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Chiarelli, A., Cox, E., Johnson, R. et al. (5 more authors) (2024) "Towards responsible publishing": Findings from a global stakeholder consultation. Report. Research Consulting and the Centre for Science and Technology Studies (CWTS)

<https://doi.org/10.5281/zenodo.11243942>

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“Towards Responsible Publishing”: Findings from a global stakeholder consultation

Prepared on behalf of cOAlition S

June 2024

“Towards Responsible Publishing”: Findings from a global stakeholder consultation

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Report dated: June 2024



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Available on Zenodo at: <https://doi.org/10.5281/zenodo.11243942>

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 [interactive online Annex](#), 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 multi-stakeholder feedback survey



72 participants in our exploratory focus groups



11,100+ responses to our researcher survey

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.

Timeline	Activities	Rationale
Short term	<ul style="list-style-type: none"> ➤ Encouraging or mandating preprint posting to enable faster dissemination and feedback on research outputs. ➤ Encouraging or mandating open licensing for all relevant scholarly outputs to facilitate unrestricted access and reuse. 	Activities that funders and institutions can directly affect through policy requirements and recognition and reward mechanisms.
Medium term	<ul style="list-style-type: none"> ➤ Encouraging and promoting open peer review across the publishing landscape, including both preprints and journal articles. 	Activities that funders and institutions can encourage but will require buy-in from multiple stakeholders, including individual authors and peer reviewers.
Long term	<ul style="list-style-type: none"> ➤ Transitioning funding and infrastructures to support a globally inclusive, scholar-led publishing ecosystem ➤ Updating recognition and reward mechanisms to incentivise adoption of open science practices like preprint posting and open peer review. 	Activities that funders and institutions can participate in, but require long-term sector coordination and alignment to be achieved in practice.

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.

Glossary

Please find below a set of definitions that may be helpful in navigating our findings.

Term	Definition
Towards Responsible Publishing (TRP)	Towards Responsible Publishing is a proposal developed by cOAlition S. In this document, they propose a vision and a set of principles that a future scholarly communication system should aspire to, along with a mission that enables research funders – in collaboration with other key stakeholders – to deliver this. The proposal was released in October 2023 and has been the subject of our consultation.
cOAlition S	cOAlition S is a consortium of national funders, charitable and international funders, research organisations and European funders.
Plan S	Plan S is an initiative for open-access science publishing launched in 2018 by cOAlition S. The plan requires scientists and researchers who benefit from state-funded research organisations and institutions to publish their work in open repositories or in journals that are available to all by 2021.
Scholarly outputs	The Towards Responsible Publishing proposal focuses on scholarly communications that disseminate research articles (including the underlying research data) and associated content-related elements (such as peer review reports, author responses, editorial decisions/assessments, etc.). Other research outputs, such as monographs, are important, but they are out of the current scope. In this context, the concept of Open Science covers all disciplines, as defined by the UNESCO Recommendation on Open Science.
Open access	Open access is a set of principles and a range of practices through which research outputs are distributed online, free of access charges or other barriers. With open access strictly defined (according to the 2001 definition from the Budapest Open Access Initiative), or libre open access, barriers to copying or reuse are also reduced or removed by applying an open licence for copyright.
Open licence	An open licence is a licence which allows others to reuse another creator’s work as they wish. Without such a licence, these uses are normally prohibited by copyright, patent or commercial licence. Different types of open licences are available, enabling different levels of permission. In a scholarly publishing content, Creative Commons licences are most commonly used.
Preprint	A preprint is a version of a scholarly or scientific paper made public in a form that precedes formal peer review and publication in a peer-reviewed scholarly or scientific journal.
Open peer review	Open peer review is the practice of publishing peer review reports alongside an article that has been formally reviewed and published, with or without the reviewers’ identities visible to readers. Open peer review involves various possible modifications of the traditional scholarly peer review process. The three most common modifications to which the term is applied are: <ul style="list-style-type: none">• Open identities (attributed or signed peer review reports): Authors and readers are aware of the identity of the reviewers of an article.• Open reports (anonymous peer review reports): Review reports are published alongside the relevant article (rather than being kept confidential).• Open participation: The wider community (and not just invited reviewers) are able to contribute to the review process.

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1. Introduction

1.1 Background

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.

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."
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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.

The proposal, which builds on the experience and lessons learned arising from the delivery of [Plan S](#), has been shared publicly and disseminated through cOAlition S' network. It has

received significant coverage and attention in the world of scholarly communication, given its stated intention to transform today’s approach to scholarly publishing.

Importantly, cOAlition S considers the TRP proposal as a starting point for further review and feedback. The present report sought to independently capture that feedback from the research community, to provide cOAlition S with an objective evidence base that could inform potential future efforts.

Broader context

The TRP proposal has been developed and shared as part of the ongoing transformation of scholarly publishing, which has evolved from a discussion about digital publishing, subscription costs and open access into a much broader conversation including research cultures, digital infrastructures, rewards and incentives, research integrity and more.

It is therefore important to acknowledge that this cOAlition S initiative seeks to influence the entire process of scholarly communication, going beyond the publishing process. For this reason, this project captured and synthesised views from a diverse set of stakeholder groups, aiming to collect feedback around all aspects that may be affected by the TRP proposal.

The present report does not include a detailed discussion of the scholarly communication landscape, its stakeholders and latest developments, but a glossary of terms is included at the top of the document. Our discussion of findings assumes a relatively high level of knowledge and understanding of the subject matter, and we invite readers to consult the glossary as well as additional sources should any of our findings appear unclear.

Scope of work

Research Consulting and Leiden University's Centre for Science and Technology Studies (CWTS) were commissioned to determine to what extent the vision, mission and objectives set out in the TRP proposal serve the needs of the global research community. Through a consultative approach, we sought to assess whether there is appetite for the type of change proposed by cOAlition S in the TRP proposal.

In addition, we aimed to:

- understand how the TRP proposal may be modified or refined to ensure it resonates with the research community and sees broad adoption;
- identify any showstoppers or unintended consequences and propose proactive measures to mitigate them, ensuring successful implementation; and
- ascertain whether the existing scholarly communication infrastructure can support this proposal and if not, identify where research funders can strengthen the infrastructure.

The findings and recommendations from this report will be used to inform discussions around the future of the TRP proposal as well as potential actions arising for cOAlition S members.

1.2 Methodology

Introduction

This project was delivered as a multi-stage, multistakeholder consultation. It comprised six work packages (WPs), which were executed sequentially, with the exception of WPs 4

and 5, which were carried out concurrently. A high-level overview of our methodology is presented in Figure 1 and is supplemented by an in-depth discussion in Appendix A.

The consultation took place between November 2023 and May 2024, following the launch of the TRP proposal on 31 October 2023.

All phases of work were led by Research Consulting and CWTS, with project management and communications (including social media) support from cOAlition S. Our project was overseen by a Steering Group of cOAlition S funders, which was engaged at key stages and provided critical advice on findings and next steps (please see the ‘Acknowledgements’ paragraph for information on membership).

This report and its findings have been developed independently by the consulting team, upon validation with cOAlition S and the project Steering Group. All findings included in this document present a factual account of consultation findings, including points in support of as well as challenging cOAlition S’ motivations and recommended actions.

Communities engaged

As part of this work, we have engaged with numerous stakeholder groups on a global scale: we reached 440 respondents through an initial stakeholder feedback survey (see Appendix B), engaged 72 participants via focus groups, collected 11,145 responses from researchers via a global survey 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 capture views from all regions in the world. This led to the need to prioritise stakeholders for attendance at our exploratory focus groups, to balance not only representation of different organisational views but also to ensure a mix of different national perspectives.

Figure 1. High-level overview of the project methodology and work packages.



Additional information

The present report is the main output of this project. It is accompanied by an [interactive online Annex](#) where the results of the researcher survey can be explored dynamically.

In addition, the following information is available:

- WP4 Online researcher survey text: [10.5281/zenodo.11244210](#)
- WP4 Online researcher survey dataset: [10.5281/zenodo.11244247](#)
- WP5 Structured organisational feedback responses: [10.5281/zenodo.11244266](#)

Acknowledgements

This project would not have been possible without the review, input, and critical advice we received from a broad range of individuals and organisations. In particular, we thank:

- cOAlition S’ project group for the support provided over the course of this work, including: Bodo Stern (Chief of Strategic Initiatives, Howard Hughes Medical Institute; Chair of the TRP Steering Group, cOAlition S), Maria Karatzia (Communications Officer, cOAlition S), Nora Papp-Le Roy (Programme Manager, cOAlition S) and Robert Kiley (Head of Strategy, cOAlition S).
- The project Steering Group for the insightful advice and commentary provided on our interim findings at multiple project milestones, including (in alphabetical order):
- Ashley Farley (Program Officer of Knowledge and Research Services, Bill & Melinda Gates Foundation), Bregt Saenen (Senior Policy Officer, Science Europe), Johan Rooryck (Executive Director, cOAlition S), Jeroen Sondervan (Programme Leader Open Scholarly Communications, NWO), Marte Qvenild (Senior Advisor, Research Council of Norway), Katharina Rieck (Open Science Manager, Austrian Science Fund), and Zoé Ancion (Open Science Policy, French National Research Agency).
- Our associates Joy Owango (Founding Director, Training Centre in Communication) and Lin Zhang (Professor of Information Management, Wuhan University) for their critical review of our findings as well as for the discussion of international implications of the TRP proposal.
- The members of the research community and other stakeholders who generously volunteered their time, both anonymously, via online surveys, and as part of our focus groups.

Finally, we wish to highlight that participation in the study by all respondents (regardless of the work package) does not imply their endorsement of the report’s findings or any commitment to the cOAlition S ‘Towards Responsible Publishing’ principles.

