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"Towards Responsible Publishing": Findings from a global stakeholder consultation – Executive Summary

Prepared on behalf of cOAlition S

July 2024

"Towards Responsible Publishing": Findings from a global stakeholder consultation

Report commissioned by:

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Foreword

Five years ago, cOAlition S funders triggered a radical shift in scholarly communication with the Plan S initiative, aiming to achieve full and immediate open access to the peer-reviewed results of research.

Since then, the publishing landscape has continued to evolve, and open access is now widely accepted. However, it is also clear that openness alone cannot solve all the inefficiencies and inequities of the publishing system. Soaring APCs, editorial gatekeeping, the peer review crisis and distorted incentives are all signs that scholarly communication must change in more fundamental ways.

Research funders have the responsibility to make sure that their funding is used in ways that improve the scholarly publishing landscape for the benefit of the research community and society. The *Towards Responsible Publishing* proposal is therefore a logical next step for cOAlition S funders to help make the publishing system fit for the 21st century. It builds on Plan S and goes further in proposing a way to disseminate research that is not only more open, but also more trusted, equitable, efficient, and sustainable.

But, of course, funders cannot do it alone. For any changes to take hold, we need support from the scholarly community. To determine to what extent our proposal resonates with researchers, we commissioned Research Consulting and Leiden University's Centre for Science and Technology Studies (CWTS) to carry out an independent worldwide consultation about the proposal. This provided the opportunity for the community to examine, comment on, and add to the vision and principles we shared.

This report presents the findings of that consultation: it shows an insightful picture of researchers' attitudes towards innovative research practices, such as open access publishing, preprint posting, open peer review and the incentives needed to embrace these behaviours.

cOAlition S will carefully examine these findings and prepare a way forward that our funders could adopt to support these practices.

We believe the report is also relevant beyond cOAlition S and will hopefully inspire other actors to do their part to create a better scholarly communication system. We therefore invite all organisations - institutions, funders, libraries, governments - to explore the rich insights of the report and to define how they can best support such a system.

We thank the teams at Research Consulting and CWTS for carrying out this important work and are particularly grateful to the 11,600 researchers who shared their voices during the consultation. We count on the research community to help us take forward our shared vision for a better and more responsible scholarly communication ecosystem.

Johan Rooryck, Executive Director, cOAlition S

Bodo Stern, Chief of Strategic Initiatives, Howard Hughes Medical Institute; Chair of the TRP Steering Group, cOAlition S

Executive Summary

Introduction

Background

This report presents the findings of a global multi-stakeholder consultation conducted between November 2023 and May 2024 by Research Consulting and Leiden University's Centre for Science and Technology Studies (CWTS) on behalf of cOAlition S. The consultation aimed to assess the research community's appetite for the transformative changes to the scholarly communication system proposed in cOAlition S' "Towards Responsible Publishing" (TRP) initiative. The key objectives of this work were to understand how the TRP proposal could be modified to better resonate with stakeholders, identify potential barriers and unintended consequences and determine whether the existing infrastructure can support cOAlition S' vision of a community-driven publishing ecosystem.

Please note that this document is accompanied by an <u>interactive online Annex</u>, where the results of the researcher survey can be explored dynamically. Additional information on the consultation, including the raw data collected in the researcher survey, is available in our full report.

About the TRP proposal

The TRP proposal presents cOAlition S' vision for a fit-for-purpose future scholarly communication system, and a mission that enables research funders to deliver this in collaboration with other key stakeholders. The proposal focuses on the dissemination of "research articles (including the underlying research data) and associated content-related elements (such as peer review reports, author responses, editorial decisions/assessments, etc.)." and acknowledges that "Other research outputs, such as monographs, are important, but they are out of the current scope." According to the proposal, the main challenges that a future scholarly communication system should address include that:

- "The dominant publishing models are highly inequitable."
- "The sharing of research outputs is needlessly delayed."
- "The full potential of peer review is not realised."
- "The coupling of editorial gatekeeping with academic career incentives is damaging science."

