cOAlition S Accelerating the transition to full and immediate Open Access to scientific publications

Part I: The Plan S Principles

"With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories without embargo."

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In addition:

- Authors or their institutions retain copyright to their publications. All publications must be published under an open license, preferably the Creative Commons Attribution license (CC BY), in order to fulfil the requirements defined by the Berlin Declaration¹;
- 2. The Funders will develop robust criteria and requirements for the services that high-quality Open Access journals, Open Access platforms, and Open Access repositories must provide;
- 3. In cases where high-quality Open Access journals or platforms do not yet exist, the Funders will, in a coordinated way, provide incentives to establish and support them when appropriate; support will also be provided for Open Access infrastructures where necessary;
- 4. Where applicable, Open Access publication fees are covered by the Funders or research institutions, not by individual researchers; it is acknowledged that all researchers should be able to publish their work Open Access;
- 5. The Funders support the diversity of business models for Open Access journals and platforms. When Open Access publication fees are applied, they must be commensurate with the publication services delivered and the structure of such fees must be transparent to inform the market and facilitate the potential standardisation and capping of payments of fees;
- 6. The Funders encourage governments, universities, research organisations, libraries, academies, and learned societies to align their strategies, policies, and practices, notably to ensure transparency.

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¹Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities: https://openaccess.mpg.de/Berlin-Declaration

- 7. The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for monographs and book chapters will be longer and requires a separate and due process;
- 8. The Funders do not support the 'hybrid' model of publishing. However, as a transitional pathway towards full Open Access within a clearly defined timeframe, and only as part of transformative arrangements, Funders may contribute to financially supporting such arrangements;
- 9. The Funders will monitor compliance and sanction non-compliant beneficiaries/grantees;
- 10. The Funders commit that when assessing research outputs during funding decisions they will value the intrinsic merit of the work and not consider the publication channel, its impact factor (or other journal metrics), or the publisher.

Part II: Guidance on the Implementation of Plan S

1. Aim and Scope

Plan S aims for full and immediate Open Access to peer-reviewed scholarly publications from research funded by public and private grants. cOAlition S, the coalition of research funders that have committed to implementing Plan S, aims to accelerate the transition to a scholarly publishing system that is characterised by immediate, free online access to, and largely unrestricted use and re-use (full Open Access) of scholarly publications.

cOAlition S is committed to fulfil the specific target set out in Plan S: publications resulting from research funded by cOAlition S members' grants under calls published as of 1 January 2021 (or earlier at individual members' choice), must be published in Open Access venues (journals or platforms) or made openly and immediately available in an Open Access repository.

Plan S applies to all peer-reviewed publications that are based on results from research funded fully or partially by cOAlition S members. This guidance specifies the principles of Plan S and provides paths for their implementation regarding scholarly articles. cOAlition S will, by the end of 2021, issue a statement on Plan S principles as they apply to monographs and book chapters, together with related implementation guidance.

Although the Plan S principles refer to peer-reviewed scholarly publications, cOAlition S also strongly encourages that research data and other research outputs are made as open as possible and as closed as necessary. The early sharing of research results through preprints is also strongly encouraged.

cOAlition S supports the principles of the San Francisco Declaration on Research Assessment (DORA)² that research needs to be assessed on its own merits rather than on the basis of the venue in which the research is published. cOAlition S members will implement such principles in their policies by January 2021.

² https://sfdora.org/

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2. Plan S Compliance

All scholarly articles that result from research funded by members of cOAlition S must be openly available immediately upon publication without any embargo period.

There are three routes for being compliant with Plan S:

	Open Access publishing venues (journals or platforms)	Subscription venues (repository route)	Transition of subscription venues (transformative arrangements)
Route	Authors publish in an Open Access journal or on an Open Access platform.	Authors publish in a subscription journal and make either the final published version (Version of Record (VoR)) or the Author's Accepted Manuscript (AAM) openly available in a repository.	Authors publish Open Access in a subscription journal under a transformative arrangement.
Funding	cOAlition S funders will financially support publication fees.	cOAlition S funders will not financially support 'hybrid' Open Access publication fees in subscription venues.	cOAlition S funders can contribute financially to Open Access publishing under transformative arrangements.

For any chosen route to compliance, the publication must be openly available immediately with a Creative Commons Attribution license (CC BY) unless an exception has been agreed by the funder.