2. Researcher survey findings

This section summarises the findings of our online researcher survey (WP4). The survey revealed that researchers rely on the journal ecosystem for publishing and reading decisions, valuing indexing, impact factor, reputation and open access publishing. About half of the respondents have posted a preprint in the past three years, citing benefits like increased accessibility, visibility, transparency, and faster dissemination and feedback. While respondents support open peer review, they prefer anonymous reports. The survey indicates that current recognition and reward mechanisms for emerging publishing methods are inadequate. Finally, respondents endorse integrating preprint posting and open peer review reports into journal workflows, suggesting that publishing platforms should adopt these practices.

Background information

Please note that this section presents a set of researcher survey findings that the consulting team prioritised. Given the broad range of demographic parameters we captured, not all possible cross-sections of the dataset are presented below. However, readers who are interested in further exploring our data may refer to the following:

- [Annex 1: Interactive dashboard](#)
- WP4 Online researcher survey dataset: [10.5281/zenodo.11244247](https://doi.org/10.5281/zenodo.11244247)

Parameters that can be used to present the data in the interactive dashboard include research experience, gender, field of science, continent, region and experience with preprint posting.

Please note that our survey design was aimed at having similar numbers of respondents from different regions, enabling us to provide robust insights into regional differences. This means that, in the aggregated world-level survey results, each region is approximately equally represented. The world-level survey results do not consider differences in the total number of active researchers in each region, meaning that the world-level survey results are not directly representative of the global researcher population. In our interactive dashboard, we also present survey results normalised based on response rates and total numbers of active researchers in different regions. These normalised results offer a more direct representation of the global researcher population.

Additionally, we highlight that the present section does not cover the findings of our initial stakeholder feedback survey (WP1). For completeness, we note that WP1 respondents were broadly supportive of the rationale and principles in the TRP proposal: for example, that there was broad agreement that the dominant publishing models are inequitable, that the full potential of peer review is not realised and that the sharing of outputs is delayed in the current publishing ecosystem. At the same time, criticism was also provided in the form of free text comments, balancing the more positive quantitative findings. Given the likely self-selection bias in WP1 and the fact that the survey sample was not representative, we only provide an overview of these results as part of Appendix B. However, a mix of supportive and critical quotes from WP1 are included below to enrich the narrative, alongside other consultation findings.

2.1 Survey demographics

Survey sample

To deliver the online researcher survey, we sent almost 150,000 email invitations, with numbers of emails sent varying by region depending on the availability of contacts in the ORCID database (see Appendix D for further discussion and information on our sample).

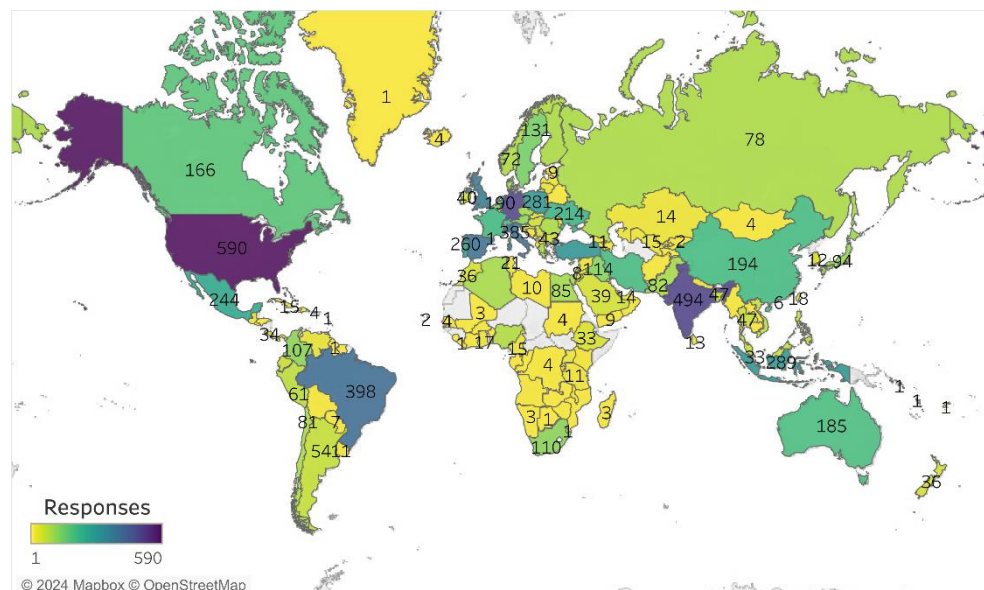
Our email campaign led to 9,991 complete survey responses, which were complemented by 1,154 responses submitted via anonymous links shared via social media.

Table 1 highlights the provenance of survey respondents, showing that the only regions where the target numbers were not achieved were Northern Africa, Sub-Saharan Africa and Oceania. Responses obtained via social media are not included in our analysis and are therefore not included in Table 1.

Table 1. Survey responses from targeted emails by region.

Continent	Region	Responses received	Response rate	Responses missing for statistical robustness
Africa	Northern Africa	240	5.0%	143
	Sub-Saharan Africa	341	7.3%	42
Americas	Central America and the Caribbean	346	4.9%	35
	Northern America	758	5.9%	0
	South America	792	6.2%	0
Asia	Eastern and Central Asia	416	3.0%	0
	South-eastern Asia	538	5.2%	0
	Southern Asia	851	6.6%	0
	Western Asia	640	5.0%	0
Europe	Eastern Europe	863	6.7%	0
	Northern Europe	808	6.3%	0
	Southern Europe	1,203	9.4%	0
	Western Europe	1,318	10.3%	0
Oceania	Oceania	224	3.7%	159
Unidentified	-	653	-	-
Total		9,991	-	379

Figure 2. Survey responses by country.



Responses by individual features

We highlight the following features of survey responses, which should be kept in mind when reviewing the present report:

- A large proportion of respondents were men (71%, $n=9,330$), followed by women (27%) and a small number opting not to specify (2%) or self-describe their gender (1%). The percentage of men ranged from 65% in Oceania ($n=224$, of which 145 were men) to 76% in Asia ($n=2,444$, of which 1,865 were men).
- The majority of respondents ($n=6,899$, 74% of the total) were affiliated with universities or colleges, followed by those from research institutes ($n=926$, 10%).
- The survey captured a diverse array of fields of science, building on [previous work by the authors](#). Our dataset includes many responses from medical and health sciences ($n=1,347$, 14% of the total), life sciences ($n=1,275$, 14%), social sciences ($n=1,303$, 14%), engineering ($n=1,033$, 11%), and arts and humanities ($n=929$, 10%). All other disciplinary groupings considered received fewer than 570 responses each. A full list of disciplines captured is available as part of our [interactive dashboard](#) and [full dataset](#).
- The survey achieved a balanced representation of research experience levels, ranging from less than three years to over twenty-four years. This is a significant feature of the data collected, as online surveys targeting researchers typically contact corresponding authors in publications, which tend to be more senior.
- Respondents provided information on their approximate number of publications in the past three years, covering journal articles, conference papers, book chapters, books and monographs and preprints. Importantly, 3,951 respondents stated that they had never posted a preprint, which suggests that individuals who provided their views had varying levels of experience with this practice. Building on this finding, our discussion in section 2.3 splits out responses into groups with and without direct experience of preprint posting.

2.2 Reliance on the current publishing ecosystem

Researchers continue to strongly rely on the journals ecosystem to decide where to publish

Researchers strongly rely on the journals ecosystem to decide where to publish their work (see Figure 3). Survey results show 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 or very useful by over 70% of respondents when deciding how to reach their intended audiences;
- sharing manuscripts in preprint form was found extremely or very useful to reach their intended audiences by 45% of respondents. Fewer respondents considered preprint platforms to be useful compared to journals to reach their target audiences.

These findings are largely consistent with previous surveys on author decision-making (for an overview of recent work in this area, see for example [Rowley et al. \(2020\)](#)). However, our work shows higher support for open access publishing as a means to deciding where to publish (77% found it 'extremely useful' or 'very useful'). We acknowledge that this result may be an effect of long-term culture change but also a potential manifestation of self-selection bias in the survey sample.

The overall findings shown in Figure 3 do vary by region. For example, we note the following:

- Publishing in journals with a high impact factor was less important for researchers in North America (59% of respondents rated this 'extremely useful' or 'very useful', n=659) and Western Europe (57%, n=1,130) than in Southern Europe (71%, n=1,077), South America (78%, n=691) and Southern Asia (78%, n=762).
- The survey found a slightly higher preference for sharing work in preprint form among researchers from North America (51% of respondents rating this 'extremely useful' or 'very useful', n=630) and Western Europe (52%, n=1,046), compared to Southern Europe (42%, n=956), South America (41%, n=615) and Southern Asia (43%, n=659).