To address these challenges, cOAlition S proposed a set of five guiding principles, as follows:

- 1. "Authors are responsible for the dissemination of their findings."
- 2. "All scholarly outputs are shared immediately and openly."
- 3. "Quality control processes are community-based and open, to ensure trustworthiness of research findings."
- 4. "All scholarly outputs are eligible for consideration in research assessment."
- 5. "Stakeholders commit to support the sustainability and diversity of the scholar-led publishing ecosystem."

These principles are aimed at allowing authors to decide when and what to publish. The proposal argues that third-party suppliers can help in such a system by offering and charging for services that facilitate peer review, publication and preservation. However, cOAlition S suggests that they should not prevent scholars from sharing their work as they choose. The proposal is supportive of preprints and a post-publication peer review

model and highlights that funders will have to play a significant role in bringing about this change.

Researcher survey findings

A broad range of stakeholders and communities contributed to the TRP consultation As part of this work, Research Consulting and CWTS engaged with numerous stakeholder groups on a global scale: we collected 11,145 responses from researchers via a global survey, reached 440 respondents through an initial feedback survey, engaged 72 participants via focus groups, and attracted a total of 10 organisational feedback letters from low- and middle-income countries that were underrepresented in our data. This takes the total number of contributions of this project to over 11,600, including those who provided their views as individuals and those who represented their organisations. Importantly, this project sought to balance not only representation of different stakeholder views but also to ensure a mix of different national, regional and disciplinary perspectives.

Contributors engaged in the TRP consultation.



440 responses to our initial multistakeholder feedback survey



72 participants in our exploratory focus groups



Researchers continue to rely on the current journals ecosystem, but acknowledge the potential benefits of preprint posting and open peer review

Survey results indicate that, when deciding how to reach their target audiences, researchers continue to rely on the current journals ecosystem. We found that factors like a journal being indexed in Web of Science or Scopus, being read by relevant audiences, having a high impact factor, a strong reputation or publishing via open access were considered 'extremely useful' or 'very useful' by over 70% of respondents when deciding how to reach their intended audiences. When deciding what to read, researchers once again prioritise the reputation of a journal, with 70% of respondents rating this 'extremely useful' or 'very useful', followed by the reputation of the authors (63%) and whether the journal is indexed in Web of Science or Scopus (57%).

At the same time, the consultation revealed support among researchers for some of the practices encouraged in the TRP proposal, such as preprint posting and the open sharing of peer review reports. Researchers viewed preprint posting as beneficial for increasing accessibility and visibility (64% rated this 'effective' or 'very effective'), providing early access to new research (62%), increasing transparency (58%), and facilitating faster dissemination (55%) and feedback cycles (52%). Across the most represented disciplines in our data (medical and health sciences, life sciences, social sciences, engineering and arts and humanities), views regarding preprint posting are broadly aligned. The only exception is that researchers in the life sciences appear slightly

more positive than average regarding preprints providing early access to new research and slightly less positive regarding receiving early feedback. Overall, views are slightly more positive for respondents who have posted a preprint in the last three years, except when it comes to the usefulness of preprints to receive early feedback on their work.

Similarly, open peer review was seen as a means to enhance transparency, though with a preference for anonymised reviewer reports (65% responded that they would 'definitely' or 'probably' support this practice) over signed reviews (47%). Across the spectrum of disciplines, the highest resistance to the publication of open peer review reports (i.e. respondents would 'definitely not' or 'probably not' support the practice) was in the field of Law (39%), followed by Arts and Humanities (36%).

In this context, consultation participants highlighted that existing recognition and reward mechanisms are inadequate for incentivising adoption of these practices, which will highly affect their uptake by researchers.

