Advancing Open Access in the Netherlands after 2020: from quantity to quality.

Jeroen Bosman, Utrecht University Library (ORCID), Hans de Jonge, Dutch Research Council NWO (ORCID), Bianca Kramer, Utrecht University Library (ORCID), Jeroen Sondervan, Utrecht University Library (ORCID)

Keywords: Open Access; The Netherlands; Quality of Open Access; Policies; Universities; Funding organisations

Abstract

The purpose of this article is to explore options to further open access in the Netherlands from 2021. Its premise is that there is a need to look at qualitative aspects of open access, alongside quantitative ones. The paper first takes stock of progress that has been made. Next, we suggest to broaden the agenda by involving more types of actors and involve other scholarly formats (like books, chapters, proceedings, preprints and textbooks). At the same time we suggest to deepen the open access agenda by including several open access characteristics: immediacy, open licenses, open metadata, open peer review and diamond open access. To facilitate discussion,a framework is proposed that allows specifying these actions by the a) aspects of open access they address (what is made open access, how/when/where it is made open access, and copyright and rights retention), b) the actors that play a role (government, research institutions, funders), and c) the various levels at which these actions can be taken: state as goal, set as policy, legalize and promote, recognize and reward, finance, support with infrastructure. A template is provided to ease the use of the framework.

1. Introduction

2021 will be an exciting year for open access in the Netherlands. Over the past years the goal of the Dutch government has been to reach 100% open access to publicly funded research by 2020. In 2021 it will be possible to take stock of what has been accomplished. How many of the research articles produced by authors in the Netherlands are openly available? It also seems the right moment to look ahead. How to proceed with the national open access agenda?

We believe we have reached a stage where many new developments are taking place at the same time and also at a very rapid pace. Think of the many publishing and platform initiatives, (inter)national partnerships between research funders, institutions and libraries to further advance in open access, but also the integration within larger open science policy frameworks. What will be a crucial driver for future change and progression, and will focus future discussions in 2021 and onwards, are the new policies set by cOAlition S and Horizon Europe. Both these funder mandates have a very strong stance on open access to publications and advocate open science practices.

Annual progress reports to the Dutch Parliament and monitoring exercises by the universities tended to concentrate on the question of how many research articles were freely accessible. But open access is so much more than aiming for 100% open availability of research articles. This is the right moment to take a step back and reconsider the Dutch open access agenda. We propose to broaden the focus from a mostly quantity-oriented to a more quality-oriented approach. To demonstrate this, we propose a framework that shows that open access has many more dimensions, with opportunities for action on many levels. This broadening and deepening of the agenda is not a goal in itself but serves the ultimate goals of open access: facilitating efficient and effective dissemination of research and contributing to solving societal challenges and questions.

The scope of this paper is limited to issues related to academic outputs communicating and reporting on research; issues related to outputs created in the process of research (specimens, data, text /corpuses, code, lab notebooks, etc.) are thus out of scope. However this approach and the framework presented could be enriched by extending it to open science practices more broadly.

2. Open access progress in the Netherlands

Great progress has been made in the Netherlands when it comes to the stated goal of making all publicly funded research available in open access. In a recent letter to Parliament it is reported that 61,5% of peer reviewed articles published in 2019 by researchers affiliated with Dutch research institutions are openly available.[1] The Dutch Association of Universities (VSNU) expects that this figure will increase considerably (to around 75%) for 2020, mainly as a result of the recently closed agreement with Elsevier, which is responsible for the publication of around 25% of all Dutch research papers.[2] In many respects this can be called a success story: in 2016 - the first year a national monitor was conducted - this percentage was 42%. In 2017 and 2018 this figure increased to 50% and 54% respectively. Although it may prove difficult to close the gap from the expected 75% to the stated goal of 100%, big steps have been made.

The ambition to reach 100% open access for all publicly funded research was first formulated in 2013 in a Letter to Parliament by State Secretary Sander Dekker in 2013.[3] The fact that most research is publicly funded and therefore should be openly available was an important motivation. In addition, the economic potential of open access was stressed: "Open access promotes the exchange and circulation of knowledge, which contributes to the innovative capacity of the Netherlands".[4] Dekker expressed a clear preference for the gold route over the green (repository) route to open access.

The transition to full open access should be realised within a clearly defined timeframe and therefore very specific quantitative goals were set. 100% open access should be reached in

---

[1] OCW, Brief van de Minister van Onderwijs, Cultuur en Wetenschap, 9 October 2020, (Kamerbrief 31288 nr 881) https://zoek.officielebekendmakingen.nl/kst-31288-881.pdf.

[2] VSNU, Brief aan de Minister van Onderwijs Cultuur en Wetenschappen, 30 September 2020, https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/20076%20U%20-%20Monitoren%20open%20access%20publicaties%202019.pdf.

[3] OCW, Brief van de Staatssecretaris van Onderwijs, Cultuur en Wetenschap, 15 November 2013, (Kamerstuk 31288 nr 354). https://zoek.officielebekendmakingen.nl/kst-31288-354.pdf

[4] Ibidem, p. 1.

ten years time (2024) with a clear intermediate target of 60% to be realised within five years (2019). In 2016, under the Dutch Presidency of the EU Council, these targets were even tightened to 100% open access to be achieved in 2020.[5] This ambition, amongst other open science goals, has later been formalised in the National Plan Open Science, which was published early 2017.[6]

The clear objective set at the national level by the Dutch government marked the beginning of an ambitious strategy of the VSNU - in collaboration with the national library consortium (UKB) - to negotiate open access agreements with the large academic publishers.[7,8] The focus was first on the larger publishers. Subsequently also deals have been closed with smaller publishers. Currently eighteen so called (transformative) read and publish agreements are in place and are renegotiated or extended on a regular basis.[9] The agreements are highly valued and used by Netherlands-based researchers and certainly have contributed to the sharp increase in open access availability of Dutch research output. Over the years the VSNU has published 55 newsletters to inform the community on progress and open access developments in general.[10] With regard to open access support, the website openaccess.nl[11] and the Journal Browser[12] can be considered as helpful and successful tools resulting from collective efforts from the Dutch stakeholders involved.

In 2015 - despite the government's preference for the golden route - the green route to open access received important legal support. During the review of the Dutch Copyright Law the so-called *Taverne amendment* was introduced. This amendment - laid down in article 25fa of the Dutch Copyright Law[13] - allows all researchers to share their (short) academic works through a repository after a non-specified embargo-period.[14] To support researchers who want to make use of this right, the university libraries jointly developed the project "You share, we take care".[15]

---

[5] OCW, *Amsterdam Call for Action on Open Science* (2016): https://www.government.nl/documents/reports/2016/04/04/amsterdam-call-for-action-on-open-science.

[6] Wilma J.S.M. van Wezenbeek, Hester J.J. Touwen, Anke M.C. Versteeg, Astrid van Wesenbeeck, *National Plan Open Science* (2017), p.9, https://doi.org/10.4233/uuid:9e9fa82e-06c1-4d0d-9e20-5620259a6c65.

[7] VSNU, *Roadmap open access 2018 - 2020* (2018), https://www.vsnu.nl/Roadmap-open-access-2018-2020/index.html.

[8] Maria A. M. Heijne and Wilma J.S.M. van Wezenbeek, (2018). "The Dutch Approach to Achieving Open Access", *Bibliothek Forschung und Praxis*, 42(1), 36-41, doi: https://doi.org/10.1515/bfp-2018-0010.

[9] For an overview of existing open access deals in the Netherlands see: www.openaccess.nl. On the concept of transformative open access deals more generally see e.g.: Ángel Borrego Lluís Anglada Ernest Abadal (2020), Transformative agreements: Do they pave the way to open access? *Learned Publishing.* https://doi.org/10.1002/leap.1347.

