mining to AI Research", *Gewerblicher Rechtsschutz und Urheberrecht – International* (2025), 397

Reese AR (2007), "Innocent Infringement in U.S. Copyright Law: A History", *Columbia Journal of Law and the Arts* 30 (2007), 133

Rendas T (2018), "Copyright Technology and the CJEU: An Empirical Study", *International Review of Intellectual Property and Competition Law* 49 (2018), 153

Ricketson S (2002), *The Three-Step Test, Deemed Quantities, Libraries and Closed Exceptions*, Centre for Copyright Studies, Strawberry Hills 2002, 31

Rogers R (2018), "Periodizing Web Archiving: Biographical, Event-Based, National and Autobiographical Traditions", in: Brügger N, Milligan I (eds), *The SAGE Handbook of Web History*, SAGE Publications 2019, 42

Rosati E (2021), *Copyright in the Digital Single Market*, Oxford: Oxford University Press 2021

Rosati E (2024), "No Step-Free Copyright Exceptions: The Role of the Three-Step in Defining Permitted Uses of Protected Content (Including TDM for AI-Training Purposes), *European Intellectual Property Review* 46 (2024), 262

Rosati E (2025), "Copyright Exceptions and Fair Use Defences for AI Training Done for 'Research' and 'Learning,' or the Inescapable Licensing Horizon", *European Journal of Risk Regulation* 16 (2025), 961

Sag M (2012), "Predicting Fair Use", *Ohio State Law Journal* 73 (2012), 47

Sag M (2024), "Fairness and Fair Use in Generative AI", *Fordham Law Review* 92 (2024), 1887

Sag M, Yu PK (2025), "The Globalization of Copyright Exceptions for AI Training", *Emory Law Journal* 74 (2025), 1163

Samuelson P (2009), "Unbundling Fair Uses", *Fordham Law Review* 77 (2009), 2537

Samuelson P (2024), "Fair Use Defenses in Disruptive Technology Cases", *UCLA Law Review* 71 (2024), 1484

Samuelson P, Wheatland, T (2009), "Statutory Damages in Copyright Law: A Remedy in Need of Reform", *William and Mary Law Review* 51 (2009), 439

Schack H (2001), "Neuregelung des Urhebervertragsrechts", Zeitschrift für Urheber- und Medienrecht 2001, 453

Schack H (2024), "Auslesen von Webseiten zu KI-Trainingszwecken als Urheberrechtsverletzung de lege lata et ferenda", *Neue Juristische Wochenschrift* (2024), 113

Schulze G (2005), „Vergütungssystem und Schrankenregelungen", *Gewerblicher Rechtsschutz und Urheberrecht* 2005, 828

Senftleben MRF (2004), *Copyright, Limitations and the Three-Step Test – An Analysis of the Three-Step Test in International and EC Copyright Law*, The Hague/London/New York: Kluwer Law International 2004

Senftleben MRF (2006), "Towards a Horizontal Standard for Limiting Intellectual Property Rights? – WTO Panel Reports Shed Light on the Three-Step Test in Copyright Law and Related Tests in Patent and Trademark Law", *International Review of Intellectual Property and Competition Law* 37 (2006), 407

Senftleben MRF (2010), "The International Three-Step Test – A Model Provision for EC Fair Use Legislation", *Journal of Intellectual Property, Information Technology and E-Commerce Law* 1 (2010), 67

Senftleben MRF (2018), "More Money for Creators and More Support for Copyright in Society – Fair Remuneration Rights in Germany and the Netherlands", *Columbia Journal of Law and the Arts* 41 (2018), 413

Senftleben MRF (2020a), *The Copyright/Trademark Interface – How the Expansion of Trademark Protection Is Stifling Cultural Creativity*, The Hague/London/New York: Kluwer Law International 2020

Senftleben MRF (2020b), 'Flexibility Grave – Partial Reproduction Focus and Closed System Fetishism in CJEU, Pelham', *International Review of Intellectual Property and Competition Law* 51 (2020), 751 (751-769)

Senftleben MRF (2021), "From Flexible Balancing Tool to Quasi-Constitutional Straitjacket— How the EU Cultivates the Constraining Function of the Three-Step Test", in: Griffiths J, Mylly T (eds.), *Global Intellectual Property Protection and New Constitutionalism – Hedging Exclusive Rights*, Oxford: Oxford University Press 2021, 83

