LIBER
Ligue des Bibliothèques Européennes de Recherche
Association of European Research Libraries

SECONDARY PUBLISHING RIGHTS IN EUROPE

Status, Challenges & Opportunities

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Knowledge Rights 21
21st Century Access to Culture, Learning & Research

CREDITS

Organisation

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Design

SPRESSO design studio, The Hague; Square-up Agency, Brussels; Giannis Tsakonas

Funding: Knowledge Rights 21 & Arcadia

The publication is issued as part of the Knowledge Rights 21 project, funded by Arcadia – a charitable fund of Lisbet Rausing and Peter Baldwin.

https://www.knowledgerights21.org/ - https://www.arcadiafund.org.uk/

DOI

Report DOI: https://doi.org/10.5281/zenodo.8428315

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LIST OF ABBREVIATIONS

AAM: Author's Accepted Manuscript

AISA: Associazione Italiana per la promozione della Scienza Aperta

ALLEA: European Federation of Academies of Sciences and Humanities

APC: Article Processing Charge

CC: Creative Commons

CESAER: Conference of European Schools for Advanced Engineering Education and Research

DSM: Digital Single Market (Directive)

EC: European Commission

EOSC: European Open Science Cloud

ERA: European Research Area

ERC: European Research Council

EUA: European University Association

F.R.S.-FNRS: Fonds National de la Recherche Scientifique

HSS: Humanities & Social Sciences

KR21: Knowledge Rights 21

LERU: League of European Research Universities

LIBER: Ligue des Bibliothèques Européennes de Recherche

OA: Open Access

ORE: Open Research Europe

OS: Open Science

OSTP: Office of Science and Technology Policy

REF: Research Excellence Framework

RFO: Research Funding Organization

RPO: Research Performing Organization

RRS: Rights Retention Strategy

SPR: Secondary Publishing Right

SPARC Europe: Scholarly Publishing and Academic Resources Coalition

STEM: Science, Technology, Engineering and Mathematics

TDM: Text and Data Mining

UKSCL: UK Scholarly Communications Licence and Model Policy

UKRI: United Kingdom Research and Innovation

VoR: Version of Record

VSNU: Vereniging van Universiteiten (Association of the Universities of the Netherlands)

EXECUTIVE SUMMARY

The Secondary Publishing Right (SPR) is considered to be one of the key instruments that can open the road to Green Open Access (OA) by challenging and lifting the contractual barriers between publishers and authors around the deposition of post-prints or Versions of Record (VoR) in public not-for-profit repositories. The SPR should be considered as a secure legislative measure that coexists with others, such as policies of rights retention, for lifting restrictions and enabling publicly funded research to become OA. Such a republishing right has been introduced in seven European countries. While these often allow for a gap between initial publication and reposting, widely known as an embargo, there is an apparent tendency now towards a 'zero embargo' approach, consistent with calls by EU ministers for immediate access.

The current study, conducted by LIBER, the Association of European Research Libraries, in the framework of the Knowledge Rights 21 Programme, looks at the development and implementation of SPR in these seven countries. In parallel, it collects, analyses, and presents the expert opinions of OA professionals and legal experts from countries that do not have this legislation, as well as of representatives from relevant associations. Key conclusions are as follows:

- There is great heterogeneity among the seven countries. SPR provisions vary when it comes to their stated goals and legal contexts, but also have different components that affect their implementation.
- These provisions have been introduced in ways that have not always taken into account the voice of relevant stakeholders. It also appears that the importance ascribed to such policies by governments seems relatively low, despite the contribution that they can make to achieving OA goals.
- Expert guidance and support are vital to respond to challenges during the drafting and negotiation of the law. Skills must be developed and capitalised on at the implementation stage to make SPR effective.
- The disharmony of various legislative acts and jurisdictions confuses and affects the implementation of SPR. Resources and policy instruments are vital to monitor compliance with the law and provide informed feedback.
- While the adoption of SPR in individual countries is welcomed, the widest possible adoption at a harmonised EU level is the most plausible solution to address national and international differences.

In general, successful SPRs require expertise in both copyright and Open Access. These are an example of broader efforts to recalibrate of the entire scholarly communication system around the balance of fundamental rights, principles, values and practice. This report is accompanied by an infographic and reading list, publicly available at www.zotero.org/groups/4840070/project_zero.

INTRODUCTION

The Knowledge Rights 21 (KR21) programme is focused on bringing about changes in legislation and practice across Europe that will strengthen the right of all to knowledge. It is built on a conviction that knowledge is essential for education, innovation, and cultural participation, and that everyone should have the possibility - locally or digitally, through libraries and archives - to access and use it.

This study focuses on the possibilities that the secondary publishing right offers to the OA scholarly communication system. KR21 has acknowledged that secondary publishing is an important instrument to open the access to scientific publications “given both the support this provides for further research, the need to support Knowledge Transfer between universities and private players, and the right of the public to access works that they have financed” and that actions should be taken both on the national and the international levels [1].

The world has changed since the first steps of the OA movement. There is a consciousness that exchanging scientific information has not been altered only by technological advancements, but also by societal awareness of the need to mobilise it to solve global issues and to address global inequalities. This awareness is pushing various bodies to act.

The need for the EU to work towards a more open knowledge economy is translated into Key Action 2 “Propose an EU Copyright and Data Legislative and Regulatory Framework Fit for Research” of the European Research Area Policy Agenda for 2022-2024In this the Commission recognizes the conditions that stall the dissemination of European research and signals its intention to recommend “legislative and non-legislative measures to improve the current EU copyright and data legislative and regulatory frameworks” [2].

This is further supported by the conclusions of the Council of the European Union, the main body for law making in the EU, which in June 2022, emphasised “that the authors of research publications or their institutions should retain sufficient intellectual property rights to ensure open access, leading to broader dissemination, valorisation and reuse of results, and improving the fair balance of the publishing business models” [3]. This bold acknowledgement of the need for rights retention was followed by the welcoming of SPR in Member States as an instrument that opens access to publicly funded research in February 2023. This was warmly received by several stakeholders, including KR21 [4]. In particular, a request “to give researchers the nonwaivable legal right to share publicly funded and peer-reviewed research findings without embargoes” has been expressed by CESAER, a European association of universities of science and technology [5].

AIM OF THE STUDY

The SPR is considered to be one of the key instruments that enables the Green OA Road[1] by challenging and lifting the contractual barriers between publishers and authors for the deposition of post-prints (known also as Author's Accepted Manuscript, AAM) or Version of Record (VoR) in public not-for-profit OA repositories. Such a republishing right has been introduced in seven European countries, often with a delay between publication in a journal and on a repository, widely known as an embargo. The SPR should be considered as a legal measure that coexists with others, such as policies for rights retention at the level of institutions or funders, in order to lift restrictions and empower publicly funded research to become OA.

The aim of this study was to conduct a survey that would help KR21 and anyone interested to form a solid narrative for the necessary legal interventions. By knowing the situation in European countries better, one will be able:

1. to solicit successful cases of implementation and the most efficient paths to this,
2. to understand their impact, and
3. to comprehend what obstacles need to be overcome in the countries that do not have this sort of legislation.

The aim is not to develop and propose a law; a model law has already been proposed by LIBER with its ZeroEmbargo campaign, based on developments on the European continent [6]. Neither does this study aim to benchmark existing laws. However, building on evidence of the implementation and effectiveness of the current legislation, it aims to understand the challenges and the impact of this legal instrument over the growth of OA. Taking into consideration that there are already studies that investigate the SPR comparatively, this study aims to add value to the entire discussion in two ways:

by firstly understanding the challenges in introducing and implementing such legislation in a country, and secondly, viewing this topic as broadly as possible, because such legislation should produce results that should be measurable and actionable in the scholarly world.

[1] Green OA refers typically to the publication of a version of a research publication on an institutional or other repository in addition to more conventional publication through a journal. It is not subject to payment. In contrast, 'Gold' OA implies some sort of payment to publishers in order to allow for OA publication in a traditional journal.

METHODOLOGY

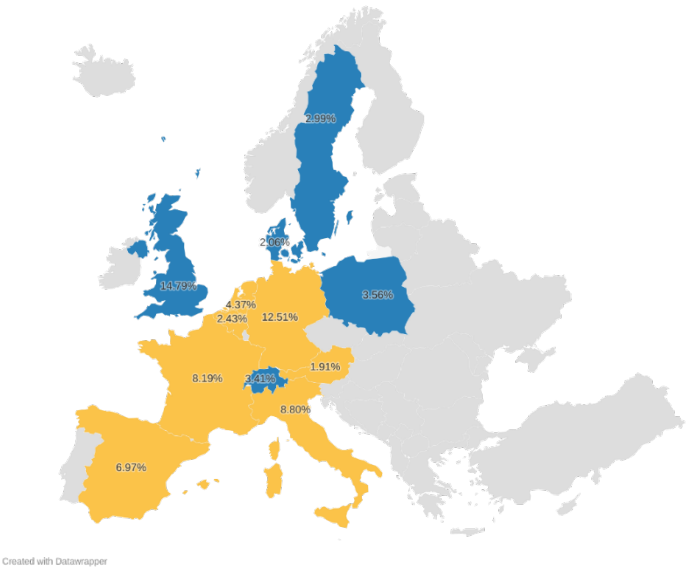
The study has been conducted by LIBER and has used a mixed methods approach. The main method was interviews that were conducted over a two month period with 18 experts split into two groups of countries: the first group countries that have a national law in place and the second countries that do not. Furthermore, umbrella organizations, such as associations of universities and funders, were asked about SPR and its role in the international context.

The study was supported by desk research for the purpose of recording and classifying the legal instruments, which has been assisted by evidence from bibliometric databases. Questionnaires were also used, but the low number of responses does not make their findings applicable and generalizable; they are used only to indicate certain directions per country.

In order to have a considerable size group of countries to examine in the available time, instead of using a convenience sample, we opted for selecting based on the criterion of scientific production. We set ourselves a target to perform research on countries that are cumulatively responsible for 75% of European scientific publications.

In October 2022, data from SciVal[2] was used and according to it, at that moment, 42 of the countries of the Council of Europe had produced 6,111,497 publications in the five-years period 2017-2021, of which 3,142,760 were OA. After summing up the countries that already have legislation in place, we selected a number of countries that collectively provided 75% of outputs on the European continent. Due to the sensitive political situation after the invasion of the Ukraine by the Russian Federation, Russian publications were excluded from the calculation. At the end of the process, two groups of countries were formed, one with countries that have legislation (group A) and the other with countries that do not have (group B), with a total representation of 71.99% of total publications.

[2] https://www.scival.com



Group A (orange):
Germany, Italy, France, Spain, Netherlands, Belgium, Austria

Group B (blue):
United Kingdom, Poland, Switzerland, Sweden, Denmark

Figure 1: Map of countries that participate in the study with their respective percentage of scientific contributions. Created with Datawrapper.de

In addition to these, six more interviews were conducted, four with representatives from international organizations and two with legal experts. All the interviews were conducted via Zoom, were recorded, transcribed and analyzed in the frame of two months, February to March 2023. In this report, snippets from the interviews are verbatim transcribed (in italics).

BACKGROUND

THE NEED FOR OA

Over the last 20 years, the scientific world has witnessed the tectonic plates of the scholarly communication system moving. It is now more than ever evident that the traditional system is limiting the potential of the scientific world by transferring all rights to publishing entities, leaving the world of research and education with very little, if not nothing. The exploitation of all rights by the publishers creates large inequalities that affect the national and international growth rates.

In a neo-liberal, economically-driven market for scholarly communication, the treatment of fundamental rights is imbalanced. On one hand we have the article 17 "Right to property" of the European Charter of Fundamental Rights, which tends to pre-empt other articles, such as articles 11 "Freedom of expression & information", 13 "Freedom of the arts & sciences" and 14" Right to education" leaving them largely overlooked and neglected.

At the same time, there is valid evidence that OA facilitates the solution of global research issues and supports innovation [7], with the case of COVID-19 providing vindication of this in many aspects [8].