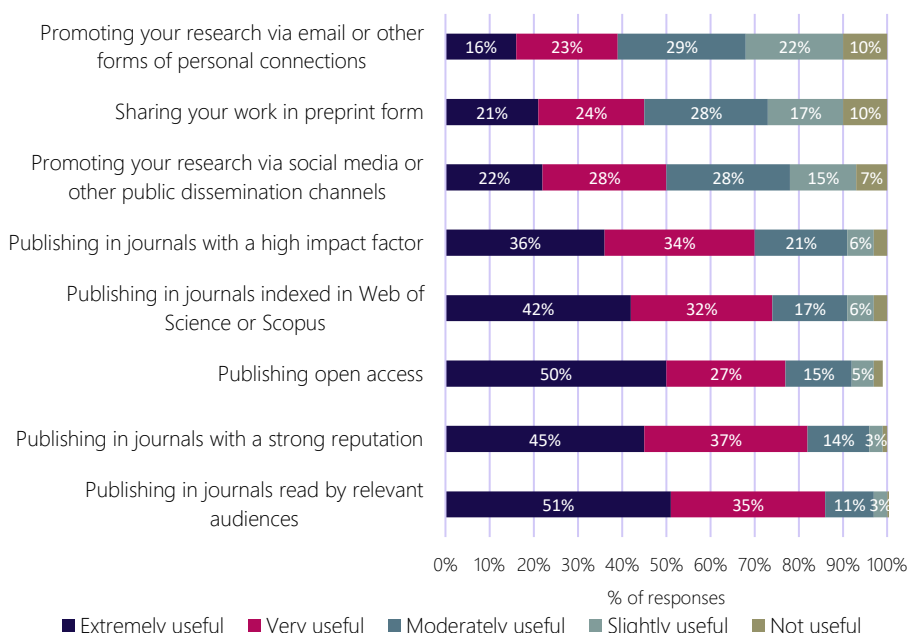
Although this project did not explore the possible reasons for such regional variation, this is likely related with local policy contexts as well as the ongoing changes in research and publishing cultures occurring across the world, for example in North America, Western Europe and China.

"The focus on journal metrics/branding, exaggerated by hypercompetition, means that publishing in certain journals becomes necessary for career progression, and in turn the editors of those journals become effectively gatekeepers for researcher careers, not just for the journal. This is highly problematic, and something we need to move away from."

Editor (Initial stakeholder feedback survey)

Figure 3. Methods used by researchers to decide where to publish their work.

Survey question: *As an author, how useful do you think the following methods are in helping your research reach its intended audience?*



The survey shows that researchers continue to rely on publication venues and bibliometric indicators when deciding what to read

Figure 4 takes a different perspective compared to Figure 3 and explores how researchers identify what research they should read. This takes into account that they have limited time and, therefore, must prioritise what scholarly materials they engage with.

The primary factor for making this choice is the reputation of the journal where the research has been published (70% of respondents rated this extremely or very useful), followed by the reputation of the authors (63%) and whether the journal is indexed in Web of Science or Scopus (57%). Bibliometric indicators commonly used to measure research impact rank lower in this list, including the impact factor (55% of respondents rated this extremely or very useful) and the number of citations (50%).

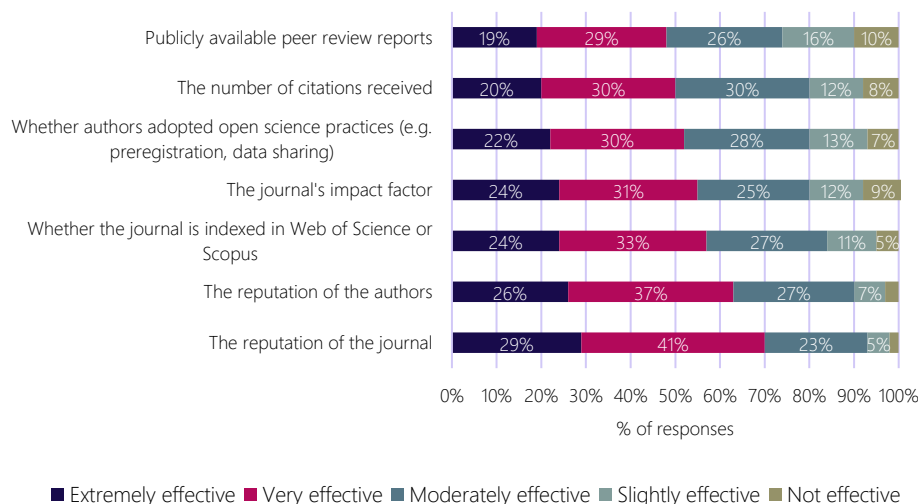
Importantly, all the factors in Figure 4 were rated as extremely or very useful by at least 50% of respondents, thus highlighting strong reliance on the current journals ecosystem when deciding what to read. When this is combined with Figure 3, we can conclude that, today, researchers see the journals ecosystem as being essential when it comes to publishing their own work and reading other people's contributions.

"Well-functioning editorial gatekeeping does have the advantage that publication in a respectable peer-reviewed journal serves as a (somewhat reliable) proxy for scientific quality. Without such a proxy, getting attention for one's high-quality work will become much more difficult – especially for junior researchers."

Researcher (Initial stakeholder feedback survey)

Figure 4. Methods used by researchers to identify high-quality research.

Survey question: *In your opinion, how effective are the following criteria to identify high-quality research?*



2.3 Preprint posting

Around half of respondents have posted a preprint in the past three years

The online researcher survey collected views from a diverse cohort of individuals with varying levels of publishing experience. Of the 7,412 respondents who shared their publishing output in the last three years (see Figure 5), 53% have not posted a preprint, 39% have posted between 1 and 5 preprints, and 8% have posted a larger number of preprints.

For this reason, it is interesting to break down the views provided in Figure 6 based on individuals who have or have not previously posted preprints. This is useful in exploring views on the benefits of preprints that are more likely to be factual (i.e. based on experience) vs those that are more likely to be hypothetical (i.e. based on perceptions or one's high-level knowledge of the preprints landscape).

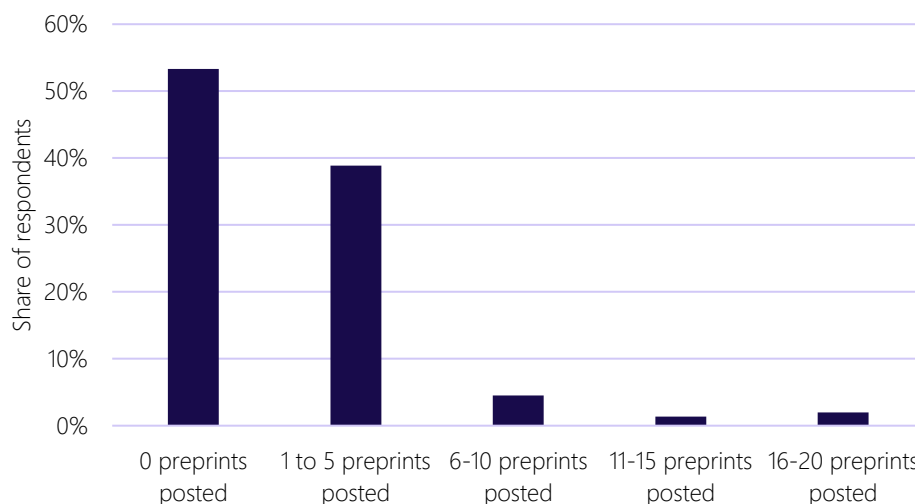
Additionally, the results suggest that there is room for training and development activities on preprint posting by libraries, institutions, publishers and learned societies. This refers to setting and discussing definitions, acceptable practices, customs in pre-publication commenting via preprint platforms as well as shifting expectations across disciplines.

"Making articles public prior to peer review can be a problem, mostly for non-academic readers, who can consider it as trustable knowledge, and for academics from disciplines not used to preprint posting."

Academic administrator (Initial stakeholder feedback survey)

Figure 5. Levels of preprints uptake among survey respondents.

Survey question: *How many preprints have you published in the past three years, approximately?*



Although preprint posting was undertaken by less than half of respondents, a majority recognise the (theoretical) benefits of this practice

Survey respondents broadly agreed that preprint posting is a beneficial practice that helps increase the accessibility and visibility of research (64% of respondents rated this 'effective' or 'very effective', see Figure 6), provide early access to new findings (62%), increase transparency in the research process (58%), accelerate the academic discourse (55%) and receive early feedback (52%).

When these findings are broken down based on demographic information, we highlight the following (please see Annex 1 for detailed percentages):

- 27% of researchers with less than 10 years of research experience consider preprints important for timely recognition of their work (responding 'very important' or 'extremely important'), whereas 21% of more experienced researchers (over 10 years of research experience) stated the same. This difference is limited and appears to challenge the notion that preprints are significantly more supported by less experienced academics (see Figure 7). From a geographic perspective, we highlight that these views vary slightly. For example, researchers in Asia show the same level of support regardless of research experience (27%), whereas researchers from the Americas show slightly more polarised views (28% for less experienced researchers vs 20% for more experienced researchers).
- Across the most represented disciplines in our data (medical and health sciences, life sciences, social sciences, engineering and arts and humanities), views are broadly aligned, with the only exception that researchers in the life sciences appear slightly more positive than average regarding providing early access to new research and slightly less positive regarding receiving early feedback.
- When the results are examined based on whether the respondent has posted preprints in the past three years, views are slightly more positive in all categories for respondents who have posted a preprint within this timeframe, except for 'Receiving early feedback on new research'. This suggests that the expectation of feedback on preprints is higher than the actual experience upon posting a preprint.

Figure 6. Perceived benefits of preprint posting.