Senftleben MRF (2022a), *Study on EU Copyright and Related Rights and Access to and Reuse of Data*, European Commission, Directorate-General for Research and Innovation (DG RTD), Brussels: Publications Office of the European Union 2022, available at: https://data.europa.eu/doi/10.2777/78973

Senftleben MRF (2022b), "Compliance of National TDM Rules with International Copyright Law – An Overrated Nonissue?", *International Review of Intellectual Property and Competition Law* 53 (2022), 1477

Senftleben MRF (2024a), "The Unproductive Overconstitutionalization of EU Copyright and Trademark Law – Fundamental Rights Rhetoric and Reality in CJEU Jurisprudence", *International Review of Intellectual Property and Competition Law* 55 (2024), 1471, available at: https://doi.org/10.1007/s40319-024-01527-8

Senftleben MRF (2024b), "Article 10bis of the Paris Convention as the Common Denominator for Protection Against Unfair Competition in National and Regional Contexts", *Journal of Intellectual Property Law and Practice* 19 (2024), 81-89, available at: https://doi.org/10.1093/jiplp/jpad122

Senftleben MRF (2025), "Win-win: How to Remove Copyright Obstacles to AI Training While Ensuring Author Remuneration (and Why the AI Act Fails to Do the Magic)", *Chicago-Kent Law Review* 100 (2025), 7

Senftleben MRF (2026), "TDM, GenAI and the Copyright Three-Step Test", *International Review of Intellectual Property and Competition Law* 57 (2026), 67, https://doi.org/10.1007/s40319-026-01680-2

Senftleben MRF, Angelopoulos C (2020), *The Odyssey of the Prohibition on General Monitoring Obligations on the Way to the Digital Services Act: Between Article 15 of the E-Commerce Directive and Article 17 of the Directive on Copyright in the Digital Single Market*, Amsterdam: Institute for Information Law/ Cambridge: Centre for Intellectual Property and Information Law 2020, available at: https://ssrn.com/abstract=3717022

Senftleben MRF, van Gompel S et al. (2021), *Webharvesting: The Legal Framework for the Preservation of the Dutch Internet Domain*, The Hague: Wetenschappelijk Onderzoek- en Documentatiecentrum (WODC), Ministry of Justice and Security, 20 September 2021, available at: http://hdl.handle.net/20.500.12832/3119

Senftleben MRF, Quintais JP, Meiring A (2023), "How the European Union Outsources the Task of Human Rights Protection to Platforms and Users: The Case of User-Generated Content Monetization", *Berkeley Technology Law Journal* 38 (2023), 933-1010

M.R.F. Senftleben/K. Szkalej/C. Sganga/T. Margoni (2025), 'Towards a European Research Freedom Act: A Reform Agenda for Research Exceptions in the EU Copyright Acquis', *International Review of Intellectual Property and Competition Law* 56 (2025), 1329-1358, available at: https://doi.org/10.1007/s40319-025-01604-6

Sganga C et al. (2023) Copyright flexibilities: mapping and comparative assessment of EU and national sources. https://ssrn.com/abstract=4325376

Spindler G (2018), „Text- und Datamining im neuen Urheberrecht und in der europäischen Diskussion", *Zeitschrift für geistiges Eigentum* 2018, 273

Stamatoudi I, Torremans P (2021), "The Digital Single Market Directive", in: Stamatoudi I, Torremans P (eds.), *EU Copyright Law – A Commentary*, 2nd ed., Cheltenham: Edward Elgar 2021

Stieper M (2025), *Verwendung von Bibliotheksbeständen für das Text- und Data-Mining, insbesondere für das KI-Training – Rechtsgutachten im Auftrag der Rechtskommission im Deutschen Bibliotheksverband e.V. (dbv)*, Berlin: Deutscher Bibliotheksverband 2025

Stančiauskas V et al. (2024), *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*, Brussels: European Commission, DG Research and Innovation 2024, available at: https://data.europa.eu/doi/10.2777/633395

Synodinou T (2025), "Navigating User Lawfulness in European Copyright Law: From Lawful Use to Lawful Access", *Kluwer Copyright Blog* 19 March 2025, available at:

https://legalblogs.wolterskluwer.com/copyright-blog/navigating-user-lawfulness-in-european-copyright-law-from-lawful-use-to-lawful-access/