There are practices that try to advance Gold OA while attempting to satisfy all parties of the scholarly communication system, such as transformative agreements, but these raise some of their own questions, and still leave issues that are not addressed properly. Based on a prestige economy that fuels current research assessment practices, the cost of OA, as reflected in Article Processing Charges (and in some cases even by Submission Processing Charges), is constantly rising. This poses critical risks for (a) the sustainability of the system, as it stretches institutions' and funders' budgets, (b) the health of the publishing market, as it creates distortions due to lock-ins, and (c) equity among research communities, as certain economies of the world cannot afford to follow. In the end, this increases the pressure for a substantial reform of the scientific paradigm, as the current situation risks undermining the adoption of Open Science. This leads to a varied and uneven landscape of scholarly publishing, in which funds are channelled to all kinds of publications, including those in hybrid journals which raises ethical dilemmas. In conclusion, these models serve the Gold OA Road and preserve existing -commodified- aspects of the current paradigm.

On the other side, the same care has not been taken for the Green OA Road, which provides an alternative way of addressing all the previously mentioned risks, plus aims at collecting and documenting the scientific production of an institution or a community. However, one significant parameter is that the Green OA Road

requires researcher and institution autonomy as well as liberation from legal constraints, which are created at the time that an author transfers the copyright to the publisher so that the latter can reproduce, publish, and archive an article. It is then that the author will have none or only a few rights in his/her own work, including the right to republish it in a repository, the primary infrastructure for Green OA, or to use in a classroom. According to Sundell "Arguments over OA are in large part arguments over property rights: who should own the rights to the production and circulation of scientific knowledge and, at times, the profits this generates" [9]. But property, a right protected by the Charter of Fundamental Rights of the EU, translates to rights of exclusion that belong to one only entity. As Sundell continues, policies to retain rights (mainly to reuse), such as those of PlanS, potentially fall into the region of 'fuzzy de-privatization', an attempt to take a more ethical approach and ease the transition from a private (i.e publisher-owned) to a common (community-owned) property paradigm for scientific publications.

According to Suber, all policy mandates, regardless of their type (loophole, deposit and rights retention policies) point down the Green OA Road, but depend strongly on the choices, will and initiative of each individual researcher [10]. While not the only ones (disinterest and lack of knowledge can be also responsible), researchers will often be concerned about the legal implications of publishing OA when signing a contract with a publisher, even when their institution or funder policy asks them to. This can be a strong factor for not republishing scholarly works on repositories. For example, legal issues are underlined as a prohibiting factor for about 37% of the respondents of a recent EUA survey [11], while in a study of SPARC Europe, it was identified that the extent of OA policies of publishers "is far from widespread" [12]. The SPARC Europe report concludes that the publishers' compliance to funders' policies is quite problematic, while other reports mention that publishers often neglect funders' policies [13].

Green OA and the concept of public research infrastructure is further fragmented by for-profit repository services, some of which cooperate with publishers, who take advantage of the cross-institutional networking abilities that they offer. While this addresses access, it does not address reuse, which should be inseparable from it, according to a number of key statements in the space [14–16]. Without reuse rights, all subsequent kinds of use are not permitted, either for for-profit, or not-for-profit purposes, until the rightsholder (the publisher), allows it, quite often requiring some additional remuneration. This legal uncertainty generates confusion that deters researchers from adopting self-archiving practices, and reduces their and their organisations' negotiating power to keep substantial rights for republishing.

Figure 2 visualises a standardised journey of an article: the concepts, ideas and work of a researcher are expressed in the form of a publication that is firstly manifested as a pre-print. After a process of peer-reviewing, it is secondly manifested as an AAM and finally it is manifested, for the third time, as a VoR.

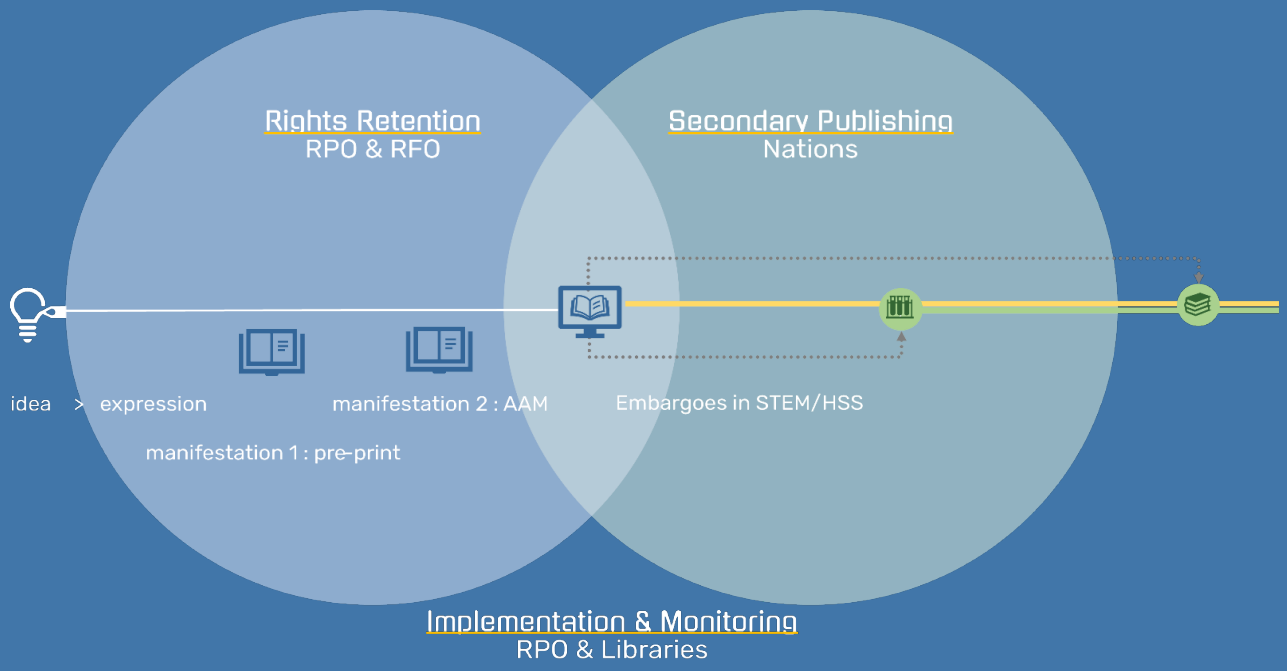


Figure 2: A standardised version of the OA publishing

During the creation of the work, the authors, when funded by public or charity resources, may need to comply to the OA policy of their funder (the Research Funding Organizations) or employer/host (the Research Performing Organizations, henceforth RPOs and RFOs respectively). These can seek to regulate the access and reuse of the final version. This final version, known as the Version of Record (VoR) traditionally gets priority, and copyright over it is assigned to a publisher.

After formal publication, this enters the typical channels of scientific discourse, not only as a knowledge asset (as every previous version), but also as an economic asset. The typical channels are considered important for the symbolic value of the work and operational efficiency in reaching interested audiences in a stable way.

The publisher can offer possibilities to researchers allowing them to comply with RFO and RPO policies, but typically at a cost, such as by charging higher APCs in return for applying CC-BY licenses or permitting a delayed Gold OA option for CC-BY articles, after 12 months and at lower APCs compared to that for immediate Gold OA. Otherwise, the Version of Record will remain behind a paywall.

The dashed lines in Figure 2 allude to the practice under Green OA models under which there is the possibility to provide access to an earlier version of an article - an Author Accepted Manuscript (AAM). However, the AAM is by default

absent from the scientific discourse and only becomes part of it if there is the possibility to share it. When this happens, it is -usually, but not always- six months after publication of the VoR for science, technology, engineering and maths (STEM) publications and 12 for humanities and social sciences (HSS) ones. Again, after this point, the AAM has a parallel course to the VoR on a Green OA infrastructure.

Secondary publishing rights, which are governed by legislation, provide a guarantee for this option for the parallel publication of articles or other materials, alongside that via traditional publishing. The key question is how long the dotted lines are - i.e. to what extent there is justification for imposing an embargo period as a balancing measure. The current challenge for SPRs is to create a safe and effective environment for the immediate availability, accessibility, and reusability of a research work, from day 0, in the context of credible scientific discourse, through the publication of at least the AAM but preferably the VoR.

One of the main challenges is the implementation of legal instruments that securely lift any restriction to immediate OA for the benefit of the authors and - under the perspective of Open Science (OS)- society. The two main groups of instruments are institutional policies (regulating the contracts for the publications of a body) and public legislation (outlining the obligations of the researchers and publishers as citizens) or as Bellia and Moscon mention “these measures can be private (e.g. contracts, university policies) or public (legislative interventions), the latter including measures outside or inside the copyright system” [17].

In other words, policies are legal instruments, mainly institutional, which under certain conditions extend and comply with funders’ policies (in Figure 2 depicted as the RPOs and RFOs region), that work outside of the frame of copyright, whereas legislation works in the frame of the national law for copyright and/or science (in Figure 2 depicted as the nations’ region). As scientific research is part of strategies for innovation excellence in every nation, one or both instruments may serve national strategies for the advancement of OS and OA.

Each type of instrument has a different nature; ranging from enabling the researcher to encouraging them to obligating them. Each one of these natures leads to various tensions among all stakeholders, in particular the researchers, their employers, publishers, libraries, and so on, and requires different implementation roads for policies and laws alike. Therefore, while the challenges are common and the tools exist, implementation varies in an attempt to adapt to local circumstances and ensure maximum impact.

INSTITUTIONAL AND FUNDER POLICIES

Many funding bodies and institutions, in their capacity as employers, have developed their own policies to regulate the contracts, as employees, that the authors sign with publishers. The field of health sciences has first recorded the implementation of such policies, with the Wellcome Trust OA policy in 2005 [18] and the National Institute of Health in 2008 [19]. Both policies require the researchers to use the PubMed Central repository (or its European counterpart) and to submit AAMs within no more than six or 12 months respectively.

The European Commission (EC) has made many steps towards enabling OA that have gradually resulted in the recent OS policy statement that “all peer-reviewed scientific publications should be freely accessible, and the early sharing of different kinds of research outputs should be encouraged” [20]. As early as 2012, in its recommendation on access to and preservation of scientific information, the EC requested that “open access to publications resulting from publicly funded research be granted as soon as possible, preferably at the time of publication, and

in any case no later than 6 months after the date of publication (no later than 12 months for social sciences and humanities)" [21]. Moreover, in 2016 the EC made a distinction between the options that researchers have in relation to intellectual property rights in work funded by the Commission, which were either to disseminate the research outcomes via publishing, or to exploit them via patenting [22]. The ultimate aim was that all scientific publications resulting from publicly-funded research should be made available in OA from 2020. In the recent research funding program of Horizon Europe, the EC has further operationalised this policy by amending respectively the Grant Agreement Model, which now explicitly mentions that "at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications" [23]. The deposit must be covered by a CC BY license (or equivalent) and the authors must retain sufficient intellectual property rights, leaving the margin for other CC licenses that further limit commercial uses for longer publications. The EC has taken other initiatives, including the launch of its own publishing platform, Open Research Europe (ORE), that also features other OS aspects, such as open peer review.

In order to help OA stakeholders, the PASTEUR4OA project formulated a set of guidelines that would help the development of institutional policies [24]. These guidelines could play an assistive role, providing information about the processes and a model policy that funders could follow. The specific tool was aligned with the 2012 recommendation of the EC and the Horizon2020 requirements. A basic feature of PASTEUR4OA's proposed model was that the requirements of self-archiving of peer-reviewed publications in any kind of repository, either institutional, or subject, while publishing to OA journals is not mandatory. Additionally, the policy requires OA when it comes to research data that supports publications for research validation purposes. Compliance with the proposed policy is associated with project reporting, future funding requests, and performance evaluation.

Similarly, the European Research Council (ERC) issued guidelines on the "Implementation of Open Access to Scientific Publications and Research Data" for those projects that receive financial support from the EU [25]. The guidelines describe a three level OA route, where researchers should archive the publication in a repository (Zenodo is a recommended one), select an OA road, and secure open access to it with the embargo period not exceeding six months (or 12 for HSS).