Survey question: *How effective do you think preprints are in the following areas?*

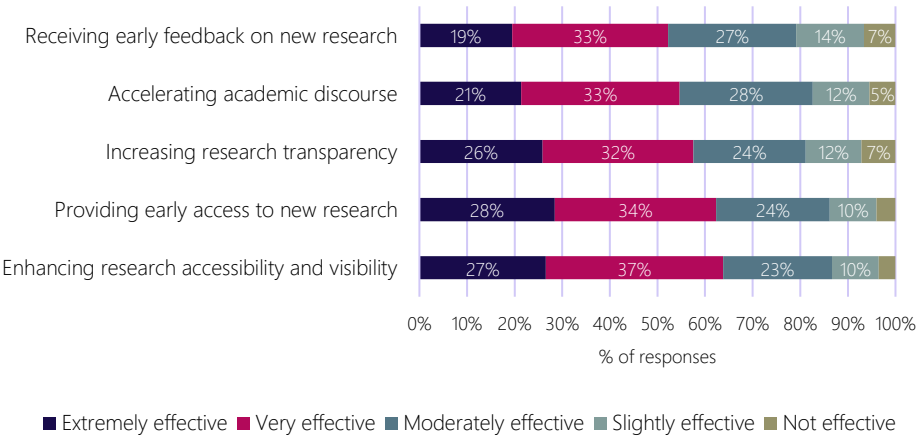
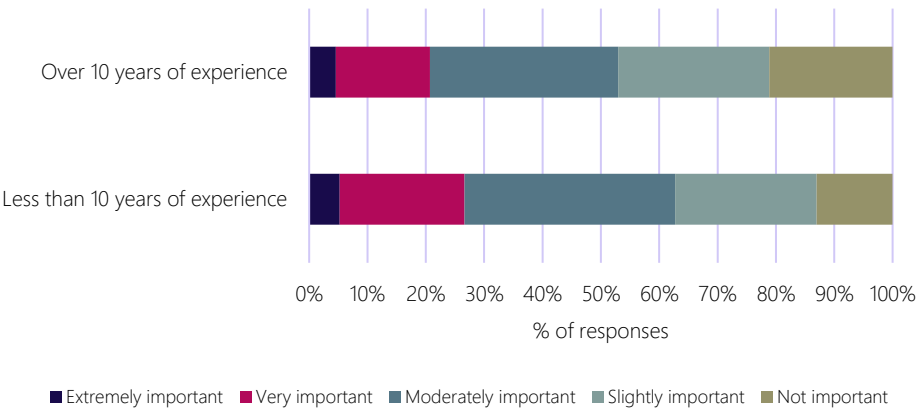


Figure 7. Importance of preprint posting for timely recognition of one’s work.

Survey question: *How important do you consider preprints for timely recognition of research in your field?*



“Pre-prints are good enough, and peer-review delays the publication process needlessly. In fact, researchers could move on to the next project faster if they did not have to go through the hoops of extensive peer-review and publication though commercial publishing. Initiatives like RePEc show that pre-prints can provide an efficient avenue for research dissemination.”

Infrastructure provider (Initial stakeholder feedback survey)

2.4 Attitudes towards open peer review

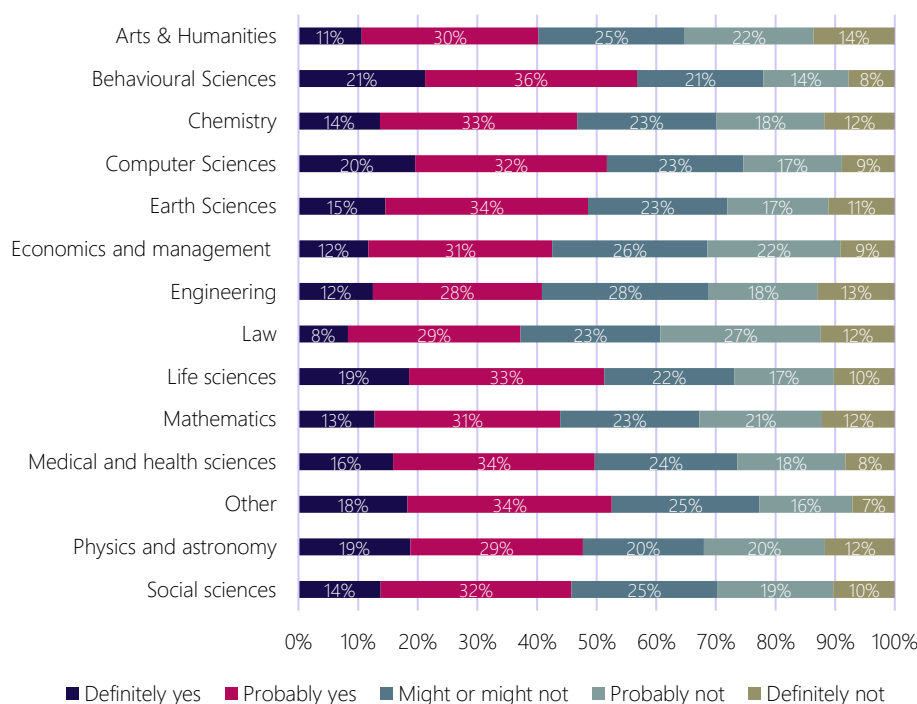
Respondents support open peer review, with broadly uniform views across regions

Views regarding open peer review where peer review reports are published regardless of an editorial decision (see Figure 8 and Figure 13) were similar across regions, reaching levels of support between 42% (lowest level of 'definitely yes' or 'probably yes', Oceania) and 48% (Europe).

Across the spectrum of disciplines, the higher 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%). Conversely, the most supportive fields (i.e. respondents would 'definitely' or 'probably' support the practice) were Behavioural Sciences (%), followed by Life Sciences and Computer Science (both at 52%).

Figure 8. Support for open peer review by selected disciplines.

Survey question: *In addition to publishing intermediate versions of an article as a preprint, a journal could also publish the peer review reports for these versions. This gives readers of the preprint information about its strengths and weaknesses. Review reports would be published regardless of whether the article is accepted or rejected by the journal. Would you support this way of informing readers?*



"Open peer review can be difficult for early career researchers. If they have to review submissions by somebody who is more established in the field, and then they decide to do a negative review, this could have some serious implications on their career."

Research funder (Focus group)

There is a preference towards anonymous peer review reports

Respondents prefer open but anonymous peer review reports (65% responded that they would definitely or probably support this practice) over attributed ones (47%); however, only 30% of respondents shared negative views regarding attributed peer review reports.

From a demographic perspective, respondents with less than 10 years of research experience are slightly more supportive of *anonymous* open peer review (67% responded 'definitely yes' or 'probably yes') than their more experienced peers (63%). Respondents with less than 10 years of research experience are also slightly more supportive of *attributed* open peer review (49% responded 'definitely yes' or 'probably yes') compared to their more experienced peers (45%).

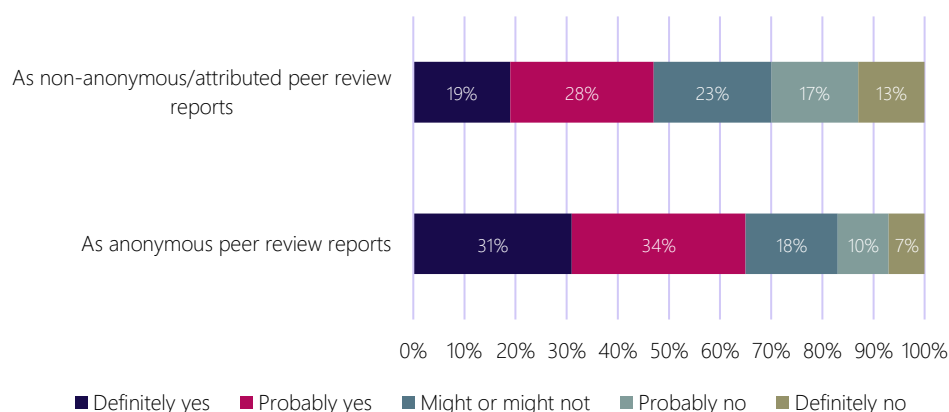
If the data is examined by field of research, results vary slightly. Disciplines such as the behavioural sciences (74% responded 'definitely yes' or 'probably yes' for signed peer review reports an 53% for anonymous peer review reports) and life sciences (69% support signed peer review reports; 50% support anonymous peer review reports) are slightly more supportive of the publication of open peer review reports; on the other hand, disciplines such as law (60% support signed peer review reports; 45% support anonymous peer review reports) and economics and management (59% support signed peer review reports; 44% support anonymous peer review reports) appear less supportive.

"One of the things that we have spoken to researchers about recently is that peer review reports would be published even for rejected papers. And the feedback we get is researchers don't want that out there. They want a blank slate when they go to another journal. They don't want the potential for prejudice, whether real or perceived."

Learned Society (Focus group)

Figure 9. Perceptions on anonymous and signed peer review reports.

Survey question: *As a reviewer, would you support the publication of your peer review reports?*



2.5 Perceptions on recognition and reward

Respondents confirm the need to improve recognition and reward mechanisms for emerging publishing methods and peer review

Most respondents felt that emerging publishing methods such as preprint posting are rarely or never recognised in current recognition and reward mechanisms (see Figure 10).

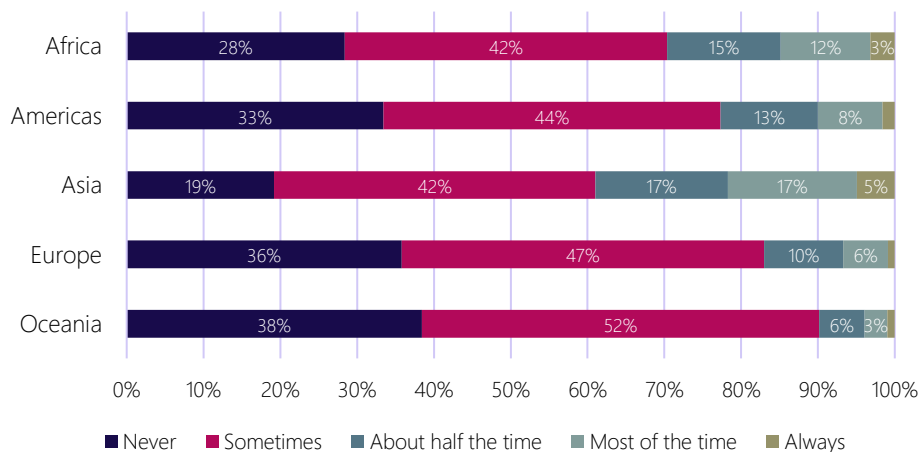
Respondents highlighted that the current recognition and reward mechanisms also do not motivate them to undertake peer review. For example, 79% of respondents in Oceania stated 'rarely' or 'never' in Figure 11, followed by Europe (68%) and the Americas (61%). Similarly to Figure 10, views are more positive when respondents from Africa and Asia are considered, where these figures fall to 48% and 39%, respectively.