For the purpose of Plan S, Open Access platforms are publishing platforms for the original publication of research output (such as Wellcome Open Research or Gates Open Research). Platforms that merely serve to aggregate or re-publish content that has already been published elsewhere are not considered as such.

cOAlition S strongly encourages the deposition of all publications in a repository, irrespective of the chosen route to compliance. Several cOAlition S members require deposition of all attributed research articles in a repository.

cOAlition S urges individual researchers, research institutions, other funders, and governments not to financially support 'hybrid' Open Access publishing when such fees are not part of transformative arrangements. cOAlition S emphasises that the individual cOAlition S members are not obliged to enter into transformative arrangements nor to fund publication costs that are covered by such arrangements.

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cOAlition S will work with the Directory of Open Access Journals (DOAJ),³ the Directory of Open Access Repositories (OpenDOAR),⁴ SHERPA/RoMEO,⁵ Efficiency and Standards for Article Charges (ESAC),⁶ and other potential partners to establish mechanisms for identifying and signalling whether journals/publishing platforms, repositories, and transformative arrangements respectively fulfil the cOAlition S requirements as detailed in Part III of this guidance. cOAlition S will support the development of a tool that researchers can use to identify whether venues fulfil the requirements.

Rights and licensing: The author or the author's institution shall retain their copyright. Licenses to publish that are granted to a publisher must allow the author/institution to make either the Version of Record (VoR), the Author's Accepted Manuscript (AAM), or both versions available under an open license (as defined below) via an Open Access repository, immediately upon publication.

Where possible, cOAlition S members will ensure by way of funding contracts or agreements that the authors or their institutions retain copyright as well as the rights that are necessary to make a version (either the VoR, the AAM, or both) immediately available under an open license (as defined below). To this end, cOAlition S will develop or adopt a model 'License to Publish' for their grantees.

The public must be granted a worldwide, royalty-free, non-exclusive, irrevocable license to share (i.e., copy and redistribute the material in any medium or format) and adapt (i.e., remix, transform, and build upon the material) the article for any purpose, including commercial, provided proper attribution is given to the author. cOAlition S recommends using Creative Commons licenses (CC) and requires the use of the Creative Commons Attribution (CC BY) 4.0 license by default. The following exceptions apply:

- cOAlition S will, as secondary alternatives, accept the use of the CC BY-SA 4.0 license, and use of the public domain dedication, CCO.
- cOAlition S members may approve the use of the CC BY-ND license for individual articles, provided that this is explicitly requested and justified by the grantee.
- Third-party content included in a publication (for example images or graphics) is not affected by these requirements.

Collaborative research: cOAlitions S recognises that funders may face the challenge of scholarly papers published in collaboration with authors funded by non-cOAlition S members, or by authors with mixed affiliations. cOAlition S commits to actively engage with major research funders world-wide in order to foster alignment with the Plan S guidelines among collaborating authors.

3. Transformative Arrangements

cOAlition S supports a number of strategies to encourage subscription publishers to transition to Open Access. We call these approaches 'transformative arrangements', and three strategies are outlined below.

Recognising that a fundamental principle of these transformative arrangements is that they are temporary and transitional, where cOAlition S members provide funding to support publication fees of journals covered by such arrangements, this funding will cease on the 31 December 2024.

3https://doaj.org/ 4http://v2.sherpa.ac.uk/opendoar/ 5http://sherpa.mimas.ac.uk/romeo/index.php 6https://esac-initiative.org/

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Transformative agreements: Plan S supports the global Open Access 2020 Initiative (OA2020)⁷ which aims to accelerate the transition to Open Access by adopting strategies to systematically withdraw financial support of paywalled publishing venues and reinvest those funds to support Open Access publishing. cOAlition S encourages that publishers enter into transformative arrangements globally in all countries and share data from such arrangements.

cOAlition S strongly encourages institutions and consortia to develop new transformative agreements and will only financially support agreements after 1 of January 2021 where they adhere to the ESAC Guidelines.

Transformative model agreements: Many journals and publishers, especially smaller society presses, are not currently engaged in transformative agreements. cOAlition S will work together with all stakeholders to develop new models for agreements that ensure Open Access publishing and avoids double payment. In particular, cOAlition S will, in partnership with stakeholders, help to facilitate new transformative mechanisms for learned society presses and smaller and medium sized publishers, including potentially through e.g., 'transformative agreement model contracts.'

'Transformative journals': cOAlition S will also consider developing a potential framework for 'transformative journals' where the share of Open Access content is gradually increased, where subscription costs are offset by income from payments for publishing services (to avoid double payments), and where the journal has a clear commitment to transition to full Open Access in an agreed timeframe.