The EUA at the end of the previous decade embraced OA by publishing guiding documents and official statements. Similarly, it encouraged EU institutions and governments, making key recommendations on developing new European infrastructures, such as the European Open Science Cloud (EOSC), implementing

new research approaches, and formulating a legislation framework. According to the EUA, European universities should play a leading role in the transition to the OA era and national governments should have a "proactive role in adopting national legislation that facilitates OA to research outputs (publications and data), in line with EU Directives including developing, modifying and/or adapting existing national regulations to ensure the lawful use of TDM, while safeguarding authors rights and fair use and re-use of data" [26]. The OS agenda of EUA has set the aims of reclaiming academic ownership of scholarly communication and creating the conditions for a fair scholarly communication system that takes into account the variations in publishing, including OA repositories [27].

Similarly, Science Europe, an association of European RFOs and RPOs in the early '10s, paved the way by publishing the principles that should facilitate the transition and the opportunities that lay under the vision of OA [28]. According to the principles of Science Europe, its members should "advocate that research publications should either be published in an Open Access journal or be deposited as soon as possible in a repository and made available in Open Access in all cases no later than six months following first publication. In Arts, Humanities and Social Sciences, the delay may need to be longer than six months but must be no more than 12 months".

Science Europe was instrumental in the development of cOAlitionS that led to PlanS. PlanS is a policy instrument of national funding organizations and charitable and international funders that participate under the aegis of cOAlitionS, with the aim to align strategies and tactics in this area. PlanS has issued a policy calling that all peer reviewed scholarly articles resulting from research funded by its members must be openly available immediately upon publication without any embargo period around the VoR, the AAM, or both versions, on an OA repository [29].

The implementation of PlanS focuses on allowing the authors to retain sufficient intellectual property rights to comply with its OA requirements. It supports publication with any type of publisher and/or venue, including fully OA, subscription or by publishers offering Transformative Agreements, meaning that these requirements can be satisfied by covering expenses, namely the Article Processing Charges via the Gold OA route.

Furthermore, the Rights Retention Strategy of PlanS further details the key requirements of cOAlitionS for open licenses, requiring that all accepted submissions are covered by a CC BY license [30]. This may be realised by either exercising prior licensing with CC BY on all future AAMs that are produced in the frame of a grant, or by imposing the prior obligation on the researchers that their AAMs or VoRs will be CC BY licensed. However, the zero embargo issue, as has been raised by the RRS of PlanS, has posed a lot of questions to researchers [31].

In the UK, the UK-SCL group developed a model policy for rights retention to provide a unified environment for compliance with funder policies and eligibility with the REF 2021 framework. The model, following the example of the Harvard OA policy, mentions that the authors grant to the University "a non-exclusive, irrevocable, sub licensable, worldwide non-commercial license to make manuscripts of his or her scholarly articles publicly available" and that this license is applied on the AAM and in an immediate manner [32]. The same immediacy has been expressed in the UK Research and Innovation (UKRI) policy, which mandates that all AAMs should be deposited in institutional repositories and that "A publisher-requested delay or 'embargo period' between publication of the Version of Record and open access of the deposited version is not permitted." [33]

In August 2022, the Office of Science and Technology Policy (OSTP) of The White House issued a mandate that all research outcomes authored or co-authored by researchers that were federally funded will be instantly freely available at no additional cost [34]. This mandate follows the 2013 "Memorandum on Increasing Access to the Results of Federally Funded Research" by the Obama administration, which according to bibliometric study by Schares [35] for the years 2017-2021 has resulted in a Green OA publication rate of nearly 30% of the total publications and a constantly growing percentage of Gold OA publications. The new memorandum has set as the transition deadline the end of 2025, and acknowledges that one of the main limitations of the 2013 one was the 12 months embargo, and that provision created inequalities that led to "...limited immediate access of federally funded research results to only those able to pay for it or who have privileged access through libraries or other institutions." Apart from the immediacy that it introduces, the new memorandum is more inclusive, covering peer-reviewed research articles in scholarly journals, peer-reviewed book chapters, peer-reviewed conference proceedings and editorials. One significant aspect that appears in both memoranda is that the implementation should include formats accessible from assistive devices to enable disabled US citizens to access scientific information.

As mentioned, these policies have different effects, varied by the strength and the ways of implementation. In a commentary of mandates, Anderson states that funders' policies are more effective than institutional ones [36]. However, he acknowledges that all kinds of policies are often bypassed or ignored, and this is why, even in the cases of funders' policies, the authors are not fully compliant. As above, a key reason for this is that when presented with a contract with a publisher which undermines OA, researchers can feel compelled to sign. However, in other cases, they may also feel unsure about OA, and have been swayed by arguments that present such rules as limiting academic freedom, often due to a perception of a misalignment of authors' and employers' interests. The validity of this argument is strongly contested however. Nonetheless, this might be a reason for the proliferation of rights retention policies in institutions, and the need to

further solidify the implementation of the policies, in particular regarding monitoring at a finer, more granular level.

LEGISLATION & SECONDARY PUBLISHING

The main legislative instrument for the advancement of OA is the Secondary Publishing Right (SPR). Caso and Dore mention other rights, such as the Revocation Right or the Termination Right, which however are not used widely in scholarly communication [37]. The laws that regulate works of scholarly communication are mainly based on copyright, in the sense that the primary unit is the intellectual work of a person that automatically gains protection under copyright laws. However, works of scholarly communication are not the same as other creative works. There are differences in the workflow of production, in economic exploitation, and -most important- in the public interest in access and reuse. Science and research are pivotal for societal and economic stability and growth and the noble aims of scientists tend to reduce or eliminate their own expectations of profiting from the economic exploitation.

Secondary rights are the rights of the researchers and their employers to reuse a work after the first publication of a formal version; in this case to republish it on an infrastructure that by its nature (public and not-for-profit) is coherent with the (public) nature of the funding source.[3] The SPR aims to empower researchers by removing the necessity of even negotiating what rights may be kept or not, and in practice removes other concerns, such as those of academic freedom. Academic freedom is a crucial principle for the flourishing of unbiased thinking, searching, conducting and spreading of scientific knowledge. The main arguments here relate to the question of whether this freedom is undermined by a limitation of publication venues when these do not comply with specific conditions. When it comes to SPR, this is not the case, as it does not forcefully obligate the selection of the first publication venue, but it secures the right of preservation on public interest infrastructures. Should it be considered as interfering with the relationship between authors and publishers, it should be remembered that these are not the only relationships that matter, and that the current publishing system is already limiting the academic freedom of unprivileged scholars [38].

According to Caso and Dore, SPR is based on the distinction between the moral and economic rights of the author of a publication and any legislative initiative to this direction would be “a ‘retrieval’ of rights, bringing into question the specific

[3] We use the term “publishing” and not “publication”, as the latter might be confused with by-products of an original publication, such as translations. Therefore, the former term seems to better convey the act of publishing a work at a secondary stage.

personal or moral dimension of the right, which is clearly an entitlement of the author" [37]. In a recent report of the European Commission's Directorate General for Research, Technology and Innovation, the question of moral rights is also explored in relation to the limitations and exceptions that exist in current copyright legislation, as well as whether SPRs comply with the three-step test [39].

Clearly, the nature and the purpose of the scientific content, as well as the norms that exist, including academic freedom, intangible rewards and remuneration, employers' rights, and so on, raise the topic of balancing moral and economic rights. Nonetheless, one key attribute of the SPR is that it is mainly concerned with a manifestation of a research outcome that differs from the formal one. Many publishers, who are the rights holders after the signing of a contract with the author, have acknowledged the right of the authors to self-archive AAMs on their employers' infrastructures. This may be done for various legal and ethical reasons, including a tactic for avoiding conflicts, which of course might emerge, should the SPR refer to immediate OA. This undermines arguments against SPRs.

By its very nature, SPR supports the Green OA Road, as any republishing may happen in a clearly defined scope: it covers publicly funded research (in whole or in a substantial part), on publicly accessible repositories of an affiliated organisation (that may have or not ownership rights), for not-for-profit purposes and with clear reference to the first source. The latter is obviously added to comply with the exceptions and limitations of the 2001/29/EC [40].

Ideally, SPR should cover all kinds of scholarly publications, but the current evidence is that it covers mainly journal publications. This specificity may make it easier to avoid conflict with other provisions. For example, according to the DSM Directive "Periodicals that are published for scientific or academic purposes, such as scientific journals, are not press publications for the purposes of this Directive", removing one potential barrier to the introduction of SPR compared to other formats that are regulated by possibly conflicting laws [39].

Similarly, the types of repositories where articles covered by SPRs are published are also excluded from liability under the DSM Directive. However, it remains less sure if they are covered or not by new requirements under the Digital Services Act. Nonetheless, it is a positive that repository owners cannot be held liable for copyright infringement unless they have been made aware that an uploaded article is infringing [39]. The argument for supporting the development of repositories is further supported by the fact that employers might want to exercise ownership rights for the purposes of gathering, preserving and documenting the outcomes of the research conducted within their walls. Thus, the SPR can support the development of repositories and other infrastructures of public interest that host information for the public benefit.

LIBER in its strategy for 2017-2022 set the aim that OA should be the main form of scholarly communication. One of the outputs of the strategy was the ZeroEmbargo campaign which proposed a model law article "to ensure a zero embargo period for lawful self-archiving on open, public, not-for-profit repositories" [6]. The article was proposed to be introduced at the widest possible level, that of the EU, but it could also be implemented by interested EU Member States at a national level. The article mentions that the secondary publication should be immediate, funded by public and/or charity funds, refer to the first publication, and -even- include third party content should it be essential for the understanding of the work, where it is covered by the three-step test/fair practice provisions in international copyright law.

THE PUBLISHERS' POINT OF VIEW

Publishers' responses to legislation and policies that require zero embargo are mostly and largely negative. The principal argument is around financial sustainability and profits. The response of Elsevier to the UKRI Open Access Review Consultation in 2020 was very clear: "Under Green OA, *embargos cannot be removed altogether*, as – combined with a requirement for CC BY licenses – this will significantly harm the Pay-to-Read model…" (emphasis on the original) [41]. In Sundell [9], the response of the Association of American Publishers to PlanS proposal recognises that OA policies and rights retention strategies "undermine its ability to function as a marketable asset" (note: 'its' is referring to copyright). The argument that OA mandates somehow limit academic freedom, together with the question of the necessity and feasibility in preserving duplicate versions of an article on repositories are also echoed in echoed in Wiley's response to PlanS [42].

In an analysis of the OSTP mandate, Clarke & Esposito mention that the key variables for the business decisions and models of the publishers are the licenses applied and the type of version deposited. Acting on at least one of these can lead to either a longer viability of the subscription/hybrid model or a shorter transition to Gold, the "orderly transition" and the "rapid flip" accordingly [43].

Some publishers warn that such policies and legislations will lead to increasing financial costs for Gold OA publishing. Dean Sanderson, Managing Director of Magazines and Partner Services at Springer Nature, advocates for the Gold OA model mentioning that "to accelerate research sustainably, U.S. policymakers need to ensure that the money and incentives are in place for federally-funded researchers to publish their papers via Gold OA." [44]. This is further supported by the claim that, if there are policies that strongly support Green OA, this will impede

the entire OA movement and the transformation of subscription journals to open [45].

Another warning by the publishers is that policies such as the Rights Retention Strategy (RRS) “undermine the integrity of the Version of Record, which is the foundation of the scientific record, and its associated codified mechanisms for corrections, retractions and data disclosure” [46]. The publishers believe that the AAM manifestation, let alone the VoR, already encapsulates a lot of the added value services in their own production chain (such as the management of the peer review) and an immediate release will jeopardize their future investment in these. Furthermore, any manifestation deposited in repositories resides outside of the formal scholarly discourse by being “not citable or connected to the scientific record” and “neither replicable nor reusable” [44].