"We believe that a spectrum of scholarly outputs has value and deserves to be surfaced, recognised and rewarded. This is true also of a broader set of research and publishing behaviours, which in a publishing sense would not just include publication but service as Editors, Board members and peer reviewers."

Publisher (Initial stakeholder feedback survey)

Figure 10. Perceptions on recognition and reward regarding emerging publishing methods.

Survey question: *Do you feel that the researcher recognition and reward mechanisms take into account emerging publishing methods, like preprints?*

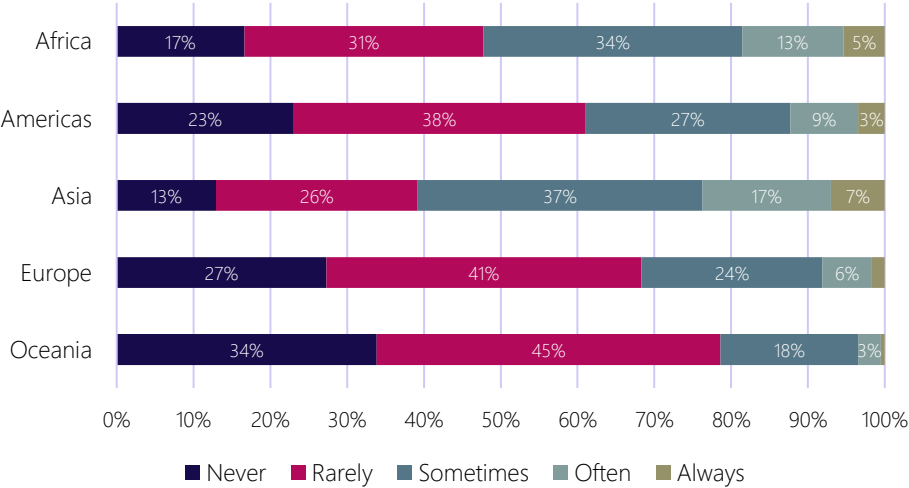


"Today, science is largely about publishing in a high-impact journal so that I can get tenure, get a better h-index and haul in all those grants. Competition has replaced collaboration and reproducibility and actual painstaking work lose out to 'publish or perish'."

Open Science Consultant (Initial stakeholder feedback survey)

Figure 11. Perceptions on recognition and reward regarding peer review efforts.

Survey question: *Do you feel that the current researcher recognition and reward mechanisms motivate you to undertake peer review?*



2.6 Enhancing publishing workflows

About half of respondents support preprint posting as part of journal workflows

The integration of preprint posting in journal workflows is supported by 48% of respondents (individuals responding 'probably yes' or 'definitely yes'), with broadly uniform views across regions (see Figure 12). This refers to journals implementing the process of posting a preprint at the start of the peer review process and updating it as the manuscript is updated.

We acknowledge that, at present, some journals do provide this functionality, but this is limited globally and may not include updating the preprint as it is changed during and following peer review.

"Shifting investment to local publishing requires a strong open repository network and more modern local publishing workflows. The budgets being spent on APCs and access could be redirected to sustain a community model supporting modern research assessment requirements, including via the Publish-Review-Curate model."

Librarian (Initial stakeholder feedback survey)

About half of respondents support the publication of peer review reports as part of journal workflows

47% of respondents support the publication of peer review reports as part of the journal submission and review process (individuals responding 'probably yes' or 'definitely yes'). shows that, once again, views are similar across regions. The publication of peer review reports as part of the journal submission and review process as discussed in our survey would take place irrespective of the final decision to accept or reject the article. We highlight that this is different from how some journals currently offer open peer review only for accepted articles and would require the development of new customs and accepted behaviours.

Figure 12. Integration of preprint posting in journal workflows.

Survey question: *To accelerate the dissemination of research, a journal could publish an article as a preprint at the start of the peer review process. When the journal receives revised versions of the article during peer review, it could update the preprint. Would you support this way of accelerating the dissemination of research?*

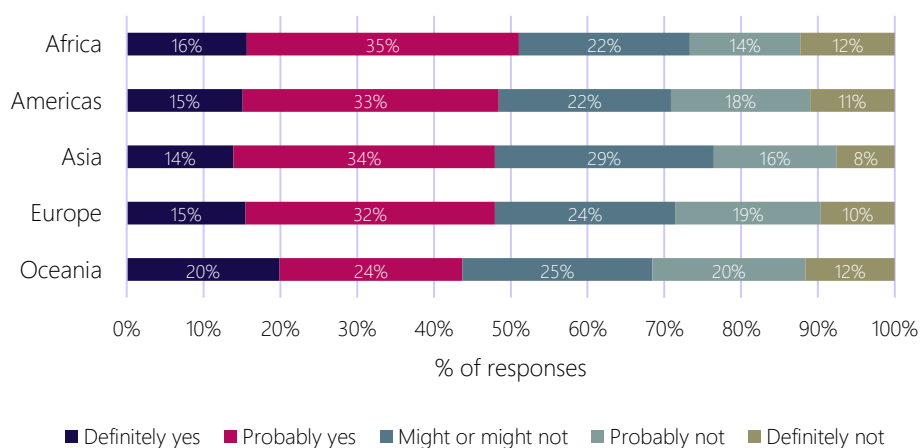
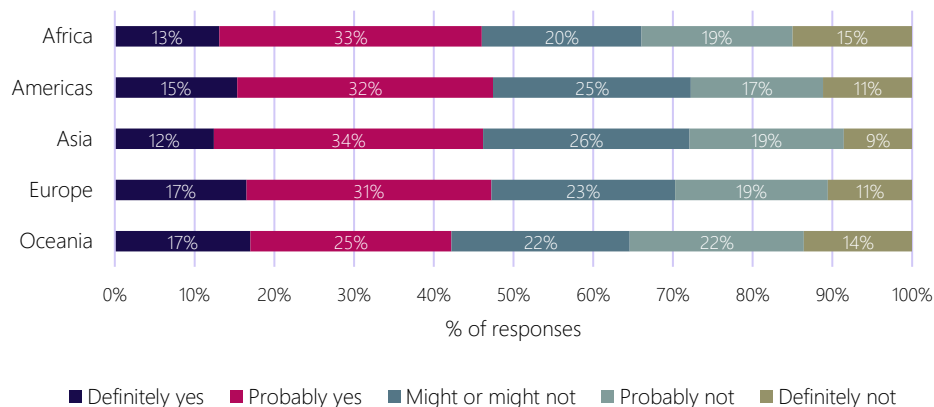


Figure 13. Integration of open peer review reports in journal workflows.

Survey question: *In addition to publishing intermediate versions of an article as a preprint, a journal could also publish the peer review reports for these versions. This gives readers of the preprint information about its strengths and weaknesses. Review reports would be published regardless of whether the article is accepted or rejected by the journal. Would you support this way of informing readers?*



3. Potential barriers to implementation

This section highlights potential barriers to the implementation of the TRP proposal, arising from qualitative research and free text survey responses. It also discusses a need for more specificity, arising from high-level references to a "community-based scholarly communication system" and the unclear scope regarding "all scholarly outputs". We explore how practical issues, such as sustainability, funding and transitioning to new models, appear inadequately addressed at present, preventing full engagement from all stakeholders. Furthermore, the section outlines the desire for a gradual implementation of TRP principles to avoid disruption, involving pilots and collaboration with existing initiatives. Lastly, we discuss perceptions of power imbalances and the desire for higher levels of multilingual publishing, which are needed to enhance inclusivity and global engagement.

3.1 Areas for clarification and updates

Lack of specificity can hinder implementation of next steps by cOAlition S

Although the TRP proposal does include a worked-out implementation example in the form of the Publish-Review-Curate model, an overarching concern from consultation participants was the lack of detail in the document. For example, this included:

- High-level references in the proposal to a "community-based scholarly communication system", which was too loosely defined for contributors to accurately discuss. Additionally, researchers and peer reviewers, who are often the same individuals, are already overburdened, and it is unclear who would take charge in a new community-based system and why, unless there are strong incentives.
- The apparent focus on "all scholarly outputs", although cOAlition S later confirmed to the consulting team that their intention was to refer to preprints, peer review reports and peer-reviewed articles only. This was unclear at the beginning of the consultation and was later clarified verbally in focus groups and as part of the online researcher survey to ensure more accurate views could be captured.

Additionally, consultation participants questioned how cOAlition S would realise their ambition in practice and wondered what this might imply for other sector stakeholders, starting from institutions and libraries: there are important gaps in how cOAlition S articulated their intentions regarding sustainability, funding sources, and the strategy for transitioning to a model where publishers offer services to researchers.

"The proposed vision of a 'community-based scholarly communications system' will require significant change to the current research infrastructure. It will demand participation from all stakeholders and countries, and fundamental investment into a sustainable, affordable, not-for-profit, community-driven infrastructure."

Representative body (Initial stakeholder feedback survey)

As noted in section 1, the high-level nature of the proposal also prevented some stakeholders from engaging in our consultation. These challenges should be acknowledged in future stages of work by cOAlition S, and 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 would be beneficial to take the initiative forward.