[10] VSNU, Archive newsletters open access, accessed 6 January 2021, https://www.vsnu.nl/en_GB/archive-newsletters-open-access.html

[11] www.openaccess.nl is the national website for open access information and support. It was founded in 2009 by SURF, VSNU, NWO and UKB.

[12] The Journal Browser is a tool, which researchers in the Netherlands can use in their search for open access options of journals. It is developed by Wageningen University & Research. Institutions can have their own installation.

[13] Dutch Copyright Law, article 25fa, accessed 5 January, 2021, https://wetten.overheid.nl/jci1.3:c:BWBR0001886&hoofdstuk=Ia&artikel=25fa&z=2021-01-01&g=2021-01-01

[14] Dirk J.G. Visser, "De Open Access bepaling in het auteurscontractenrecht", *AMI: tijdschrift voor auteurs-, media- en informatierecht* 2015 (3): 68-74,

[15] See: https://www.openaccess.nl/en/in-the-netherlands/you-share-we-take-care. See also: Arjan Schalken, "Trust as key element in implementing green open access based on Dutch Copyright Law: sharing good practices from the You Share We Take Care pilot", *LIBER 2020 - Session #3: Securing and Building Trust,* https://doi.org/10.5281/zenodo.3921751.

The Dutch Research Council NWO has also been an important driver of open access in the Netherlands. NWO was an early signatory of the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* (2005). A first open access policy for publications arising from its funding was formulated in 2009, accompanied by an open access incentive fund (2010) from which not only publication costs for articles and books were refunded but also projects to stimulate the transition to open access. Within the funding programme (2011-2012) 'Stimulating Open Access Journals in the Humanities', a range of journals that wanted to flip to open access were supported (the flip of the linguistic journal Lingua to Glossa being one of the more notable initiatives).[16] NWO also supported the OAPEN-NL project: one of the first studies of its kind conducted on the effect of open access on sales of books and monographs.[17]

Following the above-mentioned government ambitions in 2013, NWO decided to change its policy from a 'strong recommendation' into a full-fledged funder mandate.[18] In 2018, NWO announced once more it would step-up its efforts to make the research it funds openly available by joining cOAlition S, the international coalition of research funders behind Plan S.[19]

Plan S - in short - requires full, immediate open access under an open CC-BY license and with the retention of sufficient copyright for all papers that report on research funded by this growing group of research funders.[20] NWO and ZonMw (the Dutch health research council) will apply this new policy to grants arising from calls for proposals to be published from January 1st, 2021. Part of the policy is the so-called rights retention strategy (RRS) which aims to ensure that researchers funded by cOAlition S funders retain sufficient copyright to their works to allow them to share the author accepted manuscript (AAM) version of their works in open access repositories without embargo and with a CC-BY license for those journals that do not provide a gold option. A journal checker tool has been developed to inform researchers whether the journal of their choice complies with the requirements of Plan S.[21]

Fostering open access is not only a matter of funder mandates and open access deals with publishers. It is widely recognized that open access is part of a broader open science agenda which requires a change in which researchers get recognized and rewarded. A note on the need to change rewards and incentives to foster open science was written in the context of the National Programme Open Science (NPOS) which in turn inspired a major revision of the Strategic Evaluation Protocol (SEP), the national framework for research

---

[16] Benedikt Fecher and Gert G. Wagner, "Flipping journals to open: Rethinking publishing infrastructure in light of Lingua/Glossa case. *Impact of Social Sciences Blog*, 3 December, 2015, https://blogs.lse.ac.uk/impactofsocialsciences/2015/12/03/seizing-the-moment-is-our-understanding-of-open-access-too-shortsighted/.

[17] Eelco Ferwerda, Ronald Snijder, Janneke Adema, *OAPEN-NL. A project exploring Open Access monograph publishing in the Netherlands* (2013), http://www.oapen.nl/images/attachments/article/58/OAPEN-NL-final-report.pdf.

[18] OCW, *Brief van de Staatssecretaris van Onderwijs, Cultuur en Wetenschap*, 23 januari 2015 (Kamerstuk 31288 nr 414).

[19] "NWO joins international coalition to accelerate the transition to open access", accessed January 5, 2021. https://www.nwo.nl/en/news/nwo-joins-international-coalition-accelerate-transition-open-access.

[20] More on Plan S: www.coalition-s.org.

[21] Journal Checker Tool, accessed 5 January, 2021, www.journalckeckertool.org.

assessment.[22] Open access and open science figure as important assessment criteria in this protocol that will take effect from 2021. The need to reward and acknowledge open science practices also features prominently in the position statement "Room for everyone's talent" (2019), a collective call for action by all Dutch research institutions to fundamentally rethink the system of recognition and rewards.[23] And in line with the principles of Plan S, NWO took the decision to sign the *San Francisco Declaration on Research Assessment (DORA)* and introduced a new narrative CV format in which applicants are specifically encouraged to mention open access and open science practices.[24]

As mentioned before, the expectation is that the Netherlands will achieve an open access percentage of around 75% in 2020. The remaining 25% may prove to be more difficult. The so-called 'long tail' is probably substantial and it will in no way be possible to strike transformative agreements with all publishers of journals where Dutch affiliated researchers publish. It is important to consider alternative models and routes. This is also recognized by the VSNU, which in a recent letter to the Minister of Education announced a 'feasibility study' to close the gap between the projected 75% next year and the goal of 100%.[25]

A number of new initiatives have started to provide or test alternative publishing routes and models for open access. In July 2020 the open access platform for Dutch academic journals, openjournals.nl, received a NWO grant. Openjournals.nl is a stakeholder-governed journals platform to support non-APC open access journals (i.e. diamond open access) in the humanities and social sciences. The project is run at the Humanities Cluster of the Royal Academy of Sciences (KNAW). The platform will offer independent small-scale academic journals an affordable state-of-the-art technical solution for publishing academic research.[26] Another promising project, however still in its conceptual phase, is University Journals. Despite its name, this project aims to let universities publish a wide range of research outputs, such as articles, books, protocols, registered reports and preprints using their own repository infrastructure.[27]

Another recent initiative which is worth mentioning here is the study commissioned by the VSNU on the feasibility of a Dutch Open Knowledge Base (OKB). The discussion about the

---

[22] NPOS, *Notitie – Erkennen en waarderen van onderzoekers* (2018): https://www.openscience.nl/files/openscience/2019-02/notitie-erkennen-en-waarderen-van-onderzoek.ers.pdf and VSNU, NWO, KNAW. *The Strategy Evaluation Protocol 2021-2027* (2020), https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/SEP_2021-2027.pdf.

[23] VSNU, NWO, KNAW, NFU, ZonMW. *Room for everyone's talent. Towards a new balance in recognising and rewarding academics*" (2019), https://vsnu.nl/recognitionandrewards/wp-content/uploads/2019/11/Position-paper-Room-for-everyone%E2%80%99s-talent.pdf.