Angela Cochran of the American Society of Clinical Oncology noted that the OSTP mandate will stretch highly selective journals and that any transition will be at the expense of quality, as “Many societies differentiate themselves (fairly or not) from the commercial journals by promising high quality and highly-vetted impactful content” [47]. The publishing models though are very mixed and the American Association for the Advancement of Science has confidently announced the “green OA-zero day” model that will allow the immediate depositing of the AAM on a public repository [48]. At the same time, purely OA publishers, many of which have been criticised for the big volume of their journal portfolio, have welcomed the OSTP mandate [49].

In general, embargoes and the absence of licensing for reuse have been gradually accepted as the de facto mechanisms to allow republishing. Therefore, while access to early manifestations of a work is permitted, openly licensing any manifestation is considered by the publishers a risk to economic exploitation. In a letter to President Trump in 2019, a coalition of US publishers defended the embargoes by claiming that “Going below the current 12 month “embargo” would make it very difficult for most American publishers to invest in publishing these articles” [50]. It becomes clear that the embargo provisions of the 2012 EC Recommendations are still driving much of the argumentation of the publishers. This can be seen in the consultation of the Italian amendment that was proposed (Legge Gallo) by the Italian Association of Publishers, when the main argument was to extend the embargo period, should there be no additional funds [51].

FINDINGS

During the last few years, there are seven countries that have introduced legislation in favour of researchers and their right to self-archive on public repositories.[4]

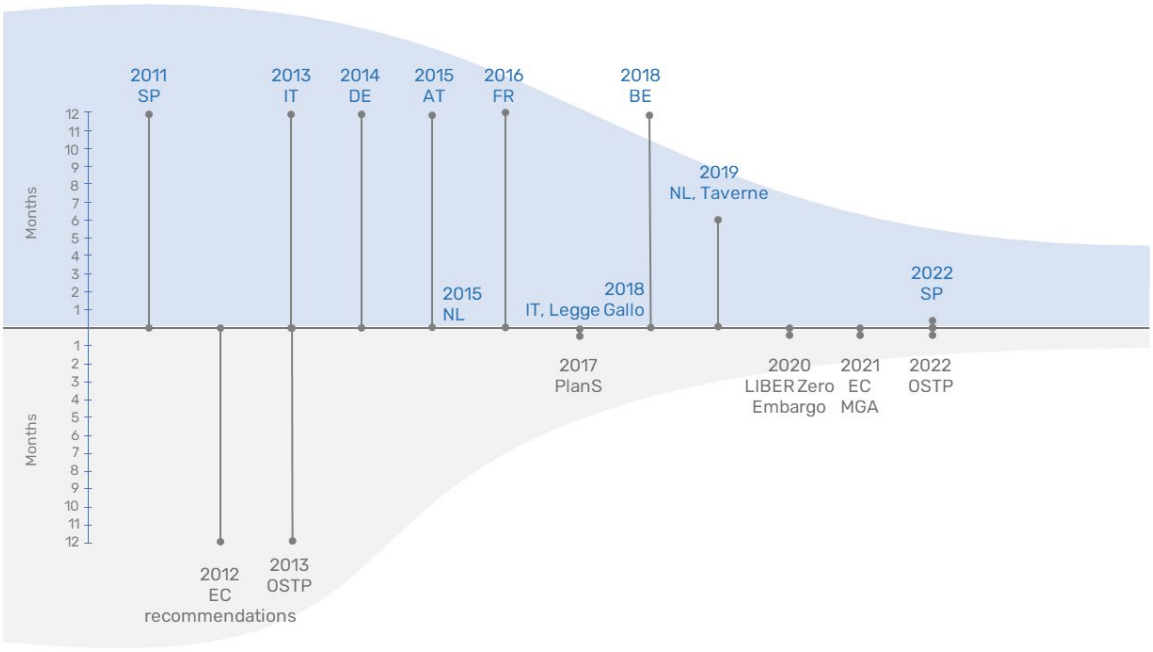


Figure 3: A timeline of SPR legislation and OA initiatives on the way to immediate OA. As laws adapt slower than funders policies, the effect of the latter and the pressure from the community, have pushed for stronger and braver laws.

The timeline in Figure 3 shows firstly when the SPR laws were introduced, second what is the length of the embargoes imposed (both on the upper section), and third what other events occurred during the same period and most likely affected them (on the lower part). It must be noted that the figure shows also the official introduction of the Dutch law in 2015 that was later amended and defined by the means of implementation, as well as the attempt by the Italian Association for the Promotion of Open Science (AISA) to pass a decree (Legge Gallo [52]) that according to one of the respondents from Italy aimed *"to introduce an imperative disposition, a mandatory disposition limiting the contract freedom, the contractual freedom"* for the benefit of OA.

[4] The laws can be found in Annex A.

PROFILE OF SPR

Table 1 takes into consideration the main components of a legislative SPR proposal. Usually, an SPR provision includes information on some or all of the following:

/ **Extent of funding:** what is the part of the contribution from public funds needed for SPR to be applied. In most cases, the laws are very clear regarding the eligibility of publications; they should have been funded by at least 50% by public agencies. There are two SPR articles though, namely in Spain and in the Netherlands, where the definition is ambiguous. Spain uses the term “mainly” and the Netherlands the term “in part”, which as both not being quantified, creates uncertainty. France takes the description of funding sources a step further, by defining explicitly that research funds from official European Union bodies are also counted.

/ **Embargo period:** what is the time after which or within which one must act. In all countries the enactment period works as an embargo period, which means that the authors have the right to republish after the passing of or within a period. Such is the case with the Italian law, that the enactment period required that the republishing should be made within a certain time period (12 months). France and Belgium acknowledge the differences between disciplines and have introduced different time periods for the fields of natural, engineering, medical sciences and of the humanities and social sciences. The Belgian law provides the ability to publish earlier than the terms stated should there be a contract allowing it and at the same time it is at the discretion of the King to extend these terms should there be good reasons.

  For the rest, the legislation that allows a shorter republishing period is the recent law in Spain (an obligation of republishing with some protections for researchers doing this in other pieces of law), which allows immediate republication. The Dutch law is again ambiguous as it does not define an explicit duration, but mentions that this can be done after a reasonable period. In a paper discussing the law, Visser mentions that a “reasonable period” might be related to the publication frequency of each journal [53]. It must be noted that the Belgian law has retroactive effect, which means that the authors can safely republish their articles on repositories, regardless of their contracts.

/ **Manifestation:** what is the manifestation (or version) of the work that can/needs to be archived. In some laws there are no details as to whether it is the AAM or the VoR that can be published. The lack of clear reference leaves a margin of interpretation that perhaps results in the safest -according to scholarly practices- version, which is the AAM being

prioritised. There is a clear reference in the German, Austrian and the Spanish laws that the SPR provision covers the AAM. In the Netherlands, the implementation of the law was assigned to the universities association (the VSNU) and the Royal Library of the Netherlands, which defined that the deposited version would be the VoR.

- **Scope of use**: what is the purpose for doing so, and can the right be waived. In some cases, it is required that republishing takes place only for non-commercial purposes. There is only one law, the Belgian, that defines the status of the SPR article. According to the law, this is a non-waivable right of the author.
- **Citation of first source:** whether it is obligatory to cite the original publication or not. In most of the countries it is explicitly stated that the first source must be acknowledged and fully referenced.

In the lower part of the table, there are other, less commonly appearing elements, such as:

- **Definition of periodicals:** The German and Austrian laws are very similar, mentioning that a periodical can be considered as any publication if it is issued at least twice in a year (2), whereas for France once in a year (1) is a sufficient frequency to characterise a publication as a periodical.
- **Range of the beneficiaries and their relationships:** The Austrian law limits its application to all researchers in institutions and in their capacity as employees of these. As a code for research that regulates not just matters of the author but also the state, the French law introduces another condition that is to have the consent of the co-authors. The Belgian law is broader, stating that the law applies to all publications where a point of contact is located in Belgium.

It is important to note that from the table there is one key component missing, which is licensing. This is a critical omission that affects the reuse of content for any lawful purpose. As Guibault mentions “since the collections of these repositories are composed of publications of all shades of green and grey, this means that the copyright was either assigned in full or licensed on an exclusive basis to the publishers and that the institutions involved (mostly university libraries) are not in a position to attach any terms of use to such material” [54]. This is an issue that LIBER tried to address with its model law by stating that “clear terms of use shall be appended. No contractual or other restrictions on the reuse of the scholarly work shall be enforceable regarding a scholarly work whose author has been majority funded by public funds” [6].

Table 1: A comparison table of the main components of SPRs (grouped by the motivation, see next section).

	Protect/enable the creator			Foster OA			
Scope of use	NC	NC			NW	NC	
Citation of first source	+	+	+		+		
Manifestation	AAM	AAM		AAM		AAM	
Extend of funding	50%	50%	*	*	50%	50%	50%
Embargo period	> 12	> 12	*	0	> 12/6	< 12/6	< 12/6
							
Definition of periodicals	2	2				1	
Range/relationships of beneficiaries	+				+	+	

CONTEXT FOR DECISION MAKING

One should first acknowledge that these laws have been developed in different settings, periods and with different aspirations. For France and Spain, the SPR is part of science laws, and the Ministries which are responsible are the ones that regulate the national research legislative codes (science, innovation, etc.). In most other cases, SPR is part of the copyright legislation; in Germany, Austria, and the Netherlands this kind of legislation falls under the jurisdiction of the Ministry of Justice, whereas in Italy the 2011 law is under the Ministry of Culture. There is one case, in Belgium, where it is part of an update of the economic law, most probably because according to our respondent *"In Belgium, we have, and I think that's a European thing, right? two parts of author rights: it's the economic part, reproduction, et cetera, and there is the moral rights. So, it's a bit strange for the moral rights to be in an economic environment."*

From the interviews, it was concluded that the adoption of these laws took place in the context of the need of governments to align with wider legislative processes, such as the transposition of the European Union's Directive on Copyright in the Digital Single Market (DSM Directive), as happened in Belgium, or of the need for RPOs to align with EU policies, especially those around OA. For instance, one representative from Spain mentioned:

> *That was a priority for our government to have a policy that was strictly aligned with what was coming from Europe. So, following the change that occurred between Horizon 2020 and Horizon Europe, we all agreed at the government level that we had to have a law that was exactly the same as what the grant agreement was saying for Horizon Europe.*

This approach has been followed in the past. For instance, Poland decided to harmonise with EU recommendations in 2015, when its Ministry of Science and Higher Education published the document "Directions of the development of open access to research publications and research results in Poland" [55], which proposed introduction of immediate OA publication, but provided also an embargo period of six or 12 months, depending on the subject area.

There are many stakeholders in the context that are involved in the process of the law making, including Ministries, Councils of Rectors, Research Councils, Councils of Intellectual Property, Library Associations, etc. As is often the case this abundance of stakeholders creates a challenging environment. Even in well-functioning environments there might be issues where the knowledge is not consistently formed:

> *…the area of copyright law is located at the Ministry of Justice. They're responsible, they're basically responsible for all the legal draft, et cetera. So, this draft goes through the Ministry of course, because it is a specific*

area. Other ministries are involved as well. So, the Ministry of Education, Higher Education and Science; it's called differently in different governments, but the Education Ministry is where Open Science is a topic is located otherwise. So, there is cooperation between the Ministries when it comes to that. And even in some cases when the corporation is not formalised, people know each other and people cooperate, people get opinions out. So, there is a functioning pipeline.

Therefore, it often occurs that the Ministry that is responsible for the implementation differs from the Ministry that was in charge of the introduction and quite possibly did not take into account the original demands of those stakeholders advocating for OA.