At the same time, we note that the TRP proposal was intended as a set of high-level principles, as a first step in a longer discussion and, consequently, was not seeking to define operational measures too firmly as this was seen as being premature.

The use of permissive licences brings benefits but is not seen as being community led

Permissive licences, such as Creative Commons Attribution (CC BY), allow for wide dissemination and reuse of scholarly work with minimal restrictions. These licences enable anyone to freely distribute, remix, adapt and build upon the work, including commercially in most cases. This approach is contrasted with more restrictive licences as well as contents shared with all rights reserved, which is typical for scholarly publications behind a paywall.

The benefits of open licensing were broadly accepted and acknowledged by consultation participants, and section 2.2 highlights the importance of open access to researchers who responded to our online survey. However, a common objection regarding open licences was that their adoption is often driven by policies from funding bodies and institutions rather than grassroots movements or requirements from within the academic community. According to consultation participants, this can create a sense of external imposition rather than organic, community-driven change. In this context, consultation participants further specified that different fields often have different values and needs regarding the licences applied to their work.

Finally, open licensing can also give rise to concerns regarding equity and power dynamics. For example, consultation participants highlighted that the push for permissive licenses can exacerbate existing power imbalances: larger, well-funded institutions and researchers may benefit more from the widespread dissemination and reuse of their work, as well as having more resources to potentially reuse contents published by others.

"The use of CC BY licences is not something that's driven by the community – it is driven by funders."

Scholar-led service provider (Focus group)

Current infrastructures cannot manage a potential overflow of poor-quality research

Consultation participants emphasised the role of peer review in maintaining scientific integrity. Quality control measures, including checks for image integrity, data availability, references, and ethical considerations, are seen as essential. Following these considerations, consultation participants highlighted their concern that encouraging a more significant uptake of preprint posting may lead to poor-quality research flooding the landscape, with difficulties in identifying materials worth reading.

As the consultation highlighted that preprint posting is currently not seen as being sufficiently rewarded by institutions and funders (see Figure 10), 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.

Either way, current scholarly communication infrastructures are not seen as being ready to support researchers in sifting through even larger and non-peer-reviewed numbers of research outputs. This highlights a gap in terms of infrastructures that would likely need addressing to make cOAlition S' vision a reality that all stakeholders are willing to embrace.

We note that the 'Curate' element of the Publish-Review-Curate model discussed in the TRP proposal would contribute to addressing some of the above-mentioned issues, but this subject was not discussed by consultation participants.

"As an Editor, I have seen the scale of how much genuinely poor quality research is filtered out from publication and I worry that the proposed new system would lead to a tidal wave of these papers making it into the public domain, creating a sea of poorly conducted research for researchers, students, and non-specialists (journalists, politicians, policy-makers, the public etc.) to attempt to navigate."

Editor (Initial stakeholder feedback survey)

More clarity is needed regarding the suggested shifts in funding

The TRP proposal recommends that shifts in funding streams should occur to make the TRP vision a reality. This is not discussed in detail in the proposal, and only a commitment to supporting the sustainability and diversity of the scholar-led publishing ecosystem is mentioned.

There are significant concerns about the financial sustainability of the proposed system, including the costs associated with infrastructure and the time investment from researchers and support staff within universities, libraries and service providers (including publishers and learned societies). Clearer information on how funders will support the economic sustainability of the desired system would be beneficial, as libraries and institutions in particular are uncertain about budget implications.

Contributors emphasised the need for financial support for community-led platforms and presses, welcoming a potential redirection of funds from traditional, subscription-based publishers. Additionally, new and open platforms will require substantial investment in programming and maintenance to ensure diversity and avoid monopolisation. However, the lack of clarity on how this should happen, and which organisations should redirect their funding (as well as where to) hindered discussions, alongside doubts about who would carry out the key functions currently organised by publishers.

Section 2.2 helps highlight a possible tension: while cOAlition S is looking to reduce reliance on the current publishing ecosystem, researchers are still strongly dependent on it for publishing their work and choosing what to read. The fact that researchers would support the integration of preprint posting and the sharing of peer review reports within journal publishing workflows may also play a role in this context (see section 0): many established publishers are potentially well placed to offer these additional services or are already offering (some of) these. In practice, these interdependences may hinder the desired redirection of funds to shift the ownership of the scholarly record.

"It's interesting that they make very strong statements about the equity of the financial system without saying anything about the contributions they're willing to make to make it equitable. I think it would be good to be a bit more explicit and to put money where the statements are."

Publisher (Focus group)

A staggered introduction of the TRP principles would be beneficial

According to consultation participants, the significant changes to scholarly publishing envisioned in the TRP proposal will need to evolve on different timescales. In our consultation, there were suggestions to pursue a more gradual shift, which would avoid polarisation and help encourage synergies with the existing publishing ecosystem, where appropriate. Contributors felt it was especially important for the TRP proposal to avoid resistance where possible, whilst recognising that the changes sought would inevitably shift the current power structure in academia.

In practice, this could entail the phased introduction of the TRP principles, with the intention of paving the way for their full implementation. Such a transition could be characterised by pilots as well as policy requirements and incentives for authors to adopt the proposed approaches (i.e. preprint posting and open peer review, using open licences), including experimentation to assess what works for all scholarly communication stakeholders involved.

The above should be complemented by engagement with institutions, publishers, service providers and other sector organisations, to try and facilitate a transition that can be embraced by as broad a portion of the current publishing ecosystem as possible.

Additionally, working with ongoing initiatives such as (but not limited to) the Coalition for Advancing Research Assessment (CoARA), the Declaration on Research Assessment (DORA), and the Higher Education Leadership Initiative for Open Scholarship (HELIOS Open) would be beneficial, to try to align objectives and enable parallel efforts pull the research community in a coherent direction.

"The proposal could include a more detailed implementation plan after consultation with major funders. If several funders agreed on an implementation plan and a fixed timeline, that could catalyse a rapid transition that is also predictable and considers the funding and technical challenges of scaling up the open infrastructure."

Researcher (Initial stakeholder feedback survey)

3.2 Considerations on global equity

General remarks

Contributors highlighted several considerations relating to global equity that arise from either:

- the nature of the changes sought in the TRP proposal and their implications for low- and middle-income countries; or
- the perception that cOAlition S, often seen as representative of high-income countries, is leading this effort.

These considerations should be carefully addressed by cOAlition S as it moves forward. It is important to note that the issues described below, relating to global power imbalances and multilingualism, were not directly caused or exacerbated by cOAlition S and are partly rooted in longstanding inequalities and injustices that continue to influence power and cultural dynamics between countries, regions, and stakeholder groups (within and beyond the higher education and research sector).

There are perceptions of power imbalances, leading to difficulties in engagement

Without greater engagement, cOAlition S' efforts may continue to be viewed negatively by low- and middle-income countries as an imposition from wealthier nations. Although this project actively sought to engage representatives from organisations in low- and middle income countries (LMICs), only limited input was received as part of Work Packages (WPs) 1, 2, and 5. However, the online researcher survey (WP4) successfully captured the views of researchers globally, including from LMICs (see section 2.1), which is a positive outcome.

One key challenge identified by representatives from low- and middle-income countries is their research policy landscapes' heavy reliance on quantitative metrics such as journal impact factors. This reliance makes it difficult for researchers in these regions to align with the changes proposed by cOAlition S. This greater dependency on the current journal ecosystem, compared to regions like North America and Western Europe, was also observed in the researcher survey (see section 2.2).

"The proposal appears to assume that there is a one-size-fits-all and homogenous research community. We know this is not the case, and especially for Indigenous and other marginalised research communities, it will be very important to design solutions that do not disadvantage them and the communities they work with."

Open access advocacy organisation (Initial stakeholder feedback survey)

Multilingualism should be more clearly promoted, in line with the TRP proposal's ethos

Publishing research in local or regional languages may enable researchers to communicate their findings more effectively to their target audiences. It may foster better interactions between science and society and may allow researchers to express their ideas more precisely. Writing in one's native language facilitates more nuanced and accurate communication compared to self-translating into English.

Promoting linguistic diversity and inclusivity in academia counters the marginalisation caused by the dominance of English, enhancing social equity and empowering different languages and their users. Furthermore, it aligns with the principles of academic freedom,

allowing scholars to choose their preferred means of communication without pressure to publish in English. For example, evaluation systems that favour English can restrict career development for non-English-speaking scholars, making support for multilingual publishing crucial for their professional growth.

This discussion aligns with cOAlition S' intent to promote more openness and recognition for a broader range of outputs as part of recognition and reward mechanisms. It also has clear technological implications: to meet the needs of a more diverse range of authors and readers, preprint and (peer) review platforms should consider supporting a greater variety of languages. This includes accommodating multiple languages in their interfaces as well as accepting submissions and reviews in various languages.

"To me, when we think on responsible publishing, we need to add the multilingualism dimension into the equation. It would be great to really think on a multilingual system in order to maximise the participation of the community, since the community is the core of this proposal."

Scholar-led service provider (Focus group)

4. Potential for unintended consequences

This section covers potential unintended consequences that may arise from the current version of the TRP proposal and is based on qualitative research and free text survey responses. It notes that the success of the proposal depends on global participation and support from institutions, libraries, funders, and service providers. Additionally, the section discusses concerns by authors about increased responsibilities, with an ensuing need for clear incentives. The proposed system's complexity and its potential impact on non-experts is also covered, including links with the traditional peer review system and related concerns about research ethics and integrity. Finally, the section highlights how the proposed system might exacerbate inequalities, placing disproportionate burdens on less-resourced researchers and creating barriers for marginalised communities.