[24] Kasper Gossing, "Quality over quantity: How the Dutch Research Council is giving researchers the opportunity to showcase diverse types of talent"*, DORA blog*, 14 November, 2019, https://sfdora.org/2019/11/14/quality-over-quantity-how-the-dutch-research-council-is-giving-researchers-the-opportunity-to-showcase-diverse-types-of-talent/

[25] VSNU, *Brief aan de Minister van Onderwijs Cultuur en Wetenschappen*, 30 september 2020: https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/20076%20U%20-%20Monitoren%20open%20access%20publicaties%202019.pdf. See also: https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/Haalbaarheidsstudie_naar_landelijke_onderhandelingen_en_100procent_%20open_access_final.pdf

[26] www.openjournals.nl

[27] Saskia Woutersen-Windhouwer, Eva Méndez Rodríguez, Jeroen Sondervan and Frans J. Oort, 2020. "*University Journals. Consolidating institutional repositories in a digital, free, open access publication platform for all scholarly output*" LIBER Quarterly, 30(1), pp.1–15, http://doi.org/10.18352/lq.10323

need to also open up the *metadata* pertaining to the Dutch publication output was brought to the fore by the national agreement with Elsevier because in this agreement pilots about the joint development of research information services are foreseen.[28] An expert taskforce advised on the terms and conditions on which such pilots could be carried out in a responsible manner and how an OKB (as opposed to the often closed CRISs of institutions) could fit into the open science goals of the Dutch research community.[29] The final results of the OKB feasibility study are planned for early 2021.[30]

Officially, 2020 is the year in which the first term of the NPOS has come to a close. As there are a number of ongoing projects, and as it is widely acknowledged that there is still a lot of work to be done, the programme will likely be extended. This is therefore the right moment to take a step back and look where we stand. A conclusion will probably be that indeed a large share of newly published scholarly articles are openly available. But new questions arise: what does it actually mean if we conclude that 75% of articles are openly available? What about the papers that over the years have not been made open access? How to include other scholarly outputs (e.g. books and monographs) into the open access agenda? What can be done to further stimulate the sharing of preprints? What measures can be taken to make the necessary changes to the recognition and reward structures in order to stimulate researchers in their open science practices? And how to assure that society at large actually is able to benefit from the research literature that is openly available?

These questions are especially relevant as 2021 seems a pivotal year in which a lot of new national and international developments come together. 2021 will see the start of Plan S which has already prompted some large publishing companies to change their policies. 2021 will be the year in which the new European framework programme Horizon Europe will be launched and a brand new publishing platform (Open Research Europe[31]) was announced. On a national level the new SEP 2021-2027 will come into effect, the openjournals.nl platform will be launched, and the first concrete effects / outputs from the national programme on 'recognition and rewards' are expected.

Open science goals and practices, including those of open access, have not only been translated into policies, but have also increasingly been embraced by researchers in the Netherlands. It is an encouraging sign that the national organisation of graduate students when surveying their members found that 63% out of almost 1.500 respondents said they felt encouraged to publish open science[32]. It exemplifies that open access now also profits from a bottom-up culture change.

---

[28] See for example: Sarah de Rijcke, "*Elsevier and the Dutch Open Science goal*s". May 20, 2020, https://leidenmadtrics.nl/articles/s-de-rijcke-cwts-leidenuniv-nl and disclosed Elsevier contract 2020-2025: https://www.openaccess.nl/sites/www.openaccess.nl/files/documenten/countersigned_ukb_elsevier_sd_2020-2024_agreement_geredigeerd.pdf.

[29] Dutch Taskforce on Responsible Management of Research Information and Data (VSNU, 2020), *Guiding Principles on Management of Research Information and Data*. https://www.vsnu.nl/files/documenten/Nieuwsberichten/Guiding%20Principles%20on%20Management%20of%20Research%20Information%20and%20Data_11May.pdf

[30] Max Kemman and Robin te Velde, 2020, "*Feasibility study Open Knowledge Base - version for consultation*", https://doi.org/10.5281/zenodo.4304334.

[31] https://open-research-europe.ec.europa.eu/ to be formally launched in March 2021.

[32] Lucille Mattijssen and Tess van Doorn, *PNN PhD Survey Asking the relevant questions - PhD criteria, Open Science, Recognition and rewards, Career* (2020). Promovendi Netwerk Nederland, https://hetpnn.nl/wp-content/uploads/2020/08/PNN-PhD-survey-report-Criteria-Recognition-and-rewards-Open-science-Career.pdf.

All in all, 2021 will be an exciting year for many reasons. The Dutch research community will be able to evaluate how far the Netherlands have come with the ambition to reach 100% open access in 2020. How successful has the mix of policy interventions of the different stakeholders been? It will not be done in 2021. On the contrary: we argue 2021 needs to be the year to broaden the open access agenda from quantity (attaining 'just' the 100%) to quality.

3. A multidimensional framework for furthering open access

Including quality aspects in open access ambitions requires reflection on the different aspects of open access to address, the different actors that play a role, and the types of actions that can be taken. Together, these can form a framework that enables seeing where current actions are focused and where gaps and opportunities lie moving forward.

Open access is about more than just the number (or proportion) of research publications being made available through open access. Other aspects include:

- *what* is being made open access - including the sharing of preprints, other publication types such as book chapters, books, reports, and older publications that could retroactively be made open access.
- *how/where/when* publications are made open access - optimizing the potential of open access by removing embargo periods, using licenses that enable not just access but also reuse, making open access an available option for all authors, and providing rich open metadata to ensure open access publications are not only accessible and reusable, but also findable and interoperable, and linked to related research outputs in a machine-readable way.
- *copyright & rights retention* - copyright retention by authors or their institutions, combined with non-exclusive licenses to publish, to maximize the potential of open access.

Moving open access forward on all these aspects requires actions from various actors, ultimately aimed at enabling researchers to make their publications open access. At the national level, these actors include the government, national and charitable funders and academic and non-academic research institutions. At the international level, the European Commission also has an important role to play, not only as funder but also as legislator. In addition libraries, funders and universities are also organised in international networks in which they can collaborate, exchange practices or seek to align policies. We have chosen not to include publishers in our analysis here, nor researchers who as editors of (society) journals of course can play an important role in shaping open access options for their research communities. Instead, we focus here on public actors (government, funders and institutions) and the policy options they have in fostering open access.

Actions taken by these actors can range from policy setting to providing researchers with concrete support, including financial support. These actions can mutually reinforce each other to create a situation where open access publishing is not only expected, but also made

possible for all researchers, and the default when sharing research results. The full range of actions open to governments, funders and institutions could be characterized as follows[33]:

- finance and support of infrastructure (make it possible and easy)
- recognize and reward (make it normative)
- legalize and/or promote (make it known and allowed)
- set as policy (make it required)
- state as goal (make it preferred).

It should be stressed that these levels are not hierarchical. They can reinforce each other: actions taken on each level make actions in the other levels more effective.

First of all, options to publish open access must be available, affordable and easy to use for researchers, and infrastructure must be in place (both at publishers and at institutions) to make information about publications, as well as publications themselves, findable, accessible, interoperable and reusable.

At the second level, researchers should be encouraged to make publications and other research output openly available, by making it both expected and recognized, for instance in grant applications and in career progression at their respective institutions. This includes recognizing all forms of research communication, and moving away from evaluating research based on journal or publisher prestige. Instead, assessment should be based on the quality of the research itself, including openness and transparency aspects. Recognizing and rewarding publications for the quality of the reporting and the underlying research is not only a matter of policies and procedures. It is also a matter of values conveyed by researchers themselves, e.g. when they informally discuss their publications.

At the third level, open access publishing can be supported by creating the (legal) conditions that allow it, e.g. by provisions in copyright law that allow authors the right to share academic work financed by public money, by clauses in grant contracts that reserve authors' right to share their accepted manuscripts and by institutional open access policies that reserve non-exclusive publication rights. Authors' use of such clauses can further be supported by making them well-known and by providing legal back-up.

At the fourth level, open access publishing can be made required, with stipulations regarding licenses, limits on embargo periods and provision of sufficient metadata. This can be mandated by institutions, funders or governments for the research they finance and/or the researchers they employ.

At the fifth level, open access can be stated as a goal both by governments, funders and institutions. This sends a clear message to other parties, including researchers and the general public, and can form the basis of a framework in which other actions are specified.

Actions can be taken on any one level by any one party - although their effectiveness does depend on actions taken at other levels and by other parties. For example, while setting

---

[33] Inspired by: Brian Nosek, "*Strategy for Culture Change*", Center for Open Science Blog, Strategy for Culture Change, 11 June, 2019, https://www.cos.io/blog/strategy-for-culture-change.

goals sends a clear message, unless additional actions are taken to achieve these goals, it is likely to be ineffective on its own. Similarly, setting mandates without providing support to meet them is likely to cause resentment rather than induce behavioural change.