In almost all countries there are high expectations that within the next few years they should reach 100% OA through one means or another. For instance, in the Netherlands the target is now 2030, including "a harmonised multi-route approach (green, diamond, as well as gold Open Access) which emphasises sustainability, cost-effectiveness and public values" [56]. The same goes for France, where the "aim set by the Research Programming Law is to achieve 100% open access publications by 2030" [57]. In Sweden, the Research Bill "Knowledge in Collaboration" set a ten-year policy goal for publicly funded research to be immediately openly available [58], mainly through Gold OA, while at the same time expressing its reluctance about Green OA due to concerns about copyright restrictions [59]. However, experts from both groups of countries expressed the concern that Gold OA, one of the ways of achieving this, cannot be considered sustainable and that *"the more compliance, the less money we're going to have for performing research activities"*, meaning that the progress of OA through Gold is happening at the expense of actual research. Here, Green OA seems a plausible solution for countries that cannot support Gold OA, like in Poland where Green OA is used by those who *"cannot pay for the APC from the grant, but they choose the repository part as an alternative way to be in line with the policy of the funder."* Finally, research funders, while not responsible for forming institutional policies and implementation roadmaps, give the option of Green OA, because *"it can't be immediate Open Access at any cost"* and *"one of our goals is obviously to have affordability for immediate Open Access."*

REASONS FOR DECISION MAKING

The respondents in this study were asked to set out the reasons for the introduction of such legislation. The answers can be classified into two categories:

The first concerns processes intended to protect and/or enable the author. It is understood that the special conditions of academia and research do not allow authors to be compensated for their publications; either at the production (writing) stage or the consumption (reading) stage. There are also concerns that publishers have taken advantage of their strategic position in the system to become the exclusive rights holders of the primary publication, enabling them to have disproportionate power in negotiations with authors. According to a respondent from Germany:

> *Regulation within the German parliament was based on the notion that in the situation in which the researchers sign the publishing contract with the publisher, the power is not evenly divided between the publisher and the researcher.*

This was echoed in other countries, such as in the Netherlands, where during the copyright reform, the overall approach was to protect the creators of creative works, including the authors of scientific publications.

The second reason is to allow the public to access scientific publications. In this case, the SPR article is just a part of a larger move towards OS, such as in Spain and France, which includes data, software, and other research elements. The article is linked with values of OS, as one respondent from France mentioned: *"this article was to make the research more transparent first, and that the public funded research could be available for every citizen in France and in the world."* This is in line with, and is supporting, one of the actions of the National Open Science Plan aiming to "Generalise the obligation to publish in open access all articles and books resulting from publicly funded calls for proposals" [57].

This distinction has been noted by respondents who underlined the difference between an SPR provision as part of the Copyright law and one as part of an Open Access law. For them it seems that there is a difference in the purpose of the support: the first one is to enable the author to perform some duties in the frame of the existing law, while the other is to make Open Access grow. This altered the viewpoint and the engagement of stakeholders during implementation. Two -connected- issues emerging: first, the question of enabling versus obliging an author to deposit; and second, the means to implement OA in terms of funds and practices.

PROCESS OF DECISION MAKING

Looking at the process of introducing, negotiating and passing SPR provisions, this has usually been concluded within six to 12 months. This has happened so far in Spain, Belgium and Austria, whereas in Italy the Legge Gallo took almost 24 months, without succeeding. The time needed to develop a SPR might be attributed to several factors, including the existence of prior legislation, the proximity to other countries with similar culture, the maturity of the conditions, or the complexity of legislation. For instance, in Poland, the prospect of having an SPR *"would be a process of maybe even several years, because a lot of regulations have to be changed if we want to take a totally different approach to this."*

The mandate to develop SPRs can come from both the bottom, such as a growing demand from RPOs in the Netherlands, and the top, such as from the State in Spain. Having as a starting point the ever-increasing expenditure on access to research, swissuniversities formulated the Swiss National Strategy on Open Access [60] and issued a mandate to work on a preparatory study for SPR "that is more on a conceptual level around which one of the solutions would be best" [61]. A diverse network of stakeholders is involved in lawmaking here, including RFOs, university associations, research libraries, research institution associations and of course government ministries. In Belgium, publishers were involved in the process from a very early stage, as the Council of Intellectual Property had a pivotal role in the making of the law.

Quite expectedly, there was resistance to such provisions from publishers during consultation, especially in countries where publishing tends not to be in English. The national publishing associations have resisted the most in Belgium, Italy and Germany. In Spain one international OA publisher lobbied to steer the direction of the law towards its interests, rather than those of researchers and readers. According to one interviewee *"the reactions come mainly from Belgian publishers, not so much from international ones. I didn't see any coming. Belgium is a small country and the impact is not that big for publishers."*

National publishers' lobbying was based on a sentimental plea for viability. One respondent mentioned that *"one of the arguments of Italian Association of Publishers was if we introduce in Italy the secondary publication right, the effect will be the favor of international foreign publishers, foreign publishers in other terms; this kind of mechanism is against interest of the Italian publishing industry, but without any evidence of this reasoning."* Interestingly enough, another argument from the publishers was that the SPRs would limit the academic freedom of the authors to the point of discrimination and exclusion from the scholarly system. According to one respondent *"the publishers said the people who were demanding the secondary publication rights limit the ability of*

the researchers to sign away their rights. So, like, discriminating against them, that was their argument."

The same negativity was met in UK, where a number of objections were voiced during the consultation on the recent UKRI policy [33], which mandates that all AAMs should be deposited in institutional repositories and that *"A publisher-requested delay or 'embargo period' between publication of the Version of Record and open access of the deposited version is not permitted."* As one representative explained *"there were challenges about lots of different aspects, challenges about our process, judicial review, et cetera; challenges about conflict of interest, challenges, I don't know, made up challenges."*

In general, Green OA is not a profitable area for publishers and even when libraries negotiate overall contracts with them it is *"very difficult because there's no incentive; so, we can't meet publishers at that level"*, as one respondent from Denmark mentioned.

Lobbying at the legal and policy making level seems uncoordinated. There might be several reasons for this. First, the building of support among people in policy making bodies might be more opportunistic than systematic, such as having personal contacts at key positions or favourable decision makers. Second, effective advocacy for change requires skills and knowledge, but libraries, researchers, and their representative organisations do not necessarily have the skills or the resources to pay for them. One of the respondents mentioned that the lack of these skills is *"…a problem because in order to achieve Open Science, you need to have a team that specialises in Open Access. We don't have sufficient people to engage in Open Access."*

The consultation process differs among the Member States and knowing how and when to submit the proposals is critical to the successful negotiation. This was echoed by many respondents, either from countries that have legislation, or for those who don't.

> *we don't have that many experts to rely on, and that's difficult as well, because if you want to lobby, if you want to be in the right forum, you need people; we have seen that in general with Open Access and later Open Science. But with the law, it's the same thing. You need people who know what they talk about and that can engage in discussions.*

Third, the SPR legislation is usually part of broader laws, such as wide copyright reforms or updating science laws. In more complex legislation, SPRs can get lost or seen as a lower priority than other issues which gain more attention.

IMPLEMENTATION

All the respondents mentioned that to implement the SPR effectively, it should be followed by additional law. Guided by the example of the REF in the UK, all agreed that this should be linked with the research assessment procedures and funding calls to incentivise researchers. Often, the SPR provisions are backed up by funding requirements. For instance, the mandate of the Research Foundation–Flanders in Belgium requires all peer reviewed articles to be published as OA after six months for scientific research, and 12 months for HSS research (maximum) [62]. Here the policy clearly refers to the provisions of the law. A similar mandate is in force in the Wallonia-Brussels Federation from the F.S.R.-FNRS of the country [63], which was followed in 2018 by the decree that obliges the authors to self-archive [64].

In Spain, the new law is broader than the one of 2011 [65] and encapsulates all OS streams of actions, including citizen engagement in science. In order to give an additional incentive, the law requires OS activities to be considered in research assessment procedures. This means that the researchers who exercise OS practices, including self-archiving and compliance to the SPR, should be rewarded.

As the SPR legislation affects the scientific production of a substantial part of publicly funded RPOs (typically universities), it has been followed in two cases by amendments in the respective laws for academic institutions. First, the German law of Universities states in article 44 that the universities should oblige the members of their scientific staff to reserve the right to non-commercial secondary publication after a period of one year after the first publication of scientific contributions created within the scope of official duties [66]. Yet the enforcement of an SPR was implemented only in the State of Baden-Württemberg after a legal challenge by researchers of the University of Konstanz, grounded on the right of academic freedom. Second, the Spanish law of Universities of 2023 links consistently with the SPR article of 2022 with research assessment and reiterates the need for immediate deposition of OA works [67].

Concerning possibilities to opt-out or opt-in to an SPR, of the seven countries, only the Netherlands used an opt-out approach. Starting from a vaguely expressed article, the Dutch community took coordinated steps to agree on the way that the law would be implemented, as the national stakeholders balanced their options between what is actionable and what is reasonable. This means that the libraries and the institutions collect and upload all VoR manifestations of the works and publish them after six months and, should the author object to this, then he/she must inform them accordingly. The rest of the countries are following an opt-in approach, which is more likely to enable research than to mandate republication. In Italy and France, the law is considered as a recommendation and

monitoring mechanisms are missing. In particular, one respondent mentioned *"It's not an obligation. It's not really strong for law, you know? It should be, but we do not have any authority to make it real if people don't do that in their research center or universities"*, while according to other participants, this was required to safeguard authors' academic freedom.

> *I would say that this law respects academic freedom in terms that the law does not oblige any researcher to publish anything anywhere. What it is saying is that it's adding a new process to the communication process. So, you are free to publish anywhere, but then you have to archive, which is a different verb you publish than you archive.*

Together with other provisions of the law, such as the period after original publication at which an SPR can be used, the lack of consequences, the lack of monitoring and most importantly the general copyright framework, there is a risk of creating an *"exit window from our mandate"* as one respondent from Spain suggested.

Furthermore, in countries like Spain, Italy, Germany and Austria, there were issues with the power that contract law has over the mandates, and its potential to lead researchers to opt out of SPRs.

> *The secondary publication right law is part of the so-called contractual copyright law. That means, within copyright laws, you may have regulations concerning the ability of partners to negotiate agreements, generally speaking. You can have any kind of agreement you would like.*

In the Netherlands, the VSNU association first piloted implementation of the law, providing a safety net that "participating authors are supported by their institution in legal cases and institutions share knowledge and possible legal costs if such cases arise" [68]. Legal support is provided to both the individual researcher and small institutions. According to our respondent, researchers *"would always get help from their university and also have no cost in legal cost or whatever, but also that university would never stand alone; all universities would help."* In other countries, such as in Germany and Belgium, the OA teams of universities provide guidance on implementation. They are ready to answer frequent questions about whether the legal basis for the deposit on the repository is sound, and if they are likely to be challenged by the publishers. However, these might be unnecessary fears, based on confused perceptions of legitimate infrastructures and practices (e.g. what is a public not-for-profit repository), that, when properly addressed, do not result in take-down notices and other actions [69]. The general impression is that the risk is low. One respondent with a strong legal background answered that *"usually the costs of such proceedings would exceed any potential benefit. So, yeah, that's why the law is not fully tested and let's hope it will not be tested on the back of researchers."*

Another area of interest is the liability of repository services. According to Angelopoulos these can "be directly liable for copyright infringement under EU law if they host infringing scientific articles uploaded by researchers". Even if article 2(6) of the DSM excludes not-for-profit scientific repositories, other provisions of the EU legislation, such as the Digital Services Act, in the absence of clarity may force academic and research institutions to express their concerns and to ask for exemptions [70].

> *…institutions don't wanna break the law, so they will always stick to the right side of the law. And we also do that with the Green Open Access policy. We can't accept illegal content in our systems. We have to make sure that it's on the right side of the law. So, institutions will be obliged to do that, and we comply with that.*

While the definition of public funding seems to be clear, there may still be areas that require clarification. According to one respondent *"not all public money is counted, but only project money which can come from German federal funds, from DFG."* As the universities are funded by the state governments for their core operations, these resources do not fall into the definition of public funding, and so research not taking place as part of additional grant projects may not be covered. There is a lot of scope for variance between countries, while the interpretation of public funds quite often includes EU funds.

Table 2: Comparison table of the implementation strategies per country.