Seamless integration and sustainability of scholarly communication infrastructures are needed to realise TRP's long-term vision

The consultation found that, on balance, researchers would support the integration of practices like preprint posting (48% would support the practice vs 27% who would be opposed) and open peer review (47% would support the practice vs 29% who would be opposed) into journal publication workflows. While some publishers offer these functions, seamless implementation across the whole publishing landscape would require significant technical development:

- For preprints, this includes functionality to post a manuscript as a preprint initially, then update it through revisions based on open peer review reports.
- For open peer review, mechanisms as well as customs would need to be designed to openly share reviewer reports regardless of the publication decision.

Additionally, the introduction of preprint posting and open peer review as part of established journals and submission workflows would require input and collaboration from different stakeholders, including publishers, service providers and editorial boards but also authors and peer reviewers. It should be noted that, as scholarly communication evolves over time, novel infrastructures and workflows that may diverge from existing paradigms could emerge and support the realisation the TRP vision.

To take concrete steps towards a globally inclusive system, infrastructural support for multilingual content would also be beneficial. Preprint servers, repositories and publisher platforms could enhance capabilities to accept submissions and reviews in diverse languages, and user interfaces and metadata standards could provide multilingual adaptations to ensure equitable access and discoverability.

Focus group participants acknowledged that funds currently spent on the publishing system would need to be shifted to enable investment in new or different platforms and services, in recognition of today's significant challenges around the financial sustainability of open scholarly infrastructures. In this context, focus group participants emphasised that more detail on proposed approach(es) to shifting funding towards the desired publishing system will be needed to make progress, given the significant departure from the status quo and the potential need for new governance and funding models.

Potential barriers to implementation

The research community seeks clarification on some aspects of cOAlition S' proposal

While the proposed changes to infrastructure and funding could support the realisation of cOAlition S' vision, the lack of clear implementation guidance emerged as a significant concern during the consultation. In some cases, this hindered stakeholder engagement, in combination with the use of ambiguous terms (e.g. "community-based scholarly communication system") and the use of negatively charged language (e.g. "The coupling of editorial gatekeeping with academic career incentives is damaging science.") in the framing of TRP's rationale.

Consultation participants also sought more clarity on practical aspects such as sustainability models, funding sources, researcher incentives, and strategies for transitioning from the current publishing paradigm. As part of this, **the need for a gradual, collaborative implementation approach involving pilots and engagement with existing initiatives was emphasised**, to avoid disruption and minimise resistance from the stakeholder groups involved in all the facets of scholarly communication affected by the TRP proposal.

Further engagement with low- and middle-income countries is seen as critical for TRP's success Without broader engagement, cOAlition S' efforts risk being viewed by low- and middle-income countries as an imposition by wealthier nations. While the consultation actively sought perspectives from these regions, substantive input remained limited due to perceptions of an external agenda being pushed without sufficient dialogue.

A key challenge is the greater reliance on quantitative metrics, like journal impact factors, in many research evaluation policies in low- and middle-income countries, making alignment with cOAlition S' vision more difficult. There is a need for cOAlition S to proactively address these concerns and highlight how their proposed model can equitably benefit researchers across the global academic community.

Potential for unintended consequences

Risks may arise from shifting more publication and review duties to authors According to consultation participants, shifting more publication responsibilities to individual authors could disproportionately overburden under-resourced researchers with limited institutional support services. In practice, and without proactive measures, the proposal risks perpetuating existing inequities between researchers and institutions of differing means and resources.

Furthermore, consultation participants highlighted the perceived importance of peer review and dedicated editorial roles in scholarly communication, including because current infrastructures lack mechanisms to sufficiently support screening for issues like image manipulation, ethics violations and bibliographic integrity at scale. Additionally, there were concerns around verifying reviewer expertise and credentials in a fully community-managed quality control workflow.

In this context, a small number of consultation participants mentioned the complexity introduced by generative artificial intelligence and some of its potential positive (e.g. support of multilingualism) and negative (e.g. use of artificial intelligence by paper mills) impacts. Due to the current uncertainty around the long-term impacts of this technology

on scholarly communication, this remains an aspect that should be considered as the TRP initiative evolves over time.