Ideally, open access publishing would be aligned both with intrinsic and extrinsic motivations of researchers - motivations for sharing their research findings and for being recognized for their contributions. It is up to the various parties that shape the environment researchers work in (i.e. institutions, funders, government) to create the conditions that make this possible.

template multidimensional framework for furthering open access	state as goal (make it preferred)			set as policy (make it required)			legalize and/or promote (make it known and allowed)			recognize and reward (make it normative)			finance and support (make it possible and easy)		
	actor 1	actor 2	actor 3	actor 1	actor 2	actor 3	actor 1	actor 2	actor 3	actor 1	actor 2	actor 3	actor 1	actor 2	actor 3
A) what is made open access?															
goal A															
goal B															
goal C															
B) how/when/where is it made OA?															
goal D															
goal E															
goal F															
C) copyright & rights retention															
goal G															
goal H															
goal I															

Figure 1. Template multidimensional framework for furthering open access

Figure 2. Framework with current open access policies & support for Dutch authors[34]

---

[34] The framework showing current actions is not exactly matched to the text in this paper, as it is just an example of how to use it. Likewise, the inclusion of Utrecht University as institution also is purely as an example and could be substituted with any of the other institutions.

Combining the three dimensions outlined here (i.e. aspects of open access, actors involved and the levels at which actions can be taken) results in a template multidimensional framework that can inform future developments (figure 1). Vertically, the different aspects of open access are projected, as we identify them in this paper. Horizontally, the five "levels of engagement" are presented for each of the different actors relevant for open access in the Dutch context. The framework can be used in various ways. For instance one could fill it with current actions/policies (figure 2). But one could also use it to prioritize or plan future actions. A full and editable version is available for download.[35]

4. Broadening and deepening open access

In moving beyond the goal of 100% open access for articles we propose a strategy of broadening and deepening. Broadening means making more types of outputs open access than just journal articles, in other terms: *what* do we make open access? Deepening refers to the characteristics of and forms in which publications are made open, or in other words: *how* do we provide open access? Both broadening and deepening will be facilitated but at the same time also restricted by the *copyright and licensing context*.

4.a What?

An important question that begs being addressed is what we would like to make open access available. A first consideration is which organizations to include when setting the scope of open access policies. The 2013 Letter to Parliament by state secretary Dekker left no doubt that the 100% open access ambition included *all* publicly funded research.[36] The vast majority of that research is obviously performed within the universities, but the Netherlands has a vibrant ecosystem of extra-university research institutes. For those institutes funded by the Ministry of Education and Research (OCW), like the twenty NWO and KNAW institutes and the Universities of Applied Sciences, it is clear that they also are expected to meet the 100% ambition of the government. Less clear is what is expected from the research and technology institutes funded by the ministry of Economic Affairs, the hospital sector and the various governmental agencies like the National Institute for Public Health and the Environment (RIVM), the Royal Netherlands Meteorological Institute (KNMI) and the various planning agencies (in Dutch: Planbureaus). Together these extra-university research performing institutions are responsible for a substantial number of publications. The question is however, if it can be expected of all these institutions to meet the open access goals by themselves. A more national approach, or possibly a widening of the existing library consortium may be useful in advancing the 100% ambition as stated by the Dutch government.[37]

---

[35] Jeroen Bosman, Hans de Jonge, Bianca Kramer and Jeroen Sondervan, *A multidimensional framework for furthering open access (2021)*. Zenodo https://doi.org/10.5281/zenodo.4455586.

[36] See in addition to the Letter of Secretary of State Sander Dekker, (note 2) a report commissioned by the Ministry of Health, Welfare and Sport and ZonMW: Berenschot, et al., *Open access tot publicaties. Stand van zaken en implicaties voor volksgezondheidsbeleid* (2017): https://www.tweedekamer.nl/kamerstukken/detail?id=2017D23296&did=2017D23296. 15 November 2013. (Kamerstuk 31288 nr 354). https://zoek.officielebekendmakingen.nl/kst-31288-354.pdf.

[37] The VSNU commissioned a feasibility study for widening the consortium and reaching the 100% goal: VSNU, *Opdracht voor Haalbaarheidsstudie naar landelijke onderhandelingen en 100% open access* (2020), https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/Haalbaarheidsstudie_naar_landelijke_onderhandelingen_en_100procent_%20open_access_final.pdf

While the organizational dimension of the scope of policies is very important, this section focuses on another scope dimension: the type of publications. Do we just look at current peer reviewed scholarly journal articles or is there a need and opportunity to also look at *other document types* (e.g. chapters, books, conference proceedings, contributions to encyclopedias, posters), *early versions* (e.g. submitted manuscripts or more generally preprints and working papers) and, maybe also *non-scholarly and/or non-peer reviewed publications* (e.g. reports, publications in professional and trade magazines, non-research articles, textbooks). And finally, we could consider to also make any *older peer reviewed publications* open access, retrospectively. With the exceptance of books, all of these have so far gotten relatively scant attention in Dutch open access policies.

Chapters and books
Open access for *books and chapters* very much lags behind that of journal articles. It is of great importance as even rich libraries can only provide access to a minority of scholarly books that are being published globally, even counting access through interlibrary loan in the Netherlands as a whole. At the same time a study into publication cultures[38] showed that books and chapters represent a substantial share of the publication output, especially in humanities and social sciences.

For chapters and books attention has already been growing and initiatives are popping up. In the context of NPOS policy options have been explored with recommendations to include books in wider open access policies, to create funds for financing open access books and to intensify communication with researchers[39]. Plan S also aims to make books open access and has announced to come forth with policies towards that in 2021. NWO already includes books and chapters in its implementation of Plan S. And the "You share, we take care" interpretation of the *Taverne-amendment* includes chapters. Some institutional open science programmes and institutional open access funds also extend to books and chapters. NWO has created a specific fund for open access books, and more publishers facilitate publication of open access books. More systematically there have been steps towards open access policy for books, at a national level[40] and in 2021 work will be done by UKB on approaches for monitoring open access availability of books and chapters. Issues deserving more attention are discussing how changes in reward and recognition may impact the wish to publish with high status publishers and also discussing the acceptance of reuse licenses for books and chapters. In addition a question which needs more discussion is whether the Book Processing Charge (BPC) model should actually be the preferred business model for open access books or that - because of the apparent unaffordability of that model - alternative collaborative funding models should be considered. The Netherlands can learn from the UK in this respect, where a lot of work is being done on these issues.[41]

---

[38] See figure 1, p. 9 of Jeroen Bosman & Bianca Kramer, *Publication cultures and Dutch research output: a quantitative assessment* (2019), Zenodo, https://doi.org/10.5281/zenodo.2643359.

[39] Eelco Ferwerda, Hans de Jonge, Jeroen Sondervan and Astrid van Wesenbeeck, *Note – Towards an open access policy for academic books in the Netherlands* (2019), https://www.openscience.nl/files/openscience/2020-02/Note%20Open%20Access%20policy%20for%20academic%20books%20in%20the%20Netherlands_def.pdf

[40] https://www.openscience.nl/files/openscience/2019-12/Notitie%20OA%20beleid%20boeken_def.pdf

[41] See: the COPIM project (Community-led Open Publication Infrastructures for Monographs): www.copim.ac.uk.

Conference proceedings
In some fields *conference proceedings* are very important: as important or perhaps even more important than journal articles. This is especially true in computer science and some technical and applied sciences.[42] Peer review is often not much different from that organised by journals. As such the importance of open access for conference outputs and journal articles is comparable. Conference proceedings are however very seldomly included in open access policies.[43] Open access figures for conference proceedings are way lower than those for journal articles. Also, there has been scant development of policies to increase open access for conference proceedings. Some institutions, like Wageningen University & Research, have a specific policy requiring conference publications to be openly available[44]. Especially realizing gold open access will require different strategies from the ones used for realizing gold open access for journal articles.