Szczepanowska-Kozłowska K (2023), "Damages and Legal Costs under the Enforcement Directive in the Light of Rulings of the European Court of Justice", *ERA Forum* 23 (2023), 567

Szkalej K (2021), *Copyright in the Age of Access to Legal Digital Content. A Study of EU Copyright Law in the Context of Consumptive Use of Protected Content*, Uppsala: Uppsala University 2021

Szkalej K (2025), "The Paradox of Lawful Text and Data Mining? Some Experiences from the Research Sector and Where We (Should) Go from Here", *Gewerblicher Rechtsschutz und Urheberrecht – International* 74 (2025), 307

Tan D, Lee Chee Seng T (2021), "Fair Use, Computational Data Analysis and the Personal Data Protection Act", *Singapore Academy of Law Journal* 33 (2021), 1032

Terhorst AGI (2015), "Auteurscontractenrecht: er is een wettelijke regeling!", *Tijdschrift voor auteurs-, media- en informatierecht* 2015, 162

Thongmeensuk S (2023), "Rethinking Copyright Exceptions in the Era of Generative AI: Balancing Innovation and Intellectual Property Protection", *Journal of World Intellectual Property* 27 (2024), 278

Trapova A (2023), 'The Exceptional Mismatch of Copyright Teaching Exceptions in the Post-pandemic University – Insights from Germany, Bulgaria, and Ireland", *Journal of Intellectual Property, Information Technology and E-Commerce Law* 14 (2023), 307

Ueno T (2021), "The Flexible Copyright Exception for 'Non-Enjoyment' Purposes Recent Amendment in Japan and Its Implication", *Gewerblicher Rechtsschutz und Urheberrecht International* 70 (2021), 145

US Copyright Office (2025), *Copyright and Artificial Intelligence Part 3: Generative AI Training – A Report of the Register of Copyrights*, Pre-publication May 2025. United States Copyright Office: Washington DC

Van Gompel SJ (2007), "Unlocking the Potential of Pre-existing Content: How to Address the Issue of Orphan Works in Europe?", *International Review of Intellectual Property and Competition Law* 38 (2007), 669

Van Gompel SJ (2012), "The Orphan Works Chimera and How to Defeat It: A View From Across the Atlantic", *Berkeley Technology Law Journal* 27 (2012), 1347

Van Gompel SJ, Hugenholtz PB (2010), "The Orphan Works Problem: The Copyright Conundrum of Digitizing Large-Scale Audiovisual Archives, and How to Solve It", *Popular Communication: The International Journal of Media and Culture* 8 (2010), 61, available at: https://doi.org/10.1080/15405700903502361

Van Gompel SJ, Hugenholtz PB et al. (2020), *Evaluatie Wet Auteurscontractenrecht. Eindrapport*, Amsterdam: Institute for Information Law (2020), available at: https://repository.wodc.nl/handle/20.500.12832/2460

Vlassenroot E, Chambers S et al. (2019), "Web Archives as a Data Resource for Digital Scholars", *International Journal of Digital Humanities* 1 (2019), 85

Westkamp G (2008), "The 'Three-Step Test' and Copyright Limitations in Europe: European Copyright Law Between Approximation and National Decision Making", *Journal of the Copyright Society of the U.S.A.* 56 (2008), 1

Wichard JC (2005), "The Joint Recommendation Concerning Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet", in: Drexl J/Kur A (eds.), *Intellectual Property and Private International Law*, IIC Studies, Vol. 24, Oxford and Portland, Oregon 2005, 257

Widła B (2025), "'Thou Shalt Not Conduct Research on Software? Text and Data Mining of Computer Programs in the Current EU Copyright Framework", *Gewerblicher Rechtsschutz und Urheberrecht – International* 74 (2025), 3

WTO (2000), 15 June 2000, Document WT/DS160/R, United States – Section 110(5) of the US Copyright Act, Report of the Panel, Geneva: World Trade Organization 2000

Wymeersch P (2023), "EU Copyright Exceptions and Limitations and the Three-Step Test: One Step Forward, Two Steps Back", *Gewerblicher Rechtsschutz und Urheberrecht – International* 2023 (2023), 631