Successful implementation of TRP will be dependent upon aligning changes in scholarly communication with changes in research assessment

The TRP proposal affects virtually all facets of scholarly communication. The shift sought is designed to address several perceived challenges in academic publishing, such as long lead times from article submission to publication, inequitable access due to high costs and the lack of transparency in the peer review process: these challenges affect a broad range of interconnected stakeholders, which means that addressing them is a complex endeavour.

Contributors stressed that the success of the proposal hinges on the active participation and feedback from the global research community, including stakeholders in scholarly communication and research assessment such as institutions, libraries, funders and service providers. Aligning these two fields – scholarly communication and research assessment – is especially important, as researchers would struggle to embrace reform in scholarly communication unless this is supported by their institutions and funders.

"I think the next step is around assessment and incentives, because for researchers to want to use new solutions, there needs to be a change in how their work is assessed. In a way, the technical piece is already a bit farther along, and maybe easier, and the cultural side of things is where there is limited movement."

Scholarly infrastructure (Focus group)

Authors are concerned about the proliferation of responsibilities attributed to them

Contributors noted that authors are concerned about the proliferation of responsibilities attributed to them. Clear incentives are needed to change behaviours around publishing, preprint review and evaluation; however, authors may not have the time or willingness to take on additional responsibilities, and the proposal could be seen as adding burdens to both authors and their institutions, leading to resistance.

Authors, who typically rely on publishers for marketing and disseminating their work, may require training and skills development in these areas if reliance on preprint posting were to be prioritised as a channel for scholarly communication. However, this is not as significant an issue if preprint posting is included as part of the journal publication process, as the impact on the current role of journals would be more limited. Alternatively, there could be new services set up to perform such functions, but it is not clear what they would look like and how they would be sustained.

"I see a lot of work coming in the way of the individual researchers. An even larger flow of research outputs to keep an eye on, with the added burden of having to judge many works for yourself. Participation in a new quality control mechanism, means more work that needs to be done by someone."

Researcher (Early feedback survey)

A system that is perceived to be more complicated risks being difficult to understand to non-specialists

The shift to a new and unfamiliar way of doing things is likely to cause uncertainty among all users of scholarly outputs. However, changes are more likely to negatively affect non-expert users, including for example the media and the general public, due to lower familiarity with academic customs and scholarly infrastructures. We highlight the following possible unintended consequences mentioned by contributors:

- Increased complexity: The proposed system involves multiple stages like publishing preprints, managing peer review and curating the final versions, plus a mix of manuscript versions that both researchers and non-specialist may not be familiar with. This complexity of the publishing process and proliferation of outputs could make it harder for non-experts to navigate and find relevant information.
- Fragmentation of the scholarly record: By making various research outputs like preprints, peer review reports and revisions openly available, potentially across different infrastructures and databases, the scholarly record may become fragmented. Non-specialists may struggle to identify the most up-to-date and authoritative version of a work amidst the different components and access points (e.g. preprint server, journal website, online repository, overlay journal).
- Discoverability challenges: Without the established journal brands and indexing systems, it may become more difficult for non-specialists to discover relevant research outputs, especially if they are scattered across different platforms.
- Potential information overload: By making the entire research cycle openly available, including early versions and peer review comments, non-experts could be overwhelmed by the sheer volume of information, making it harder to identify the most relevant and trustworthy sources.

Some of the above challenges are unavoidable in the context of opening up the scholarly research process, and some may be resolved by considering the role of curation in models such as Publish-Review-Curate. However, consultation participants remained concerned that, while the proposal aims to democratise access to research, the increased complexity and fragmentation could inadvertently create barriers for non-specialists in understanding and engaging with scholarly outputs effectively.

"Normal people, teachers, journalists, experts, doctors can read and use articles that are published in journals because they think they can trust (some of) them. If we make an ecosystem where all written articles are published and then peer-reviewed after, we need a system to provide trust to non-specialists."

Researcher (Early feedback survey)

Shifts in the current approach to peer review may lead to further growth in research integrity issues

During our consultation, contributors raised significant questions about the potential restructuring of the current peer review system, particularly if this were to be partly or fully replaced by preprint posting and their review. For example, contributors highlighted concerns about pre-publication checks as well as regarding the assessment of reviewers' credentials in the absence of traditional publisher roles.

The current version of the proposal is seen as lacking clarity on who would oversee research integrity checks, leading to concerns about the detection of errors and fraudulent submissions, such as image manipulation, reference accuracy and ethical breaches. This uncertainty is exacerbated by the rising volume of publications, which is already straining peer review.

"research integrity could be a massive unintended consequence of something like this. And there is no recognition in the proposal that I see that there is a problem that it's growing."

Learned Society (Focus group)

Contributors also emphasised the need for robust mechanisms and guidelines to navigate the proposed transition. 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.

"Something that is completely missing [in the TRP proposal] is the role of artificial intelligence in the scholarly communication system of the future. It's hard to address this, but it will have a role in a scholar-led communication system."

Funder (Focus group)

The proposed system may inadvertently create barriers or exacerbate disparities

Some consultation participants noted that authors with more resources or institutional support may be better positioned to advertise and promote their work in preprint form without relying on journals. Additionally, any added responsibilities around managing the publication process, including coordinating peer review or ensuring compliance with technical standards could place a greater burden on researchers with limited resources or support, including in underrepresented or marginalised communities.

Another consideration is the potential for fragmentation of the scholarly record across multiple platforms and repositories in the proposed model. This could pose challenges for discoverability, especially for researchers in low- and middle-income countries or those with less reliable internet access.

Care must therefore be taken to ensure the new system doesn't inadvertently create barriers or exacerbate disparities in research output and visibility. Ongoing consultation

with diverse stakeholders will help ensure the new system lives up to its transformative promise while mitigating unintended consequences that could deepen existing inequities.

"It seems like this approach is more based on the Global North, or Western Europe and North America. I don't know how the scholarly communication or the research communities in the Global South, would think about this. Is it really applicable to them given their priorities and resources available?"

Library (Focus group)

5. Conclusions and Recommendations

Our consultation has identified support for practices like preprint posting and open peer review, indicating a positive reception for some changes proposed by cOAlition S in the TRP proposal. However, clarity and further discussion are necessary to address misunderstandings and ensure the principles are well understood. To gain broader acceptance, cOAlition S should consider developing an implementation strategy that provides more operational details and address concerns about research culture, community ownership and quality control. While cOAlition S can effect change in some areas independently, particularly regarding Principles 1-3, achieving all its objectives will require collaboration with other stakeholders in the scholarly communication and research landscape.

5.1 Conclusions

There is support for some of the principles and practices encouraged in the TRP proposal

This primary aim of this project was to assess to what extent there is appetite for the type of change proposed by cOAlition S in the TRP proposal. Based on our findings, **we conclude that there is support for some of the key TRP principles and related practices: researchers shared positive views regarding preprint posting and open peer review in particular.** And though we can make no direct claim regarding open licensing per se, our positive findings regarding open access can be interpreted as a possible sign in favour of open licensing.

Additionally, **there is support for shifts in recognition and reward mechanisms.** However, contributors highlighted that this landscape is likely to move more slowly, and that changes will require cooperation with other research stakeholders. This is related to the need to **achieve alignment between the publishing reform and research assessment reform, which are interdependent and closely linked.**

Support for some of the proposed changes varies by region and discipline, indicating potential tensions between funder requirements and the cemented approaches to research(er) evaluation in several parts of the world. We have highlighted particular challenges regarding low- and middle-income countries, and the fact that further engagement in these regions would be beneficial as the TRP initiative moves forward. Whilst we acknowledge the complexity of discussing and coordinating efforts such as TRP across global regions, we also recognise that these are essential in a field such as scholarly communication.

Please see Appendix E for a direct mapping of our findings to the TRP principles.

There is a need to clarify and further discuss some aspects of the proposal to mitigate possible showstoppers and unintended consequences

We highlight the confusion reported by contributors in interpreting the principles in the TRP proposal, and the fact that further work is needed to clarify these to ensure that the practices they wish to encourage are clearly reflected.

As a starting point, future efforts by cOAlition S could consider the following priorities:

- sharpening the desired outcomes from principles 1 and 2, to highlight the key practices that they wish to promote, including i) rapid dissemination of research findings through preprints, ii) open peer review and iii) open licensing;
- clarifying how the TRP initiative could cooperate with initiatives promoting reform of current recognition and reward systems to encourage the practices being promoted (e.g. preprint posting, open licensing, open peer review);

- outlining more clearly what is meant by community ownership and what support, including financial, would become available to researchers to enable this in practice;
- including more detailed information on how quality control would shift over time, to ensure that community-set standards are met and to address concerns about the potential proliferation of low-quality works;
- providing greater clarity regarding operational details and using less negatively charged language, as these prevented engagement from some stakeholder groups as part of this work.

Additionally, we highlight that our efforts to engage contributors from marginalised or underrepresented communities were only partly successful. Those who contributed highlighted that addressing considerations of equity, diversity and inclusion in the TRP proposal is key for cOAlition S to foster a more inclusive and equitable academic environment. By engaging more effectively with low- and middle-income countries, promoting linguistic diversity, and adapting technological platforms to support multiple languages, cOAlition S can better align its efforts with the principles of academic freedom and social equity.

Improvements in publishing infrastructures and workflows, as well as how these are funded, would support uptake of the desired practices

Our research found that researchers support the inclusion of preprint posting and open peer review as part of journal workflows. Such integrations are already in place in a minority of journals, and there is an opportunity for publishers and service providers to fill this gap in line with cOAlition S’ expectations. Additionally, contributors emphasised the importance of linguistic diversity and inclusivity in scholarly communication and suggested that preprint and (peer) review platforms should support a variety of languages.