There are concerns about introducing greater reliance on preprint posting

Consultation participants saw a significant increase in preprint posting as potentially risking the proliferation of poor-quality, unvetted research outputs that may flood the public domain unchecked. As the consultation highlighted that preprint posting is currently not seen as being sufficiently rewarded by institutions and funders, the likelihood of excessive numbers of preprints being posted is limited in the immediate future. This would, however, likely change, should recognition and reward mechanisms shift to take preprint posting into greater consideration.

At the same time, consultation participants also highlighted that the problem of subpar research making it through the peer review and publication process, while undesirable, already exists to some extent in the current system. It is difficult to predict what impact a greater uptake of preprints would have on this, but it is important to note that preprints would not be introducing an entirely new challenge.

Finally, consultation participants noted that the proposed system involving preprints, open peer review reports, revisions and final versions could lead to an extent of fragmentation of the scholarly record. This complexity may make it challenging for non-experts like journalists, policymakers and the public to navigate the research landscape effectively. While aiming to democratise access to science, the proposal could therefore inadvertently create new barriers hindering broader public understanding and engagement.

Conclusions and next steps

Recommendations for future work

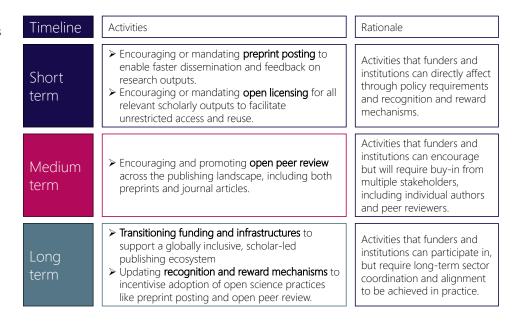
Based on the findings from this global multi-stakeholder consultation, we conclude that there is support for some of the principles and practices encouraged in the TRP proposal. This highlights opportunities for cOAlition S to make progress in their desired direction of travel, building on select parts of the proposal.

In particular, the consultation findings can be used to prioritise a set of desired activities based on the expected efforts and level of coordination required to achieve progress. Our work suggests that cOAlition S is well-placed to pursue the following activities in the near term:

- Encouraging or mandating (as appropriate) **preprint posting** to enable faster dissemination and feedback on research outputs.
- Encouraging or mandating (as appropriate) open licensing for all relevant scholarly outputs to facilitate unrestricted access and reuse.

In the medium-term, cOAlition S could focus on encouraging and promoting open peer review across the publishing landscape, including both preprints and journal articles. This is a more complex endeavour, as it will involve collaborating with peer reviewers, publishers and other stakeholders to develop workflows and practices for sharing reviewer reports.

Recommended prioritisation of activities by cOAlition S based on consultation findings.



Finally, realising the full vision of the TRP proposal will require longer-term efforts and cooperation with other stakeholders to:

- Update recognition and reward mechanisms at a global scale, to incentivise adoption of open science practices like preprint posting and open peer review. cOAlition S will need to work closely with institutions, funders, and other stakeholders to promote alignment of evaluation policies with the desired principles of responsible publishing. Notably, cOAlition S members may decide to take steps in this direction independently, over the short- and medium-term, with an impact on grantees and staff.
- Transition funding and infrastructures to support a globally inclusive, scholar-led publishing ecosystem. This will involve redirecting funds from subscriptions and article processing charges to invest in community-governed platforms and services, which will require engagement with institutions, libraries, and library consortia as a starting point. Pilots and engagement with existing open science initiatives will help inform the development of new funding and governance models, but more experimentation is needed to fully scope out a clear direction of travel.

To move forward, cOAlition S should develop a strategy that provides more implementation details and outlines how funders and other stakeholders can deliver on the ambitions set out in the TRP proposal. By carefully considering the potential barriers and unintended consequences identified through this consultation, and adopting a phased approach to implementation, cOAlition S can take further steps to drive meaningful and sustainable change in scholarly communication. The insights gathered will help guide cOAlition S' future work and serve as a foundation for continued collaboration with the global research community to create a more open, equitable and responsible publishing ecosystem.





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