Xalabarder Plantada R (2020), "The Principle of Appropriate and Proportionate Remuneration for Authors and Performers in Art.18 Copyright in the Digital Single Market Directive. Statutory residual remuneration rights for its effective national implementation", *InDret* 4 (2020), 1, available at: https://indret.com/wp-content/uploads/2020/10/1591.pdf

Zarif A (2023), "The Economics of Scientific Publishing", *Yale Journal of Biology and Medicine* 96 (2023), 267

ANNEX: Interviewees, questionnaire

Interviewees

We owe special thanks to the following experts who shared their practical insights and advice on potential policy measures with the research team during the interviews:

- Annemarie Beunen, Copyright Expert, Koninklijke Bibliotheek/National Library of the Netherlands, The Hague, The Netherlands
- Maja Bogataj Jančič, Founder and Head, Open Data and Intellectual Property Institute (ODIPI), Ljubljana, Knowledge Rights 21, Slovenia
- Martin Bradley, Barrister, Archivist and Director, Archives Ireland, Knowledge Rights 21, Ireland
- Eric-Jan Dol, Electronic Resource Librarian, University of Amsterdam, The Netherlands
- Annakim Eltén, Research Support Librarian, Data Steward, Libraries of the Joint Faculties of Humanities and Theology, Lund University, Sweden
- Marion von Francken-Welz, Deputy Head of the Acquisition and Cataloguing Department, University Library, University of Mannheim, Germany
- Georgios Glossiotis, Head of Library and IT Department, Organisation for Mediation and Arbitration, Knowledge Rights 21, Cyprus and Greece
- Ciska Kurpershoek, Licensing Manager, Utrecht University Library, Utrecht University, The Netherlands
- Judith Ludwig, General Counsel and License Manager, Technische Informationsbibliothek Hannover, Germany
- Andrea Mervik, Research Support Librarian, Libraries of the Joint Faculties of Humanities and Theology, Lund University, Sweden
- Marcel Ottenbros, Head Acquisitions, University Library, University of Amsterdam, The Netherlands
- Carl Petersson, Legal Counsel, Legal Division, Lund University, Sweden
- Erna Sattler, Copyright Expert, Leiden University, The Netherlands
- Annabelle Shaw, Public Access Researcher, British Film Institute (BFI), UK
- Dyveke Sijm, Chief Adviser, Det Kgl. Bibliotek/Royal Danish Library, Denmark
- Victoria Stobo, Lecturer in Record-Keeping, Liverpool University Centre for Archive Studies, University of Liverpool, UK
- Arja Tuuliniemi, Head of Licensing, National Library of Finland
- Ophélie Wang, Librarian, Cujas Library in Paris, Knowledge Rights 21, France

- Benjamin White, Researcher, Centre for Intellectual Property Policy and Management (CIPPM), Bournemouth University, Knowledge Rights 21, UK

- Stephen Wyber, External Affairs Director, International Federation of Library Associations and Institutions (ILFA), UK

Questionnaire

The semi-structured interviews carried out during the research project have been based on the following questionnaire:

General - Legal risks for knowledge institutions

1. Role of current copyright law

Practice

- How do copyright issues impact day-to-day operations in your institution? Do you have to deal with rules in:
  - copyright legislation; and/or
  - terms and conditions in license agreements?
- How frequently does your institution engage with rightsholders (e.g., publishers, database providers, content creators) to clear copyright and/or clarify copyright permissions?
- Are there specific types of activities (e.g., text and data mining, digital preservation, online teaching) that are particularly affected by copyright uncertainty at your institution or that you are aware of in the sector?
- Did you/your institution ever stop developing or supporting certain research and/or teaching activities because you feared that the activity would infringe copyright and you would have to pay damages?

Internal policy

- Would you say that copyright compliance places financial and administrative burdens on your institution?
- What internal measures does your institution take to manage copyright-related risks (e.g., internal legal counsel, compliance training, risk assessments)?
- What role does copyright uncertainty play in shaping institutional policies on digital learning materials, open-access research, and archiving?

Enforcement

- Are you aware of copyright holders threatening legal action against knowledge institutions?
- What are the most common types of copyright disputes you are aware of? How are these disputes resolved in practice?
- Have there been instances where copyright uncertainty delayed or prevented the launch of a research project or educational initiative?