Contributions to encyclopaedias
Contributions to encyclopaedias, whether generic or topical ones, are important for cohesion and progress of science and scholarship. Proprietary ones may cost many thousands of euros and are thus out of reach for smaller or less well endowed institutions. For contributions to encyclopaedias nothing has been arranged yet to provide open access. They are mostly produced outside research grants and they are not considered as articles. As such they are out of scope of the current version of Plan S. One could consider these as short scholarly works though, that could also be shared under the *Taverne-amendment*. An alternative option would be for scholars themselves to choose to (also) contribute to encyclopaedias that are already open. These could be both generic ones like Wikipedia and topical and disciplinary ones like the Stanford Encyclopedia of Philosophy.[45]

Early versions (preprints)
Making *early versions* open access has gained a lot of momentum under the pressing need of finding solutions to the COVID-19 crisis. Sharing preprints or working papers has been a longstanding practice in fields like physics, mathematics, astronomy and economics and has also grown for a few years now in for instance life sciences, psychology and some other fields. With COVID-19 the practice has also gained wider acceptance in medicine. It remains to be seen whether other grand challenges (e.g. the climate crisis) will lead to more disciplines more broadly adopting the sharing of early versions.

There are no policies that we know of that require sharing preprints/early versions. NWO accepts preprints (of published articles) to comply with their open access policy, although in Plan S preprints are only 'strongly encouraged'. Funders (e.g. NWO, ERC) are starting to allow mentioning preprints in grant applications. Some institutions financially support preprint archives and there has been a lot of, mostly positive, discussion on preprints, although some have also commented on the drawbacks of publishing preprints hastily in emergency

---

[42] Aliaksandr Birukou, "Guest Post - Everything* You Ever Wanted to Know about Conference Proceedings But Were Afraid to Ask", *Scholarly Kitchen*, 30 January 2020, https://scholarlykitchen.sspnet.org/2020/01/30/guest-post-everything-you-ever-wanted-to-know-about-conference -proceedings-but-were-afraid-to-ask/.
[43] NWO being an exception. See: article 1.13 in the NWO Implementation of Plan S: https://www.nwo.nl/sites/nwo/files/documents/Implementation%20of%20Plan%20S_JULY2020.pdf
[44] "WUR open access policy", accessed 11 January 2021, https://www.wur.nl/en/Library/Researchers/Open-Access/WUR-Open-Access-policy.htm.
[45] "Stanford Encyclopedia of Philosophy", accessed 7 January 2021, https://plato.stanford.edu/.

situations. In exploring ways to stimulate preprints it is good to discern between self archiving preprints after formal publication and sharing preprints before or on submission. All three serve different goals. In open science terms (speed, transparency, verification, error detection), sharing before submission is probably the most valuable. Fostering preprint cultures in more disciplines should be considered anyway because it allows for really innovative publishing models like the overlay journal or could help in making open access publishing more equitable and affordable.[46]

Trade books and magazines, textbooks
Publications that are not primary research, or that are not peer reviewed, and publications that primarily have a non-researcher audience such as *trade books and magazines, but also textbooks for students* have been out of scope of open access policies so far. It is also more difficult to assess to what extent these are currently open access, also because they often lack DOIs and have limited coverage in scholarly publication databases. All of these types of publications are really different beasts with specific issues that require separate discussion, generic approaches based on copyright exceptions and self archiving might bring us a long way for some of them. The idea to make textbooks open access, or rather create them openly from the start, as online open textbooks has spurred a whole open textbook movement. However that movement is still relatively weak in the Netherlands. An exception may be the TU Delft Open Science Program, which has strong ambitions on the support for creating and publishing interactive open textbooks and replacement of existing commercial textbooks.[47] In terms of accessibility of education and not becoming too dependent on big educational publishers for content and development of curricula this certainly deserves attention from institutions in the next years.

Retrospective open access
Finally, *retrospective open access* for publications from previous years is an important route to explore. Libraries and individuals are still paying for access to (papers from) back volumes. Some institutions can only keep access to a (rolling) window of back volumes while maintaining a license. Retrospective open access can be provided by publishers for publications older than a few years, but mostly this is done without an open license, known as bronze open access. Some communities (e.g. mathematicians) have successfully lobbied to realize delayed open access and some societies have also provided this for their journals on their own account. Some publishers also allow paying an APC to make older articles open access. Another approach is using exceptions in national copyright law, like the Taverne amendment to provide open access to older publications. Already, older publications can be made available in the 'You Share we Take Care' project, and some institutions have started doing so. It deserves exploring whether this could be scaled up. Still, that would be without an open license. Of course opening up backfiles, with or without an open license, could also be negotiated in national deals with publishers but will likely come with a price.

---

[46] "How journals are using overlay publishing models to facilitate equitable OA", Scholastica blog, 25 October, 2019, https://blog.scholasticahq.com/post/journals-using-overlay-publishing-models-equitable-oa/ and Toby Green (2019). ""Is open access affordable? Why current models do not work and why we need internet-era transformation of scholarly communications". *Learned Publishing, 32: 13-25*, https://doi.org/10.1002/leap.1219.
[47] See: Irene Haslinger (2019). *TU Delft Strategic Plan Open Science 2020-2024: Research and Education in the Open Era*. Delft University of Technology, https://doi.org/10.4233/uuid:f2faff07-408f-4cec-bd87-0919c9e4c26f.

4.b How, when, where?

Immediacy
One of the main tenets of open science is increasing the engagement with research and its outputs. Having publications open access available sooner rather than later helps with that. It increases the chance of engagement and the possibility for verification that is especially important in the first weeks after publication, when the research results have a first spike of attention. For publications that receive a lot of media attention it is especially important for journalists and the wider public to not only be able to read the news pieces but also gain access to the publications themselves. Relying on publishers selectively giving access to science journalists is too limited. Some policies, e.g. Plan S and Horizon Europe both require immediacy of open access and UNESCO, in its first draft of the UNESCO recommendation on open science also calls for immediate open access.[48] However, most institutional policies and mandates do not. Some of those policies prefer gold open access and with that implicitly support immediate open access, but many others rely on green open access, and with that implicitly accept delays caused by publishers imposing embargo on self archiving. The Dutch preference for gold open access has resulted in a very substantial part of Dutch open access output already conforming to the immediacy requirement. Of course there is a price tag involved, both in big deals with the larger publishers and in individually paid APCs.

There are several forms of non-immediate open access: publisher embargo's on self-archiving, delays in the articles in national copyright law on exceptions for self archiving and delayed open access provided by publishers (bronze open access). Embargoes have existed for many years, typically range between 6 months and 36 months, with differences between fields (STEM versus SSH), publishers and individual journals. The embargo durations have not come down, except for some publishers that have introduced generic embargoes for all their journals. Although bringing back embargo's to say 12 months for all fields and journals would bring clarity and especially improve access in SSH fields it will not satisfy policies demanding immediacy. The same holds for self-archived publications based on exemptions in national copyright law (like article 25fa in the Netherlands) as these require an embargo period.

Alternative publishing platforms
Over the past decade a vibrant ecosystem of so-called alternative open access publishing platforms has emerged. Platforms represent a move away from the traditional journal as organizing principle. These platforms might differ from traditional scholarly journals in a number of ways, including publication process, governance and underlying infrastructure. They often apply a wider disciplinary scope, include the publication of submitted versions/preprints and apply open peer review. Often the focus is on transparency and efficiency rather than selectivity or prestige. Notable examples of alternative publishing platforms have been started by funders like Wellcome Trust, the Bill & Melinda Gates Foundation, the Irish Health Board and more recently the European Commission (all using the infrastructure and publishing model provided by F1000Research).[49] But scholar-led

---

[48] UNESCO, *First draft of the UNESCO Recommendation on Open Science* (2020): https://unesdoc.unesco.org/ark:/48223/pf0000374837.