4. Supporting Quality Open Access Journals and Platforms

cOAlition S acknowledges the existing range of high-quality Open Access journals and platforms and the importance of a diversity of business models, including Open Access publications venues that do not charge Article Processing Charges (APCs).

cOAlition S is conducting a gap analysis of Open Access journals/platforms to identify fields and disciplines where there is a need to increase the share of Open Access journals/platforms. cOAlition S members will collectively establish incentives for establishing Open Access journals/platforms or flipping existing journals to Open Access, in particular where there are gaps and needs.

5. Transparency of Costs and Prices

There exist different models of financing and paying for Open Access publications. cOAlition S recognises that there are a range of business models that can be used to achieve full and immediate Open Access. cOAlition S calls for full transparency and monitoring of publication costs and fees.

Where Plan S requirements apply, no later than 1 January 2020, cOAlition S, in partnership with publisher representatives and other stakeholders, will define the various services (e.g., triaging, peer review, editorial work, copy editing) publishers will be asked to price. This price transparency requirement will apply to all articles funded through transformative arrangements as well as those levied by Open Access journals and platforms. As a minimum, the breakdown of prices should be at a publisher level, but where possible publishers are encouraged to provide this price transparency at the journal level.

Alongside this, cOAlition S will establish on-going monitoring to maintain transparency and a clear understanding of costs and prices. cOAlition S will thereby contribute to establishing fair and reasonable

⁷ https://oa2020.org/

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prices for publishing services, including equitable waiver policies, that reflect the publishing costs. Individual cOAlition S funders may decide to standardise and cap the reimbursement of services that they will cover through their grants. cOAlition S may at a later time decide to implement caps in a coordinated way if unreasonable price levels are observed.

6. Review

Before the end of 2024, cOAlition S will conclude a formal review process that examines the requirements, effects, and impact of Plan S. In particular, the review will examine the effect of transformative arrangements as well as the option of providing immediate Open Access to subscription content via open repositories, on achieving a transition to full and immediate Open Access.

7. Compliance and Sanctioning

The individual members of cOAlition S will align their grant agreements and/or contracts with Plan S and monitor compliance and sanction non-compliance. Each funder will determine how best to monitor compliance and what sanctions to introduce. Possible sanctions could include: withholding grant funds, discounting non-compliant publications as part of a researcher's track record in grant applications, and/or excluding non-compliant grant holders from future funding calls.

8. Timeline

The timeline for implementation of Plan S will vary among member organisations. As a minimum requirement, cOAlition S members must apply the Plan S principles at the latest in calls published, or application deadlines, after 1 January 2021. cOAlition S encourages its members who are in a position to do so, to implement Plan S on all grants awarded from January 2021.

Part III: Technical Guidance and Requirements

For cOAlition S funded research covered by Plan S requirements, all peer-reviewed scholarly articles must be published in venues that fulfil the requirements below. Where such an article is published in a subscription venue, followed by immediate deposition in an Open Access repository, the requirements for repositories also need to be fulfilled.

Criteria which are strongly recommended will be subject to review in 2024 and may become mandatory after the review.

1. Requirements for Publication Venues

1.1 Common requirements for all publication venues

Basic mandatory conditions for all publication venues:

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- cOAlition S emphasises the need for high quality journals, therefore requiring journals/platforms to have a solid system in place for review according to the standards within the relevant discipline and guided by the core practices and policies outlined by the Committee on Publication Ethics (COPE).⁸ Details must be openly available on the respective journal and platform websites. In particular, payment of publication fees or waiver status must not in any way influence the editorial decision-making process on the acceptance of a paper.
- The journal/platform must provide, on its website, a detailed description of its editorial policies and decision-making processes. In addition, at least basic statistics must be published annually, covering in particular the number of submissions, the number of reviews requested, the number of reviews received, the approval rate, and the average time between submission and publication.
- The journal/platform must accept the retention of copyright by the authors or their institutions, at no
 extra cost. Licenses to publish must preserve the right and responsibility of the author/institution to
 make the VoR or the AAM of the article Open Access immediately upon publication, under an open
 license as defined in Part II Section 2 above.
- The journal/platform must either enable authors to publish with immediate and permanent Open Access (without any kind of technical or other form of obstacles) under an open license as defined in Part II Section 2 above, or to deposit the AAM or VoR in an Open Access repository at no extra cost and under an open license as defined in Part II Section 2 above. In either case, no embargo period can be applied (including for early view versions, i.e., online VoR before inclusion in an issue).