	Protect/Enable the creator			**Foster OA**			
Follow up laws / Calls of RFO		+		+	+		
Monitoring			+				
Mandate (opt-in/opt-out)	In	In	Out		In	In	In
							

THE CASE FOR HARMONISATION

Harmonisation can be seen as an opportunity to solve inconsistencies and weaknesses in national (institutional policies & law) and international (countries) approaches. In other words, there is variation between policies at the level of institutions, and between countries at the level of legislation, as one French interviewee mentioned. Furthermore, differences in the laws between countries may be compounded by inconsistency between different sections of European law, as well as by different levels of available resourcing among the Member States.

This particular aspect of harmonisation was highlighted also by the League of European Research Universities, which that stated "The current situation where EU copyright rules are scattered in a patchwork of 12+ Directives and Regulations contributes to uncertainties in this field, harming disproportionately more weaker parties such as researchers and research institutions" [71]. Harmonisation would also allow more Member States to participate instantly, saving time and effort, as one respondent from Sweden mentioned.

One respondent mentioned that harmonisation would mitigate issues of co-authorship in different countries and that *"amending the territorial scope would be just the best thing that could happen to secondary publishing."* A few respondents mentioned that harmonisation could be co-designed by a broad range of participants. According to one participant from an umbrella organisation, *"what is important is to get there, to have all a good representation and a good co-creation with all the representatives and stakeholders. So, less fragmentation, definitely."*

Yet, harmonisation implies a strong and coherent application of the same concepts, via mandatory provisions.

> *So, you'd have to decide how detailed you want the proposal to be. The trouble with not being detailed is that, if you adopt an EU level proposal that's not detailed, you are inviting in this harmonisation the ultimate result of 27 different secondary publication rights across different EU Member States. So, all of them have a secondary publication right? But it looks very different from country to country. And maybe you don't want that.*

Mandatory provisions can be legally grounded in the dual nature of the EC, a funder and a lawmaker, and, based on EU policy commitments for widest knowledge dissemination, requiring that most effective measures can be taken. As we have seen, Spain has aligned its legislation to the new Horizon Europe Model Grant Agreement, which means that, if followed by other countries, then a silent harmonisation will have started, at least on the practical level.

In a recent commentary of the Council of European Union's draft, Chicot underlined the necessity of coordinated work between Member States to ensure that SPR is implemented in a harmonised, and not fragmented way across Europe [72]. Two other organisations, the ALLEA and CESAER have called for a harmonised mandatory implementation of the SPR and the resolution of tensions among researches, institutions and funders [73].

A MACHINE-READABLE INTERPRETATION

The analysis of interview data is a demanding process which may lead the researcher to miss certain issues or not to recognize latent relationships among the topics of the discussions. For the needs of the specific research, we applied topic modelling - a machine learning method - to automatically detect recurring topics from the interview transcripts. By applying the Latent Dirichlet Allocation algorithm we attempted to identify salient issues or concerns raised by interviewees confirming in that way that the key points of research's objectives were mentioned by them. Using the topic modelling tool jsLDA, a series of tests was carried out to detect the appropriate number of topics (five in this case, see Table 3). jsLDA functionalities not only detect groups of words that are called topics, but also help one to relate them.

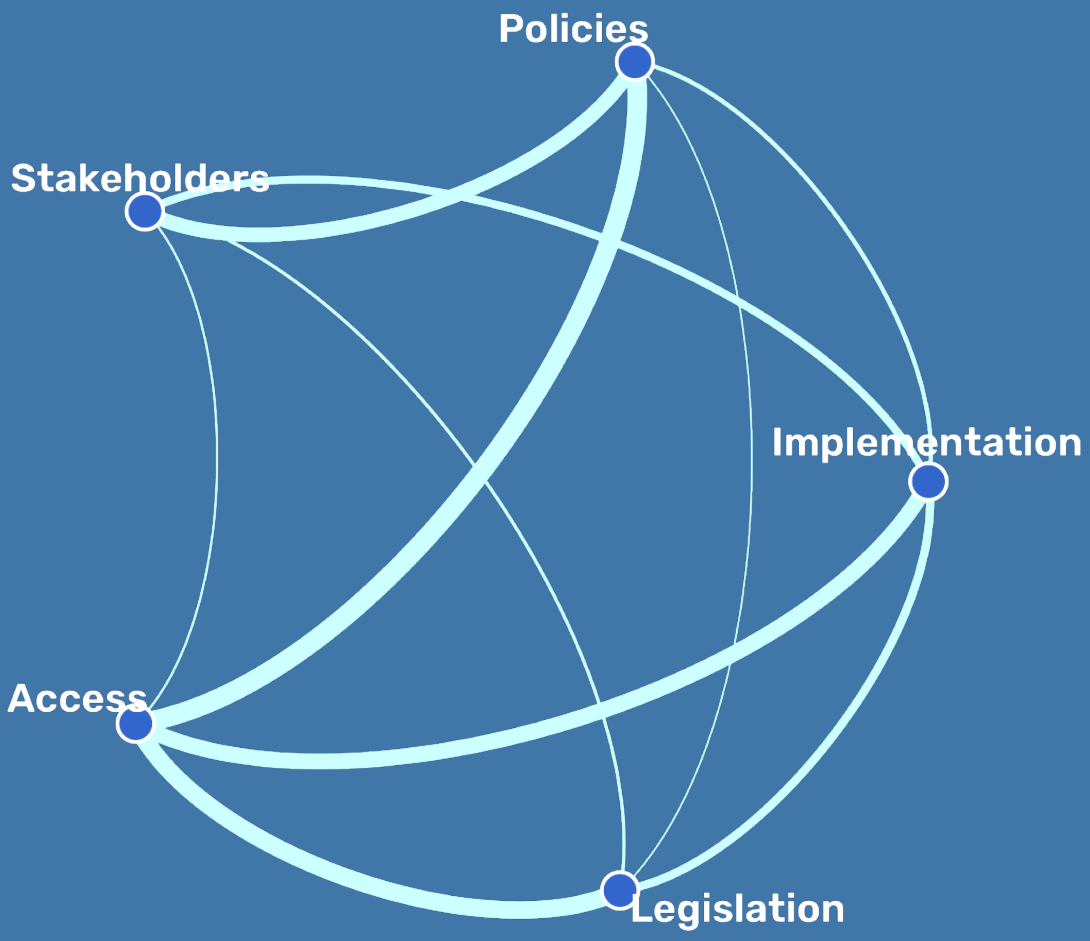


Figure 4: A networked representation of topics around SPR

The analysis of the topic modelling results indicates the major axes of the research that were mentioned by interviewees. The network of the five topics that were detected - Policy, Stakeholders, Practice, Legislation and Access - is presented in Figure 4. Access is an issue that lies among Policies, Legislation and

Implementation. Additionally, Stakeholders are strongly connected with Implementation issues, while another notable aspect of the network is the loose connection between Policies and Legislation. That might mean that there is a gap between theory and practice of SPR. Institutional and funder policies don't have an obligatory nature like laws and that inherent weakness complicates SPR implementation.

Table 3 presents the topic label that was assigned by the researchers of the current report, the number of words (tokens) that are included in each group and the 10 most representative words of the group.

Table 3: Topics expressed in the interviews.

TOPICS	TOKENS	WORDS
Policies	4656	research legislation policy funders rights retention universities funding organizations science
Stakeholders	5256	law science universities research ministry public access national legal government
Implementation	5234	access universities policy embargo implementation national version green publications help
Legislation	5468	law rights publication copyright secondary publisher author universities publishing countries
Access	4497	access publishers researchers journals publishing money green diamond science research

DISCUSSION

Open access to scientific knowledge leverages the quality of research and innovation, leading to greater impact. With the multitude of global issues we are facing, accelerating and intensifying work to advance OA is necessary. SPR, which is a tool at the hands of national and international (EU) bodies, can help the growth of Green OA on public infrastructures, making scientific information more readily available to all interested, without barriers and without preconditions.

It is wise to see SPR as belonging to the junction of two fields; it should be seen as both a Copyright and an Open Access topic. It stands on the territory of multiple cultures; governed by different traditions and principles, legislation, policies, and declarations. The viewpoints of the stakeholders differ and relying only on one can be counterproductive. Successful SPR requires both a clear and stable legal environment, and agility and responsiveness in everyday practice.

The laws presented have been developed in the past, in conditions when the whole framework was different, and the expectations were low. Since then, there has been significant progress in the areas of technology, communication, economy, and others. However, the current paradigm creates a sense of inertia as, next to the gravity of the prestige-based system, legal uncertainty further weakens the negotiating power of institutions, and hinders researchers from exercising certain rights. This urgency has been already addressed by funders and institutions while forming rights retention strategies: *"I think there was a need for, so rather than rely on the government to do something, it was a sense that we as funders can do something and working with the institutions, they can do something."*

At the moment, the success and impact of SPR is a relative concept. While the great aspiration is to have immediate OA of the final version, we do not have legislation that enables immediate Green OA of VoRs. Embargoes, versions of publications or the combination of these are the parameters that keep the current SPR restrained in a status that does not really translate to immediate, open and unrestricted access and reuse. Within the current copyright framework, the SPR can be only seen as an exception and limitation to scientific research, but *"The problem with exceptions and limitations is that they're about reuse, but not about access."* As the reuse of content is an integral component of OA, it is important to address the question of whether SPR passes the three-step test, which governs the legitimacy of exceptions and limitations.

According to a more restrictive view, while there are qualitative characteristics that qualify it as a special case (step one), the volumes of materials affected could exclude it from this area. In the absence of guidance on steps two (normal exploitation) and three (prejudice of legitimate interests), current SPR articles

have seemingly build in limits on their own reach and effectiveness, such as embargoes, restrictions on versions, citations of original place of publication, or the combination of these.

However, this is to take a very narrow view that arguably discounts both the fact that researchers are being paid independently of publication, as well as the wider interest (including of other researchers) in access and re-use possibilities. Bolder decisions are required, based on the actual needs of research and science and the wide spectrum of fundamental rights, such as the LIBER ZeroEmbargo campaign has exhibited. One possible solution would be to revise the legal framework for research and innovation as it has been listed in the ERA priorities. Bellia and Moscon acknowledge that such issues can be also resolved by extending the scope of permitted uses to copyright for research and academia, in the same way as it has been done in the European Directive 2019/790 for text and data mining. Clearly this is nonetheless, potentially quite time consuming with doubtful outcomes in regards to how far the obligation would be harmonised across Europe [17].

Further, there is no fully embedded mechanism that measures the compliance with the law, and monitoring data is not sufficient or clear enough to lead to concrete conclusions. While there are OA monitoring systems in place in these countries, none of these check the compliance with the law, and only one, openaccess.nl, seems to be explicitly fed with data from the repositories that implement the legal requirements, and as a result *"now you see a spike in green for those institutions who now really have both the workflow and the policy in place. And they are now above 90% Open Access of both the corresponding and co-author publications."*

Most certainly, very detailed laws do not seem necessarily to lead to better results. A broader approach has been followed by two countries, namely the Netherlands and Spain, and the early signs from the application of the Taverne Amendment in 2019 in the Netherlands are promising [74]. A key lesson from this might be that the law defines the parameters and the target, but the details that affect its implementation are agreed by the relevant stakeholders and, perhaps, are reviewed regularly to match the progress in practice. Clearly, however, as stated above, the value of adaptation to national circumstances needs to be considered against the risks created by disparity between laws.

Throughout the study it has been clear that skill building is essential. Skills and knowledge are required at various different levels: from those making policy in academia and research, who should be aware of the framework and its potential, to executive officers, who should coordinate the networks and develop a roadmap of actions. In general, there is a demand for legal expertise that takes into consideration the modern issues that research and education faces. As one of the respondents mentioned:

I don't know that many experts that are working on copyright from the view of a user and with the user, I mean institutional user, like a repository, like university, et cetera. In most cases, they really look at it from the view of the rights holder, and that indeed is a problem.

Therefore, it might be reasonable to claim that legal expertise looking at the interests of openness would fairly balance the overall arguments and that skills and expertise seem to be urgently needed to mitigate the effects of uncertainty about legal complexities. Moreover, knowledge about what actually hinders the work of researchers is required. It is not clearly communicated that SPR is not negatively affecting academic freedom and the right to select the venue of preference. Instead, it is publishers' policies for Green OA that create an artificial tension that distracts the attention of the authors from other factors affecting venue selection, like high APCs. It has been shown that even in opt-out policies there are safety valves that calm concerns about academic freedom.