[49] Tony Ross-Hellauer, Birgit Schmidt, Bianca Kramer, 2018. "Are funder Open Access platforms a good idea?" PeerJ Preprints 6:e26954v1, https://doi.org/10.7287/peerj.preprints.26954v1.

platforms like SciPost and Liberate Science could just as well be qualified as 'alternative' publishing platforms. The value of alternative publishing platforms should not be underestimated. They can represent not only examples of real innovative, open access scholarly communication, but also effective "threat infrastructures" to traditional journal publishers.[50] Depending on one's point of view the acquisition of F1000Research by Taylor & Francis either confirms the value of such a threat or shows its limited effect.

Despite the fact that 'alternative publishing platforms' were mentioned as one of the five pillars of the open access strategy of the VSNU[51] it seems these initiatives have not received the same level of attention from research institutions that has gone into negotiating transformative deals with traditional publishers. An exception is the "University Journals" initiative that was announced in 2018, but has remained in a conceptual phase. Also, TU Delft aims to set up its own open access publishing platform as part of their open science programme.[52] Examples from other countries - for instance UCL Open: Environment, the first journal from UCL Press run on ScienceOpen[53] - show that these alternative platforms can offer an interesting and innovative route to open access using a different infrastructure.

Diamond
Globally, many have criticised focussing only on APC-based journals in fostering open access. The critique is that this merely shifts the onus of payment from those wanting to read to those wanting to publish and consequently creates new inequalities. Diamond journal publishing models deserve attention as potentially the best option to avoid the drawback of APC-based publishing. Existing diamond journals are sometimes regarded as not requiring any fostering as they are already fully open access and do not charge authors. However, for these (often smaller) journals to remain a viable publishing venue, they cannot be neglected. There are projects to set up diamond publishing options for institutions, such as through the University Journals project, and to support development of new and existing diamond journals in terms of infrastructure and visibility, such as through the Openjournals platform. cOAlition S also recognizes the potential importance of diamond journals and commissioned a study into the diamond landscape and challenges for these journals.[54] Some Dutch institutions and NWO have started to support new or existing diamond platforms such as SciPost and Open Library of the Humanities.[55] The big question is what kind of support diamond publishing venues need and how to organize that support. It may start with wider recognition of their role and with providing sustainable 'homes', as the journals are often based at institutions or societies. Coming up with solutions for infrastructural support and

---

[50] Martin P. Eve, "The Emergence of Threat Infrastructures: Plan S and Behavioral Change", 3 July 2020, https://eve.gd/2020/07/03/the-emergence-of-threat-infrastructures-plan-s-and-behavioral-change/.

[51] VSNU. *Naar 2020: voortgang op de vijf pijlers*, 2019. In: VSNU, Open access - International alignment. https://www.vsnu.nl/open-access-international-alignment/naar-2020-voortgang-op-de-vijf-pijlers.html.

[52] TU Delft Strategic Plan Open Science 2020-2024, (p.18) https://doi.org/10.4233/uuid:f2faff07-408f-4cec-bd87-0919c9e4c26f .

[53] "About UCL Open: Environment", accessed 6 January 2021, https://ucl-about.scienceopen.com/.

[54] cOAlition S website: "Exploring collaborative non-commercial publishing models for Open Access: tender results", accessed 6 January 2021, https://www.coalition-s.org/exploring-collaborative-non-commercial-publishing-models-for-open-access-tender-results/.

[55] NWO website: "Open Science Infrastructure Support", accessed 16 January 2021, www.nwo.nl/en/open-science-infrastructure-support.

scalable mechanisms for financial support where necessary is also needed, and may depend on collective action, as outlined in a recent Knowledge Exchange report.[56]

Open metadata and infrastructure
To maximise the potential for use and reuse of research publications, not only publications themselves, but also their metadata should be openly available with a license that enables (re)use.[57] Availability of open metadata facilitates discovery and makes it possible to create a 'record of versions' of a publication (including preprints and accepted manuscripts, but also updated versions) and to link publications to related research outputs such as code, data and peer review reports. In addition, it allows transparency on data used for research assessment as promoted by initiatives such as the Leiden Manifesto and the San Francisco Declaration on Research Assessment (DORA).

Over the past years, strides have been made to convince publishers to make citations and abstracts of publications (that both can be considered metadata) openly available[58], facilitating innovation and potentially lessening the dependence on commercial parties providing discovery and research evaluation systems based on closed metadata.

Plan S and the proposed Horizon Europe policy include requirements for CC0-licensed open metadata, including funding information, and research institutions could include open metadata as a condition when negotiating with publishers and providers of research information. This is particularly important when publisher contracts cover publications as well as (services around) research information, such as with the recent national contract with Elsevier. As mentioned earlier, Dutch research organizations are exploring the feasibility of an Open Knowledge Base for research information, and open metadata will be an important aspect in both the development and potential use of such a resource.[59]

It should be noted that openness and quality of metadata is not only relevant for metadata of journal publications, often supplied by publishers and providers of research information systems, but also for metadata of publications and other research output in institutional repositories, which are in turn harvested and made available for discovery by downstream aggregation services.

Open peer review
One of the tenets of open access is that it increases usage, by specialists, academics at large as well as other professionals. For non-specialists to make optimal use of the various document types and versions of publications that become available it is important to have clarity about their status: what is the type of document, what is the version, what kind of peer review has it gone through, have there been corrections or a retraction? Some of the clarity can be provided by labelling documents. Ideally peer review status is made fully transparent

---

[56] Cameron Neylon, Rene Belsø, Machiel Bijsterbosch, et al., (2019). "Open Scholarship and the need for collective action", Zenodo, http://doi.org/10.5281/zenodo.3454688.

[57] Ludo Waltman, 2020. Publications should be FAIR, https://leidenmadtrics.nl/articles/publications-should-be-fair. See also Ludo Waltman, "*Open Metadata of Scholarly Publications*" (European Commission, July 2019), https://www.doi.org/10.2777/132318.

[58] See Initiative for Open Citations (I4OC): https://i4oc.org/ and Initiative for Open Abstracts (I4OA): https://i4oa.org/.

[59] Alastair Dunning, Maurice Vanderfeesten, Sarah de Rijcke, et al., 2020. "What is an Open Knowledge Base anyway?", https://openworking.wordpress.com/2020/05/29/what-is-an-open-knowledge-base-anyway.

by adding open peer review reports and by facilitating community review. The latter is especially important for fulfilling the promise of preprints in the sense of early correction and improvement. Open peer review is a quality aspect of open access that could be seen as increasing the value of publications.

4.c Within what legal, copyright and license context?

A crucial element for open access, and something that could be given more attention in current (national) open access strategies, is copyright and licensing. Both play a very important role in open access publishing and in securing the quality of open access in general.

Still, in many cases agreeing to a publisher contract implies a transfer of copyright (while always retaining moral rights[60]). From that very moment the publisher is in charge of the content and is allowed to monetize it until the end of the legal copyright term. A growing number of publishers instead offer a license to publish, which means that copyright is retained by the author(s) and the publisher gets an (non-)exclusive license to publish the work. Usually these works are published under an open license like a Creative Commons (CC) license. The CC-BY license, as being the most liberal one, will allow (re)users to distribute, adapt, and build upon the publication in any medium or format with the requirement to attribute the creator. This license is required by many funders and closest to the definition of 'open access' in the *Berlin Declaration*.