Legal framework

- How accessible and understandable do you find current EU and national copyright laws? Are they easy to interpret, or do they require extensive legal expertise?
- Which elements of copyright law in your country would you describe as "effective" in assisting knowledge institutions (libraries, archives, universities, research organisations, etc.) with navigating legal risks – in the sense of reducing exposure of knowledge institutions to those risks? Which elements would you describe as "ineffective"?
- Have you encountered cases where differences in national copyright laws within the EU have complicated a research collaboration or educational initiative, in particular cross-border collaborations?

Licence agreements

- Would you say that legal uncertainty about copyright permissions can arise from license agreements?
- Can you give examples of contractual clauses that you find difficult to apply in practice?
- Do you think that licensing can be a good solution for clarifying use permissions for modern forms of research and teaching, such as use in text and data mining and AI projects, or in cross-border distance education? Have you encountered contractual clauses that prohibit such uses?
- Are you aware of licence contracts that include the choice of a foreign copyright law? Does this concern a foreign law outside the EU? How would you describe the impact of a foreign law choice on uses that are permitted in EU copyright law, such as text and data mining and distance education?

Potential legal mechanisms supporting risk management

2. Liability exemption

- Do you think it would help you or your institution to have a rule in copyright law stating that (staff of) knowledge institutions are not liable for copyright infringement when they acted in a diligent manner?
- Are you aware of such rules in copyright law or other pieces of legislation?
- How would such a liability exemption affect your approach to the risk of copyright infringement? Do you think it would make it easier to develop or support research and/or teaching activities?
- Which criteria for invoking the liability exemption would make sense from your perspective? Should institutions be required to demonstrate due diligence, good faith, sufficient knowledge of copyright, etc.?

3. Cap on damages

- Do you think it would help you or your institution to have a rule in copyright law stating that you only have to pay a certain maximum amount of damages?

- Alternatively, do you think it would help to have a rule stating that damages for copyright infringement would be calculated in a specific way that makes the financial risk for knowledge institutions “manageable”?
- What factors should be considered in determining a fair cap on damages? Should it vary based on the type of institution (e.g., research university vs. public library)?
- Do you think that limiting damages would encourage knowledge institutions to make broader use of copyright-protected materials when fulfilling their tasks? Make broader use of use permissions given in copyright legislation, such as permission for text and data mining and distance education?
- Do you think that – with or without a cap on damages – knowledge institutions would still fear potential reputational harm (“bad press”) when copyright infringement is found?

4. Advisory or dispute settlement body

- Do you think it would help you or your institution to have an advisory or dispute settlement body which you could consult to find out whether a certain use for research or teaching is permissible from a copyright perspective? Are you aware of such a body in your country or elsewhere in the EU?
- Should institutions be able to request binding legal opinions from this body, or should it serve as a purely advisory mechanism?
- Would a national advisory body be more useful than a centralized EU entity, or would a combination of both be preferable?
- Should the advisory body have a mediation function to facilitate settlements between institutions and rightsholders?

5. Best-practice guidelines

- Do you think it would help you or your institution to have best-practice guidelines that provide guidance on copyright issues in educational and research contexts?
- Are you aware of existing sectoral standards or guidelines that could serve as a basis for such best-practice guidelines?
- What formats (e.g., online toolkits, legal manuals, training sessions) would be most effective for delivering best-practice guidelines?
- Should these guidelines focus solely on copyright exceptions, or should they also address licensing models and contractual obligations?

6. Country-of-origin rules

- How do you or your institution currently deal with cross-border copyright issues that arise in collaborations with foreign partners? Are you aware of problems that can arise when your foreign partners are subject to different national copyright laws or license agreements?
- Are there particular types of content (e.g., audiovisual materials, datasets, publications) where cross-border legal uncertainty is especially problematic?
- Do you think it would help you or your institution to have a rule in copyright law stating that the use carried in collaboration with foreign partners is deemed to take place only in one single country (your country for instance if it concerns copyright-protected resources

in your collection) and not in all countries involved in the project "country-of-origin" rule?

7. Open

- Do you have ideas for other mechanisms to mitigate legal risks of copyright infringement, damages etc.? If so, what other mechanisms?
- Are you aware of studies, case law, analyses etc. shedding light on challenges that knowledge institutions face in practice, such as a lack of knowledge about or formalised processes for risk management when handling copyright works?