According to our respondents, the introduction of SPR has been challenged by publishers, mainly national ones, often those focused on very specific areas, like legal publications. While this opposition had been expected, especially when there were voices about the preservation of national languages or the viability of very specific sectors, this was not the only risk. In the Spanish case, an international OA publishing house lobbied for its interests and attempted to hijack the process in order to streamline the OA mandate towards a model that suited their economic interests. The local stakeholders had a meeting with them which "*was not very nice meeting the one that we had with them, but for any reason they convinced any politicians in a political group; I do believe that they cheated or they framed a different reality than we do.*" It is clear that OA stakeholders cannot afford to miss opportunities to consult policy and law makers as frequently as they can. In instances where consultations are an open procedure, often using digital boards to express publicly an opinion may be simpler. However, there might be cases where stakeholders are invited to present their opinions and requirements before a council on a more discretionary basis. To this end, quite often, personal connections might help. Being strategically connected to those who take key decisions and communicating aims and messages well and directly might give an advantage, because otherwise there are risks of losing important opportunities, like the ambitious Legge Gallo in Italy.

In the countries examined, implementation was found to be uneven. There are cases where resources have been invested and cases that have not. Strong mandates from high-ranking officers, skilled personnel, funds to run offices and, of course, infrastructures are important. Introducing the SPR is the start and not the end of the process, as it must be followed by decisive steps to support networks of institutions which are often under-staffed and have not received

training in the field, to implement services that will make the transition permanent with obvious positive results for the public.

> *But in Italy, we are very smart to write a national plan without plan, without any enforcement mechanism, without any institutions' support and so on. So, this is a very big problem in Italy because we don't have any support from the Ministry or the University. If we receive support in terms of committee teams in infrastructure, we can go on and carry on our legal mechanism.*

Therefore, introducing the SPR is a great achievement, but there is a lot that must be done, both on the policy level, so that there is adequate support, and on the practical one, so that legal and OA experts can work together. According to an interviewee *"It's better to have a poor law and a good implementation than a good law and no implementation or nobody who takes responsibility to implement it."*

Of course, SPR and the Green OA Road more broadly require researchers to invest time and effort, and so implementation development should aim at lifting not just the legal, but also the operational burdens. *"The huge challenge with the Green Open Access policy, in Denmark, and we are one of the few countries in Europe that has this, is that we need the researcher to do something."* This is why in the Netherlands this task is undertaken by the libraries, while in the UK they are avoiding duplicate uploads on the repositories, if the VoR is openly available. This is in line with the implementation strategies for rights retention in several institutions, as "Policies from which researchers must opt-out and are communicated to publishers by institutions are less bureaucratic and ensure researchers can more readily make their work Open Access with minimal effort." [75]

Harmonisation is seen as an opportunity to address national and international differences and inequalities. According to one respondent *"it's our strong conviction that if this took place, this whole issue would immediately be solved instead of doing it in a hodgepodge country by country, region by region way".* In parallel, it will be important to address the challenge of a lack of communication across ministries and stakeholders, which is causing problems of coordination. As one interviewee mentioned *"I think that in France we have some different interests between different ministries and this harmonisation is the first step for us before doing it at the European level."* A collective understanding at the national level is certainly welcome and strengthens the application of laws. Nonetheless, having a top-down approach might solve any difference, by giving the general tone of what is expected from legislative changes. Furthermore, differences also occur with rights retention policies; while their coexistence with SPR is useful, operating in a harmonised environment is expected to challenge the applicable law, at least in the EU. It is also expected that uniformity, as

mentioned via mandatory provisions, will ameliorate the effects of different legal principles in Member States.

When having two main instruments, legislation and institutional/funder policies, can there be a preference based on their effectiveness? What would be more effective: the licensing of a republished work (through law) or the pre-licensing of a work (through policy)? The latter is applied from institutions and funders and for the time being pre-licensing a work, in the sense of setting out a prior license as exercised by PlanS and those institutions which have signed up to this, is a plausible solution. Defining the rights of users to allow access and reuse is a much-welcomed solution that, by using the contractual law, lifts the pressure from the author.

However, this model still creates inequalities and does not address the representation and sustainability issues. It might be possible that policies are addressing the short-term challenges in a narrow field of scope, whereas SPR's cover is more extensive including all kinds of disciplines, publications, funded research and so on, over the long term. At the same time, the application of such policies creates the critical mass of experience that, based on their outcomes, can persuade policy makers, administrators, and other stakeholders to invest more energy in regulating the access and reuse of scientific publications for the benefit of many.

Another topic that emerged during the interviews is whether the matter of OA growth is hindered by the misalignment of copyright from the current needs and priorities of science and research or by distortions of the publishing market, including a lack of transparency and competition. One respondent strongly argued that changing copyright provisions will not have an effect and that this is a market and competition issue. According to her, *"I don't think the law has to be amended, but these transformative agreements should be taken into consideration by the competition law, because they are really not competitive."* When representatives from Denmark raised the matter of competitiveness at the EU level, the response was that, while critical, it remains low on the agenda.

At the same time, experience has so far indicated that SPR does not harm financial sustainability and that *"some small publishers have shown that it's possible also for a smaller publisher to develop a business model that is focused on open access, or diamond open access or subscribe to open"* while also implementing an SPR, as one of our respondents from the Netherlands mentioned. Evidence is coming from other sides as well, as the implementation of policies for rights retention seem to produce results (see only 5% waivers of the Harvard OA policy [76]), even though according to one respondent *"The publishers continue to assert without any evidence"* (note: meaning their opposition). It is beyond the scope of this study to comment on the profits of the publishing industry, but as long as the publishers do not present credible information about

the potential threats of their financial stability, then the voices calling for reform of a flawed system will increase and get louder, leading to calls for more radical actions.

RECOMMENDATIONS

- **Reweight the values.** While legislators aim to foster balanced decisions, it has been evident that contract law (between publishers and author) is disproportionately powerful. Given the special conditions of science and research, solutions should be based on balanced treatment of all fundamental rights and principles to protect the authors and institutions rights.
- **Amend the uncertainty of rights ownership**. Stakeholders should work towards resolving uncertainty around who holds the rights between institutions and researchers, improve communication around the concept of academic freedom, and argue that the requirement of self-archiving does not harm the choices of the authors.
- **Design SPR by principle.** Any introduction of legislation first needs to set out what it aims to achieve - e.g. enable authors or grow openness. The aim of the legal intervention then shapes implementation. Stakeholders need to project their decisions into the future and understand the complications.
- **Develop licenses.** Develop open licenses for specific versions of a work to truly open the access and allow reuse. Define the range of licensing allowed with the stakeholders, taking into consideration the best interests of communities.
- **Aim for the widest possible coverage.** Define the technical terms, such as the eligible works and content that can be republished, in a manner that embraces all disciplines and all types of work.
- **Work consistently to guarantee wide and strong support.** Key stakeholders need to take initiatives to increase political support. To do so, coordinated action on all levels is required; from research and documentation on the ground to higher level discussion and communication for effective policy making.
- **Invest resources to monitor progress.** Investments for modern service development are required. Just as funders' policies require the monitoring of the entire process by institutions. To this end the latter are renewing their rights retention policies, similarly each Member State should provide the necessary legal authority and tools for institutions to monitor compliance and progress.
- **Develop user-oriented services.** Provide alternative routes that respect the consent of the authors and develop services that minimise the required effort. Organise the entire process on already known platforms and tools to avoid adding new ones.
- **Reassert the value of Green OA by upgrading its role in scholarly communication.** If certain compromises are required by the researchers to comply with legislation, these should be mitigated by a new acknowledgements and rewards system that truly recognises Green OA. Strategically upgrading the status of publicly owned Green OA and embedding it into regular processes will also lower discrimination between researchers according to resources.

CONCLUSIONS

SPR is gaining the attention of the OA world as an instrument that can counter the contract negotiating power mismatch between publishers and authors around the depositing of versions of intellectual works on Green OA infrastructures, such as AAMs and VoRs.

The current state of implementation of SPR has been explored to understand differences and commonalities between seven countries, the rationale behind the introduction of provisions, and the factors that have facilitated or stalled progress. It demonstrates that SPR is a reality, and one that has attracted the interest of lawmakers in the EU. It can evolve and be extended to the EU level, and in doing so bridge international differences and resolve weaknesses in national laws.

These laws have been developed in different settings and periods, and with different aspirations. As laws adapt slower than funders' policies, the effect of the latter and the pressure from the community, have pushed for stronger and braver laws.

The motion is towards a new generation of SPR that will be both legally and practically elaborated, taking into account the lessons learned from the first generation of SPRs and fully understanding the dynamics of fundamental rights, principles, traditions, practices and prospects, as set out in the Recommendations above. Despite their differences, one can not ignore that the SPR are powerful tools at the hands of the national policy makers that can use the knowledge from the first generation of provisions to truly open up access to scientific information and promote inclusive, collaborative and impactful research in Europe.

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APPENDIX A: NATIONAL LEGISLATION FOR THE PROMOTION OF OPEN ACCESS IN EU

Unless stated the translation is an unofficial one.

AUSTRIA

Zweitverwertungsrecht von Urhebern wissenschaftlicher Beiträge (01 October 2015, Art. 37a)
[https://www.ris.bka.gv.at/eli/bgbl/1936/111/P37a/NOR40173343]

§ 37a. Der Urheber eines wissenschaftlichen Beitrags, der von diesem als Angehörigem des wissenschaftlichen Personals einer mindestens zur Hälfte mit öffentlichen Mitteln finanzierten Forschungseinrichtung geschaffen wurde und in einer periodisch mindestens zweimal jährlich erscheinenden Sammlung erschienen ist, hat auch dann, wenn er dem Verleger oder Herausgeber ein Werknutzungsrecht eingeräumt hat, das Recht, den Beitrag nach Ablauf von zwölf Monaten seit der Erstveröffentlichung in der akzeptierten Manuskriptversion öffentlich zugänglich zu machen, soweit dies keinem gewerblichen Zweck dient. Die Quelle der Erstveröffentlichung ist anzugeben. Eine zum Nachteil des Urhebers abweichende Vereinbarung ist unwirksam.

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§ 37a. The author of a scientific contribution that was created by him as a member of the scientific staff of a research institution that is at least half publicly funded and has appeared in a collection that is published periodically at least twice a year, also has the right to use the work if he grants the publisher or editor a right to use the work has the right to make the article publicly available in the accepted manuscript version after a period of twelve months has elapsed since it was first published, provided this does not serve a commercial purpose. The source of the first publication must be stated. Any deviating agreement to the detriment of the author is ineffective.

BELGIUM

Loi portant dispositions diverses en matière d'Economie, Section 6. — Modification du livre XI du Code de droit économique (19 July 2018, Art. 29) [http://www.ejustice.just.fgov.be/cgi/article.pl?urlimage=%2Fmopdf%2F2018%2F09%2F05_1.pdf%23Page81&caller=summary&language=fr&pub_date=2018-09-05&numac=2018031589]

Art. 29. Dans l'article XI.196 du même Code, inséré par la loi du 19 avril 2014, il est inséré un paragraphe 2/1 rédigé comme suit:

§ 2/1. L'auteur d'un article scientifique issu d'une recherche financée pour au moins la moitié par des fonds publics conserve, même si, conformément à l'article XI.167, il a cédé ses droits à un éditeur d'un périodique ou les a placés sous une licence simple ou exclusive, le droit de mettre le manuscrit gratuitement à la disposition du public en libre accès après un délai de douze mois pour les sciences humaines et sociales et six mois pour les autres sciences, après la première publication, dans un périodique, moyennant mention de la source de la première publication.

Le contrat d'édition peut prévoir un délai plus court que celui fixé à l'alinéa 1er.

Le Roi peut prolonger le délai fixé à l'alinéa 1er.