As mentioned, the focus in the current national negotiations is mainly on achieving the objective of getting to 100% fully open access publishing as quickly as possible. Under what copyright/licensing conditions this should be done is often less clear. NPOS states availability for reuse as a goal, but does not mention specific licenses, nor how to advance or facilitate open licensing. Similarly, some Dutch institutions have stated reuse allowance or Plan S compliance for their publications as a goal in their institutional open science programme, but institutions with such a programme are still a small minority.[61]

Nevertheless, there are several other ways to keep (more) control of your own work as a researcher. What follows are a few possible strategies that researchers and/or their respective institutions can apply.

Formal copyright retention
An author or respectively the institution where the author is affiliated with and if this is determined by the copyright of the employer, of an academic work, automatically holds the copyright of that work. When offered a publishing agreement it's important to know what rights are asked for to sign over to the publisher. No matter what, before signing an agreement, a researcher could ensure that at least a set of important rights are retained, like

---

[60] Dutch Copyright Law, Art 25-1. https://wetten.overheid.nl/jci1.3:c:BWBR0001886&hoofdstuk=I&paragraaf=6&artikel=25&z=2021-01-01&g=2021-01-01.

[61] The Utrecht University Open Science programme 2018-2021, accessed 19 January, 2021, https://www.uu.nl/sites/default/files/utrecht-university-open-science-programme.pdf (p.5) aims to have all publications open access and available for reuse. TU Delft Strategic Plan Open Science 2020-2024, accessed 19 January 2021, https://doi.org/10.4233/uuid:f2faff07-408f-4cec-bd87-0919c9e4c26f (p.17) aims to implement a Plans S compliant open access policy.

the right to reuse the work in teaching and research, to rewrite and amend the article and to distribute the article among your colleagues.

Give publisher only a non-exclusive license to publish
A licence is a formal permission to do something. Besides granting the publisher an exclusive licence to publish, which means certain restrictions to the content, authors can grant publishers a non-exclusive license to publish. In this case also, you do not transfer copyright, the publisher may only use your material as described in the agreement. The non-exclusivity leaves the author the possibility to grant these rights of use to others as well. It's always an option to negotiate this with publishers when offered a publishing agreement.

Retain right to share AAM immediately and CC-BY
A new strategy, which has been introduced by cOAlition S and supports the green open access route, is the aforementioned Rights Retention Strategy. The cOAlition S funders will change their grant conditions to require that a CC-BY license is applied to all submitted AAMs or published VoRs reporting original research, supported in whole or in part by their funding.[62] The policy provides a kind of fallback option, making it always possible for grantees to share their paper immediately and with an open license. It remains to be seen how and how often this option will be used and whether publishers will accept papers under this policy.. Recently AAAS, with their highly selective Science family of journals, has announced that it will indeed accept papers submitted under these conditions, as the only compliant route for cOAlitionS funded authors[63]. Others are criticizing the renewed emphasis on the green route with this strategy[64].

Give funder/employer a non-exclusive license to publish
In this case the institution or funder acts as a copyright administrator for their researchers and/or grantees, making it possible to to draw up a set of rules that must always be complied with. Any conflicting conditions in future publishing contracts will be nullified. The most concrete example where this has led to an effective policy is the so-called Harvard Licensing Model, developed and first implemented at the Harvard Faculty of Arts and Sciences in 2008.[65] The faculty adopted the following policy: 'the permission granted by each Faculty member is a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, and to authorize others to do the same, provided that the articles are not sold for a profit'[66], allowing the faculty to deposit its employers' papers in the institutional repository.

[62] "cOAlition S Rights Retention Strategy", accessed 7 January 2021, https://www.coalition-s.org/rights-retention-strategy/.
[63] Richard van Noorden, "Science family of journals announces change to open-access policy", Nature, 15 January 2021, https://www.nature.com/articles/d41586-021-00103-1.
[64] OASPA blog: "Open post: The rise of immediate green OA undermines progress", 4 December, 2020, https://oaspa.org/open-post-the-rise-of-immediate-green-oa-undermines-progress/.
[65] "Harvard Library - Office for Scholarly Communication, Open Access Policies", accessed 7 January 2021, https://osc.hul.harvard.edu/policies/.
[66] "Harvard Faculty of Arts and Sciences Open Access Policy", accessed January 2021, https://osc.hul.harvard.edu/policies/fas.

In the Netherlands, Woutersen et al. (2019) have compared the legal principles of the Harvard Licensing Model as applied in the US with Dutch law.[67] The authors come to the conclusion that, on the basis of Dutch legislation, the use of the Harvard license model is in principle also possible in the Netherlands. This policy is especially valuable if the copyright is retained by the university's employee, which in both countries is currently common practice for faculty members at academic institutions, although in both countries employers' copyright is the basic legal principle[68].

Copyright amendments to retain rights to share AAM or VoR after an embargo period
As mentioned above the Taverne Amendment was laid down in Dutch Copyright Law in 2015. It allows authors to open their short works, financed with public money, after a 'reasonable period of time' [translation by authors]. Besides the unfamiliarity among researchers about the possibilities of this legal provision, also the vague formulation in the legal text caused researchers to initially be reluctant to make use of this opportunity.

In 2018 the VSNU picked up the baton to work on concrete outlines of the amendment, so it would be useful for researchers. This has been put to the test in the VSNU pilot project 'You Share, we Take Care!' in 2019. The pilot was necessary to flesh out the definitions, implications and possibilities that the amendment offers. Principles and implementation guidelines had to be defined, which were set at a six month embargo period for either the version of record (VoR) or accepted manuscript (AAM), although the pilot specifically aimed for VoRs to be opened. Legal advice and back-up had to be arranged in the event that publishers were not agreeing with the stated principles and researchers had to be informed about their options.

More than 600 researchers participated and more than 2.800 publications were shared through the repository and during this pilot, there were no formal requests for retractions or legal claims from publishers regarding the sharing of publications.[69] As stated in the pilot's evaluation report it is important, however, to keep in mind that Taverne doesn't match for example Plan S compliance guidelines (i.e. zero months embargo, usage of a CC-BY license and retention of copyrights). The added value of the Taverne amendment as interpreted in the VSNU-pilot lies in: 1) providing a fall back option in cases where other routes are not possible; 2) facilitating open access for all short scholarly works, not just articles; and 3) facilitating retrospective open access. All three could support actions to further open access. Currently various institutions are considering how to embed Taverne in their regular practice. Leiden University created a new open access policy around it.[70]

---

[67] Saskia Woutersen, Damiaan van Eeten, Arjan de Rooy (2019) "Het Harvard Open Access-licentiemodel in het Nederlands recht" *Nederlands Juristenblad, NJB 2019/2172, afl. 36*.
https://www.njb.nl/blogs/het-harvard-open-access-licentiemodel-in-het-nederlands-recht/.
[68] For the legal situation in the USA see Laura G. Lape (1992), "Ownership of Copyrightable Works of University Professors: The Interplay between the Copyright Act and University Copyright Policies", 37 *Villanova Law Review 223*, https://digitalcommons.law.villanova.edu/vlr/vol37/iss2/1.
[69] NPOS 2019, "*Results of the VSNU open access pilot 'You Share, We Take Care' based on article 25fa of the Dutch Copyright Act*"
https://www.openaccess.nl/sites/www.openaccess.nl/files/documenten/summery_taverne_pilot_vsnu_200330.pdf
[70] Leiden University (2020), Open Access easier for Leiden Researchers with a new Open Access policy, accessed 18 January 2021,
https://www.library.universiteitleiden.nl/news/2020/12/open-access-easier-for-leiden-researchers-with-a-new-open-access-policy.