Mandatory technical conditions for all publication venues:

- Use of persistent identifiers (PIDs) for scholarly publications (with versioning, for example, in case of revisions), such as DOI (preferable), URN, or Handle.
- Deposition of content with a long-term digital preservation or archiving programme (such as CLOCKSS, Portico, or equivalent).
- High-quality article level metadata in standard interoperable non-proprietary format, under a CCO public domain dedication. Metadata must include complete and reliable information on funding provided by cOAlition S funders (including as a minimum the name of the funder and the grant number/identifier).
- Machine-readable information on the Open Access status and the license embedded in the article, in standard non-proprietary format.

Strongly recommended additional criteria for all publication venues:

- Support for PIDs for authors (e.g., ORCID), funders, funding programmes and grants, institutions, and other relevant entities.
- Registering the self-archiving policy of the venue in SHERPA/RoMEO.
- Availability for download of full text for all publications (including supplementary text and data) in a machine-readable community standard format such as JATS XML.
- Direct deposition of publications (in a machine-readable community standard format such as JATS XML, and including complete metadata as described above) by the publisher into author designated or centralised Open Access repositories that fulfil the Plan S criteria.
- OpenAIRE⁹ compliance of the metadata.

8https://publicationethics.org/ 9https://www.openaire.eu/

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- Linking to data, code, and other research outputs that underlie the publication and are available in external repositories.
- Openly accessible data on citations according to the standards by the Initiative for Open Citations I4OC.¹⁰

1.2 Specific conditions applicable to Open Access journals and Open Access publishing platforms:

The journal/platform must be registered in the Directory of Open Access Journals (DOAJ) or in the process of being registered.

In addition, the following criteria are required:

- Open Access journals must not have a mirror/sister subscription journal with substantial overlap in editorial board to avoid business models charging for both access and publication. Such journals will de facto be considered 'hybrid' journals.
- Transparent costing and pricing: information on the publishing costs and on any other factors impacting the publication fees must be openly available on the journal website/publishing platform (see also Part II Section 5 above).
- The journal/platform must provide APC waivers for authors from low-income economies and discounts for authors from lower middle-income economies,¹¹ as well as waivers and discounts for other authors with demonstrable needs. Waiver policies must be described clearly on the journal website/platform and statistics on waivers requested and granted must be provided.

2. Requirements for Open Access Repositories

2.1 Requirements for Open Access repositories:

The repository must be registered in the Directory of Open Access Repositories (OpenDOAR) or in the process of being registered.

In addition, the following criteria for repositories apply:

Mandatory criteria for repositories:

- Use of PIDs for the deposited versions of the publications (with versioning, for example in case of revisions), such as DOI (preferable), URN, or Handle.
- High quality article level metadata in standard interoperable non-proprietary format, under a CC0 public domain dedication. This must include information on the DOI (or other PIDs) both of the original publication and the deposited version, on the version deposited (AAM/VoR), and on the Open Access status and the license of the deposited version. Metadata must include complete and reliable information on funding provided by cOAlition S funders (including as a minimum the name of the funder and the grant number/identifier).
- Machine readable information on the Open Access status and the license embedded in the article, in standard non-proprietary format.
- Continuous availability (uptime at least 99.7%, not taking into account scheduled downtime for maintenance or upgrades).

10 https://i4oc.org/

11 According to the 'World Bank Country and Lending Groups' classification: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

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 Helpdesk: as a minimum an email address (functional mailbox) has to be provided; a response time of no more than one business day must be ensured.

Strongly recommended additional criteria for repositories:

- Manuscript submission system that supports both individual author uploads and bulk uploads of manuscripts (AAM or VoR) by publishers.
- Full text stored in a machine-readable community standard format such as JATS XML.
- Support for PIDs for authors (e.g., ORCID), funders, funding programmes and grants, institutions, and other relevant entities.
- Openly accessible data on citations according to the standards by the Initiative for Open Citations (I4OC).
- Open API to allow others (including machines) to access the content. A compliant API must be free to access without any barrier. A light authentication mechanism such as a token for 'power users' e.g., high-traffic collaborators is acceptable as long as there is a totally open/anonymous route too.
- OpenAIRE compliance of the metadata.
- Quality assurance processes to link full-text deposits with authoritative bibliographic metadata from third party systems, e.g., PubMed, Crossref, or SCOPUS where feasible.

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