Il ne peut être renoncé au droit prévu à l'alinéa 1er. Ce droit est impératif et est d'application nonobstant le droit choisi par les parties dès lors qu'un point de rattachement est localisé en Belgique. Il s'applique également aux œuvres créées avant l'entrée en vigueur de ce paragraphe et non tombées dans le domaine public à ce moment.

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§ 2/1. The author of a scientific article resulting from research financed for at least half by public funds retains, even if, in accordance with Article XI.167, he has assigned his rights to a publisher of a periodical or has placed them under a simple or exclusive license, the right to make the manuscript freely available to the public in open access after a period of twelve months for the humanities and social sciences and six months for the other sciences, after the first publication, in a periodical, provided that the source of the first publication is mentioned.

The publishing contract may provide for a shorter period than that set out in the first paragraph.

The King may extend the period set in the first paragraph.

The right provided for in the first paragraph cannot be waived. This right is mandatory and applies notwithstanding the law chosen by the parties when a

point of connection is located in Belgium. It also applies to works created before the entry into force of this paragraph and that are not in the public domain at that time.

FRANCE

Code de la recherche (7 October 2016, Art. L533-4), [https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000033205794/]

Partie législative (Articles L111-1 à L547-1)

Livre V: La Valorisation des Résultats de la Recherche et le Transfert de Technologie en Direction du Monde Économique et des Associations et Fondations, Reconnues D'utilité Publique (Articles L511-1 À L547-1) / Titre III: Dispositions Relatives aux Personnels et aux Établissements et Organismes De Recherche (Articles L531-1 à L533-4) / Chapitre III: La valorisation des résultats de la recherche par les établissements et organismes de recherche (Articles L533-1 à L533-4)

I.-Lorsqu'un écrit scientifique issu d'une activité de recherche financée au moins pour moitié par des dotations de l'Etat, des collectivités territoriales ou des établissements publics, par des subventions d'agences de financement nationales ou par des fonds de l'Union européenne est publié dans un périodique paraissant au moins une fois par an, son auteur dispose, même après avoir accordé des droits exclusifs à un éditeur, du droit de mettre à disposition gratuitement dans un format ouvert, par voie numérique, sous réserve de l'accord des éventuels coauteurs, la version finale de son manuscrit acceptée pour publication, dès lors que l'éditeur met lui-même celle-ci gratuitement à disposition par voie numérique ou, à défaut, à l'expiration d'un délai courant à compter de la date de la première publication. Ce délai est au maximum de six mois pour une publication dans le domaine des sciences, de la technique et de la médecine et de douze mois dans celui des sciences humaines et sociales.

La version mise à disposition en application du premier alinéa ne peut faire l'objet d'une exploitation dans le cadre d'une activité d'édition à caractère commercial.

II.-Dès lors que les données issues d'une activité de recherche financée au moins pour moitié par des dotations de l'Etat, des collectivités territoriales, des établissements publics, des subventions d'agences de financement nationales ou par des fonds de l'Union européenne ne sont pas protégées par un droit spécifique ou une réglementation particulière et qu'elles ont été rendues publiques par le chercheur, l'établissement ou l'organisme de recherche, leur réutilisation est libre.

III.-L'éditeur d'un écrit scientifique mentionné au I ne peut limiter la réutilisation des données de la recherche rendues publiques dans le cadre de sa publication.

IV.-Les dispositions du présent article sont d'ordre public et toute clause contraire à celles-ci est réputée non écrite.

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Article L533-4 Version in force since October 09, 2016 (Creation LAW n°2016-1321 of October 7, 2016 - art. 30)

I.-When a scientific text resulting from a research activity funded at least half by grants from the State, local authorities or public establishments, by grants from national funding agencies or by European Union is published in a periodical which appears at least once a year, its author has, even after granting exclusive rights to a publisher, the right to make available free of charge in an open format, digitally, subject to with the agreement of any co-authors, the final version of his manuscript accepted for publication, as soon as the publisher himself makes it available free of charge digitally or, failing that, at the end of a period current from the date of first publication. This period is a maximum of six months for a publication in the field of science, technology and medicine and twelve months in that of the human and social sciences.

The version made available pursuant to the first paragraph may not be used in the context of a commercial publishing activity.

II.-As soon as the data resulting from a research activity funded at least half by grants from the State, local authorities, public establishments, grants from national funding agencies or by funds from the European Union are not protected by any specific law or particular regulation and that they have been made public by the researcher, establishment or research organization, their reuse is free.

III.-The publisher of a scientific document mentioned in I cannot limit the reuse of research data made public in the context of its publication.

IV.-The provisions of this article are of public order and any clause contrary to these is deemed unwritten.

GERMANY

Urheberrechtsgesetz – UrhG (I October 2013, Section 38, par. 4)
[https://www.gesetze-im-internet.de/englisch_urhg/englisch_urhg.html]

(4) Der Urheber eines wissenschaftlichen Beitrags, der im Rahmen einer mindestens zur Hälfte mit öffentlichen Mitteln geförderten Forschungstätigkeit entstanden und in einer periodisch mindestens zweimal jährlich erscheinenden Sammlung erschienen ist, hat auch dann, wenn er dem Verleger oder

Herausgeber ein ausschließliches Nutzungsrecht eingeräumt hat, das Recht, den Beitrag nach Ablauf von zwölf Monaten seit der Erstveröffentlichung in der akzeptierten Manuskriptversion öffentlich zugänglich zu machen, soweit dies keinem gewerblichen Zweck dient. Die Quelle der Erstveröffentlichung ist anzugeben. Eine zum Nachteil des Urhebers abweichende Vereinbarung ist unwirksam.

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(4) The author of a scientific contribution which results from research activities at least half of which were financed by public funds and which was reprinted in a collection which is published periodically at least twice per year also has the right, if he has granted the publisher or editor an exclusive right of use, to make the contribution available to the public upon expiry of 12 months after first publication in the accepted manuscript version, unless this serves a commercial purpose. The source of the first publication must be cited. Any deviating agreement to the detriment of the author shall be ineffective. [Official translation]

ITALY

Disposizioni urgenti per la tutela, la valorizzazione e il rilancio dei beni e delle attività culturali e del turismo (8 August 2013, n. 91, Art. 4, par. 2) [https://www.gazzettaufficiale.it/eli/gu/2013/08/09/186/sg/pdf]

2. Le pubblicazioni che documentano i risultati di ricerche finanziate per una quota pari o superiore al cinquanta per cento con fondi pubblici, indipendentemente dal formato della prima pubblicazione e dalle modalità della sua distribuzione o messa a disposizione del pubblico, devono essere depositate, non oltre sei mesi dalla pubblicazione, in archivi elettronici istituzionali o di settore, predisposti in modo tale da garantire l'accesso aperto, libero e gratuito, dal luogo e nel momento scelti individualmente, l'interoperabilità all'interno e all'esterno dell'Unione Europea e la conservazione a lungo termine in formato elettronico. I soggetti preposti all'erogazione o alla gestione dei finanziamenti adottano le misure necessarie per l'attuazione dell'accesso aperto ai risultati della ricerca finanziata con fondi pubblici.

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2. Publications that document the results of research financed for a sum equal to or greater than fifty percent with public funds, regardless of the format of the first publication and the modalities of its distribution or making available to the public, must be filed, not more than six months after publication, in institutional or industry electronic archives, prepared in such a way as to guarantee open, free and gratis access, from the place and at the moment chosen individually, the

interoperability inside and outside the European Union and long-term preservation in electronic format. The subjects responsible for the provision or management of funding take the necessary measures to implement open access to the results of publicly funded research.

NETHERLANDS

Auteurswet (Art. 25 fa, 11-10-2018) [https://wetten.overheid.nl/BWBR0001886/2018-10-11/#Hoofdstukla_Artikel25fa]

De maker van een kort werk van wetenschap waarvoor het onderzoek geheel of gedeeltelijk met Nederlandse publieke middelen is bekostigd, heeft het recht om dat werk na verloop van een redelijke termijn na de eerste openbaarmaking ervan, om niet beschikbaar te stellen voor het publiek, mits de bron van de eerste openbaarmaking daarbij op duidelijke wijze wordt vermeld.

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The maker of a short scientific work, the research for which has been paid for in whole or in part by Dutch public funds, shall be entitled to make that work available to the public for no consideration following a reasonable period of time after the work was first published, provided that clear reference is made to the source of the first publication of the work.

SPAIN

Ley 17/2022, de 5 de septiembre, por la que se modifica la Ley 14/2011, de 1 de junio, de la Ciencia, la Tecnología y la Innovación (06 September 2022, art. 37, par. 2) [https://www.boe.es/buscar/act.php?id=BOE-A-2022-14581]

2. El personal de investigación del sector público o cuya actividad investigadora esté financiada mayoritariamente con fondos públicos y que opte por diseminar sus resultados de investigación en publicaciones científicas, deberá depositar una copia de la versión final aceptada para publicación y los datos asociados a las mismas en repositorios institucionales o temáticos de acceso abierto, de forma simultánea a la fecha de publicación.

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2. Research personnel from the public sector or whose research activity is financed mainly with public funds and that chooses to disseminate its research

results in scientific publications, you must deposit a copy of the final version accepted for publication and the data associated with them in institutional or subject open access repositories, simultaneously with the publication date.

APPENDIX B: GLOSSARY

This short glossary provides the definition of key terms that appear in the report and might help the reader better understand the concepts. Depending on the term, an established definition may be borrowed from other texts to avoid confusion.

1. **Article Processing Charge:** the fee that is required to publish a scholarly work on a venue that follows the Gold OA Road and covers the expenses of processing the work throughout the production (proofreading, typesetting, image preparation, etc.) and publication stage. In a few cases, a fee can be charged also at the submission stage (as a Submission Processing Charge)
2. **Embargo period:** The period of time that has to pass in order for an author to be able to republish their scholarly work on certain, permitted locations, such as public, not-for-profit repositories and websites.
3. **Gold OA Road:** The publication of a scholarly work on a journal, either purely OA, or hybrid (mixed content; subscribed and open), after the author or their institution has paid an APC. Where no APC exists, then the Road becomes Diamond.
4. **Green OA Road:** The publication of a scholarly work on a trusted and linked public repository, either institutional, or thematic.
5. **Deposit mandate:** an act that obligates one author to deposit his/her scholarly work on a public, not-for-profit repository. When the publisher does not permit this, then the mandate becomes loophole [10].
6. **Harmonization:** the process of developing a common legal environment across the internal EU market. Harmonization can be full (with mandatory provisions) or partial (with optional provisions), depending on the adaptation of the key regulatory principles, but aims to create a consistent framework so that there is an even distribution of rights and responsibilities across Member States.
7. **Moral right:** In most jurisdictions, an indefinite, inalienable and non-waivable "right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation." (definition by the Berne Convention [77]).
8. **Open Access:** the "…free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal,

or technical barriers other than those inseparable from gaining access to the internet itself." (definition by the Berlin Declaration [15]).

9. **PlanS:** an initiative launched by cOAlitionS, a group of European research funders and led by Science Europe, with a view to accelerating the transition to open access (https://www.coalition-s.org/).
10. **Post-Print:** The final manifestation of a scholarly work, after it has been reviewed and qualified for publication. This is also known as AAM or VoR.
11. **Pre-Prints:** An early manifestation of a scholarly work at the time it has been submitted for review in a journal.
12. **Rights Retention:** "An expressed position setting out the practice of retaining sufficient rights for academic works produced by an institutions' researchers to make the work openly accessible and reusable immediately" (definition by SPARC Europe/KR21 [75]).
13. **Revocation right:** the right of a creator to revoke after a substantial period, in whole or in part, the license or the transfer of rights, if there is evidence that lacks proper exploitation.
14. **Self-archive:** the act of depositing a scholarly work on a repository by the author him/herself.
15. **Termination right:** the right of a creator to terminate the license or the transfer of rights for any considerable reason (failure to meet terms, convenience, lapse of time, etc.)
16. **Three-step test:** the main instrument that balances limitations and exceptions of the economic rights of a rightsholder and allows reproductions of certain scope. According to the Berne Convention, the three conditions are if there are "certain special cases" and "such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author." [77]).