Similar amendments are already in place or seriously considered in several EU-member states.[71] This underlines that there is a place for national legal arrangements to foster open access. Most important differences from the Dutch legislation that catch the eye between all these amendments are disciplinary embargoes (SSH versus STEM) and the eligible version (accepted manuscripts versus VoR). The question remains how to promote and scale the use of these amendments, but the Dutch implementation can be used as a proof of concept. Perhaps here lies a role for the EC to investigate to what extent it is necessary or useful to align these national amendments in the near future.

Licenses in case of emergencies
Interestingly, the European Commission has a special arrangement in its proposed model grant agreement for Horizon Europe for CC0 licenses (that leave no rights reserved) to be applied to any output - thus including publications - of funded research in case of emergencies, if requested by the granting authority[72]. This is clearly an effect of the COVID-19 pandemic experience but is formulated generically, so probably it could be applied during other types of emergencies as well. This could mean making additional outputs open but also to change the license from e.g. CC-BY or CC-BY-NC/ND to CC0 in order to remove all barriers to reuse. Though it remains to be seen how the EU envisions implementation it seems worthwhile to consider the value of such arrangements.

4.d Handling complexity

By way of illustration, figure 3 provides an example segment of the framework showing various actions that actors can take, in this case in the field of copyright. The vertical axis lists the different open access aspects, the horizontal axis discerns between action levels and within that the various actors.

Open Access policies & support for Dutch university-affiliated researchers *	stated as goal (make it preferred)					set as policy (make it required)					legalized and/or promoted (make it known and allowed)				
	NL government	NL institutions / VSNU	Utrecht University	national funders (NWO, ZonMW)	EU funders (Horizon/ERC)	NL government	NL institutions / VSNU	Utrecht University	national funders (NWO, ZonMW)	EU funders (Horizon/ERC)	NL government	NL institutions / VSNU	Utrecht University	national funders (NWO, ZonMW)	EU funders (Horizon/ERC)
C) copyright & rights retention															
C1. formal copyright retention	no	no	UU-OSP	Plan S impl.	Plan S	joining coalition S?	no	no	Plan S impl.	Plan S	no	no	UU-OPS	Plan S impl.	Plan S
C2. retain right to share AAM immediately and CC-BY	no	no	no	Plan S RRS	Plan S RRS	no	no	no	Plan S RRS	Plan S RRS	no	no	no	Plan S RRS	Plan S RRS
C3. retain right to share AAM or VOR after a embargo period	no	no	no	no	no	no	no	no	no	no	Aw 25fa	no	no	no	no
C4. give publisher only non-exclusive license to publish	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
C5. give funder/employer non-exclusive license to publish	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no

Figure 3. Example segment of the framework showing (current) concrete actions in the realm of copyright.

[71] Jeroen Sondervan (2020). "*EU-member States Copyright Laws with Open Access Amendments*" (Version 0.1.0) [Data set], Zenodo, http://doi.org/10.5281/zenodo.3673237.
[72] Based on a slide in the presentations of the Stakeholder workshop: Novelties in Horizon Europe MGA (2020), https://ec.europa.eu/research/participants/docs/h2020-funding-guide/other/event201009.htm (2020). See also screenshot in https://twitter.com/jeroenbosman/status/1331356796246777856.

This is one example of how the framework presented in this paper can be used to map existing actions, and identify opportunities for additional actions by various actors, as well as for areas of collaboration and alignment. The various actors can use this to check the consistency of their set of actions and check whether their actions align well with those of other actors. For instance, institutions can consider to follow Plan S requirements, to await new VSNU policies or to move forward individually.

In presenting this framework we do not pretend to be complete. And obviously it is a very time-bound exercise. The framework presents the goals, policies and ambitions at the moment of writing this paper. As open access and open science are becoming the norm, the contents of this framework will change. With this framework we hope to encourage debate and discussion. How wide and how deep do the different stakeholders want to cast their net in fostering open access? How far do the actors want to go? What level of agency do they have and how can actions on different levels influence or reinforce each other?

5. How to proceed? Some concluding remarks

In this article, we argue that the Netherlands has – in a relatively short period of time - come a long way in realising the government's ambition of 100% open access for publicly funded research. The fact that this goal was set in such a specific quantitative way by the then State Secretary Dekker has certainly contributed to this because it ensured focus in the efforts of the various stakeholders involved in the Netherlands.

At the same time, we have argued that open access has so many more dimensions than just striving for that quantitative goal of 100%. This remains important, but we are also arguing for a more qualitative approach. An open access agenda that is both broader and deeper in scope. Broader in scope means including many more scholarly publication formats than the traditional peer-reviewed academic paper on which many of the current policies in the Netherlands (and abroad) have focused so far. We have suggested a range of scholarly outputs to which the open access agenda could be extended. At the same time we argue for an extension along another dimension: the how, where and when of the openness applied to the various scholarly outputs. In its most recent progress report to the ministry of education VSNU has specifically extended its open access ambitions, stressing the importance of the immediacy of open access and reusability[73]. Many more (qualitative) aspects of open access could be taken into consideration, by various actors.

In this article we have outlined what type of actions can be taken on these dimensions. Taken together this creates an ambitious – maybe a more holistic – open access agenda. To some this new agenda could come across as somewhat overwhelming and maybe even discouraging. That is not our intention. We would not suggest for instance that the Netherlands and all institutions must adopt this comprehensive agenda. Of course not all actions will be relevant for all organizations, not all actions demand immediate implementation and not all require a coordinated national approach.There may be very good

---

[73] VSNU, *Brief aan de Minister van Onderwijs Cultuur en Wetenschappen*, 30 September 2020: https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/Open%20access/20076%20U%20-%20Monitoren%20open%20access%20publicaties%202019.pdf.

reasons to concentrate on certain topics first and take on other aspects or dimensions later. But in doing that it is useful to be aware of the broader, more comprehensive agenda.

In order to help institutions to engage in a dialogue on this more qualitative, holistic open access agenda we present a framework. The framework invites discussion on how broadly each of the institutions in a given national context wants to define the open access agenda and how far each of the institutions wants to or can go in formulating actions in the different domains. It is clear that all stakeholders have a role to play in the research system, nationally and internationally. Universities, libraries, funding organisations and the government all have a certain agency. All of them work together somehow on a national level but in addition all these institutions are organised in international networks in which they may seek collaboration, exchange of practices or even alignment of policies. But the actions each of these organisations take individually can influence and reinforce one another. For example, the policy goal of immediate open access as set by a funder can – for instance – be supported by institutions adopting Harvard-style rights retention strategies. But could also be supported by copyright reform on national or international level, which in turn could be supported by policy development on a supra-national (European) level.

Good cooperation at a national level between government, funder and research institutions - such as the one that exists in the Netherlands in the NPOS - is therefore important. At the same time we think the value of national cooperation should not have a limiting or slowing effect. It always remains possible for individual institutions to take a bold step on their own, to lead by example, take a certain policy action and by that promote progress among other stakeholders. Funders seem to be particularly well placed to take bold steps because they are less caught in the rat race of international rankings than other institutions.[74]

2021 will be an exciting year for the Netherlands. A year in which the Dutch research community will take stock of how far it has come with open access. But even more it will also be a year in which we will look ahead and hopefully ask ourselves the question on how to proceed with open access? We hope that this paper will contribute to that discussion but we think the presented framework can also serve as an inspiration in other countries to shape their future open access agendas in all its dimensions. We invite all institutions and other actors to consider how wide and deep they want to cast their nets in shaping their open access strategy and to consider for themselves what they are willing and able to do and with whom to collaborate.

6. Competing interests

The authors declare no competing interests. All have contributed equally to the writing of this article. The authors write in a personal capacity and views they share in this article do not necessarily express the opinions of their employers.

---

[74] See: Jean Claude Guédon, "Preface" in: European Commission (2019), *Future of scholarly publishing and scholarly communication.* Report of the Expert Group to the European Commission, https://www.doi.org/10.2777/836532.