We recognise that this is not an area that cOAlition S is looking to change first-hand, as these infrastructures and workflows are not within their control. They will therefore need to liaise with the research community, including institutions and libraries, as well as with publishers and service providers to assess, trial and, potentially, fund changes in the desired direction.

A clear point that emerged from our consultation is that these infrastructures and workflows, whether existing or newly introduced, will need sustainable funding. A broad range of consultation participants recommended that this should be achieved by **shifting and repurposing funds that are already spent on the scholarly communication system by funders, institutions and other stakeholders.**

5.2 Recommendations

Recommendations for future work

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 (see Figure 14).

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.

Figure 14. Recommended prioritisation of activities by cOAlition S based on consultation findings.

Timeline	Activities	Rationale
Short term	<ul style="list-style-type: none"> ➤ Encouraging or mandating preprint posting to enable faster dissemination and feedback on research outputs. ➤ Encouraging or mandating open licensing for all relevant scholarly outputs to facilitate unrestricted access and reuse. 	Activities that funders and institutions can directly affect through policy requirements and recognition and reward mechanisms.
Medium term	<ul style="list-style-type: none"> ➤ Encouraging and promoting open peer review across the publishing landscape, including both preprints and journal articles. 	Activities that funders and institutions can encourage but will require buy-in from multiple stakeholders, including individual authors and peer reviewers.
Long term	<ul style="list-style-type: none"> ➤ Transitioning funding and infrastructures to support a globally inclusive, scholar-led publishing ecosystem ➤ Updating recognition and reward mechanisms to incentivise adoption of open science practices like preprint posting and open peer review. 	Activities that funders and institutions can participate in, but require long-term sector coordination and alignment to be achieved in practice.

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. 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.

Declaration of interests

The authors are consultants and researchers working in the field of research and scholarly communication and have provided consultancy services to a subset of the organisations and/or individuals that contributed to this project.

Some of the authors of this report, including Stephen Pinfield (University of Sheffield; RoRI), Ludo Waltman (CWTS; RoRI), André Brasil (CWTS; RoRI), and Wolfgang Kaltenbrunner (CWTS; RoRI), are actively involved in the development and operation of MetaROR. MetaROR is a scholarly communication platform that employs the Publish-Review-Curate model. It is a partnership between RoRI (the Research on Research Institute) and AIMOS (the Association for Interdisciplinary Meta-research and Open Science). Ludo Waltman also serves as President of ASAPbio, an organisation promoting transparency and innovation in life science communication. Furthermore, Rob Johnson is the Vice Chair of UKSG

The authors declare these interests to ensure transparency and to allow readers to critically assess the potential for any bias in the analysis and conclusions.

Appendix A. Detailed methodology

Background

This detail methodology is provided to supplement the high-level discussion presented in section 1.2. Please refer to Figure 1 for a graphical overview of the process.

WP1. Desk research and initial stakeholder feedback survey

The project started with a review of the TRP proposal before its release, during October 2023. The consulting team analysed the proposal in detail, exploring its rationale and principles and conducting desk research on the operating context in which the changes proposed would take place. This included the preparation of an initial stakeholder longlist, which would be used in later WPs, too.

Prior to delivering any of the WPs listed below, we sought ethics approval through the University of Sheffield (WP1, WP2 and WP5) and Leiden University (WP4). This covered all data collection exercises that involved human participants and the processing of personally identifiable information and enables us to share relevant research data captured as part of the project (see ‘Additional information’ paragraph below).

The TRP proposal was released on 31 October 2023. Building on the proposal’s text and on our desk research, we designed the initial stakeholder feedback survey, which sought to capture initial reactions via a range of open-ended and multiple-choice questions. The main purpose of this survey was to inform the following WPs: as a result, the survey was not designed to achieve statistical robustness, but rather to capture as broad a range of views as possible.

We highlight that, at this stage, the TRP proposal had not benefited from clarifications or contextualisation by either cOAlition S or the consulting teams. This means that all information collected through the survey was based on a respondent’s interpretation of the text in the proposal. This was intentional, as we sought to understand if and how stakeholders would recognise cOAlition S’ aims when reading the document for the first time.

The initial stakeholder feedback survey was open to any interested stakeholder in the world for a month, until 30 November 2023. Individuals were allowed to share their own or organisational views, and we received a total of 440 complete responses. As part of this exercise, respondents were allowed to volunteer to join focus groups as part of WP2; it should be noted that this was entirely optional and did not guarantee participation in the focus groups.

As noted above, the findings from WP1 did not contribute to shaping the conclusions and recommendations included in this report, as their core purpose was to inform our overall approach and the following WPs. A more detailed overview of WP1 findings is presented in Appendix B.

WP2. Exploratory focus groups

To understand the views of scholarly communication stakeholders on the benefits and challenges arising from the TRP proposal (in line with the questions outlined in the ‘Scope of work’ paragraph), we organised a total of ten focus groups, each delivered online and lasting 90 minutes and taking place between 4 December 2023 and 16 January 2024.

Eight focus groups were run by stakeholder type (including academic libraries; academic membership bodies; learned societies; research funders; researchers; scholarly infrastructures; scholar-led service providers), whereas two included a mix of stakeholder

types based in Oceania and Asia (who would have been unable to attend other focus groups due to significant differences in time zones). Please see Appendix C for a list of focus group participants.

Focus group attendees were prioritised to ensure coverage of stakeholder groups as well as global regions. The consulting team developed a longlist of participants based on desk research, prior knowledge of the scholarly communication landscape, as well as by building on WP1 responses. This longlist was then discussed and finalised with the cOAlition S project team, to secure a diverse pool of participants and a mix of supportive and opposing views.

The starting point for the focus groups was an overview of WP1 findings, which were subsequently questioned, probed and further explored by participants to gather additional and more nuanced feedback.

WP3. Synthesis and interim reporting

To take stock of feedback collected so far, we **thematically coded** WP1 and WP2 findings using **NVivo**, a qualitative data analysis software tool used by Research Consulting. This approach led to a total of over 1,700 coded text extracts, which were subsequently anonymised and exported for analysis and summarisation. Our manual approach was supplemented using generative artificial intelligence to harmonise and interrogate stakeholder inputs, which helped extend the work of human analysts and more deeply explore the vast amount of information collected. More detailed information on our use of artificial intelligence in the context of this work is provided in a dedicated section below, within the present appendix.

The thematic coding of findings led to the preparation of an interim findings document, which was shared with cOAlition S' project team and the project Steering Group for review and subsequently discussed via interactive online meetings.

The feedback obtained from these groups was instrumental to:

- prioritise questions and areas of focus for the researcher survey (see WP4);
- refine and improve the language used to refer to the TRP proposal and its objectives as part of our consultation; and
- identify key stakeholder groups that were under-represented to this point in the project (see WP5).

WP4. Online researcher survey

Following WPs 1-3, which helped us understand how the TRP proposal would affect a set of research and scholarly communication stakeholders, we delivered a large-scale researchers survey with global coverage.

The WP4 survey differed from the initial feedback survey (see WP1) in that it specifically targeted researchers to gather their feedback on the scholarly communication ecosystem, their role in this, and their appetite for change. In particular, the WP4 survey sought to answer our key research questions, i.e. how researchers are likely to respond to cOAlition S' proposed changes in the scholarly communication landscape.

The survey was launched on 12 March 2024 and closed on 22 April 2024, after receiving 11,145 responses. These were split as follows:

- 9,991 responses were received from researchers approached by making use of publicly available information in ORCID IDs. In particular, CWTS issued email

invitations to researchers whose ORCID ID had been most recently updated and included a publicly available email address.

- 1,154 responses were obtained from researchers who submitted their views via a link disseminated via social media, including X and LinkedIn.

Our detailed survey sampling strategy is available in Appendix D, and we highlight that this survey has received a large and statistically robust set of responses from all over the world. The sample of respondents is discussed in more detail in section 2.1, followed by an analysis of survey findings.

From a methodological perspective, we note that free text responses to the survey have been analysed by the CWTS team using [ATLAS.ti](#), another professional qualitative analysis software tool.

An interactive and more comprehensive version of survey results is [available online in interactive form](#). This includes breakdowns and analysis that were not included in the present report and can be freely explored by viewers.

Importantly, we note that the 1,154 responses obtained from researchers who were not directly invited to contribute are not included in our analysis. This is because the direct approaches led to a statistically robust sample and the additional responses were likely to increase the risk of self-selection bias. Nevertheless, the online version of our findings (see link above) does allow viewers to toggle these additional participants on and off.

WP5. Structured organisational feedback

Coinciding with the release of the researcher survey, cOAlition S also sought written responses to the proposal from a range of organisations involved in scholarly communication, focusing on low- and middle-income countries that were underrepresented in previous WPs (i.e. communities in Africa, Latin America and parts of Asia).

An invitation was developed by the consulting team and issued by Robert Kiley, Head of Strategy at cOAlition S, to a set of 27 organisations, nine of which responded. These organisations were asked to comment on the implementation of the TRP proposal, possible challenges regarding financial sustainability, the impact of the proposal on different countries and research cultures and any concerns relating to research integrity, equity and quality. The letters we received were analysed via thematic coding, using NVivo by the Research Consulting team, in a similar manner to WP2.

WP6. Reporting

Findings from all WPs were synthesised and summarised in the form of a slide deck for presentation to the cOAlition S project team and the project Steering Group. After initial validation, the consulting team set out to produce the present report, which provides our answers to the questions outlined in the ‘Scope of work’ paragraph.

The findings presented in section 2 mainly arose in the online researcher survey (WP4), which is used to assess the appetite for the type of change proposed by cOAlition S. Additional information such as narrative discussion as well as sections 3 and 0 are based on the thematic coding of exploratory focus group findings (WP2), free text survey responses (WP1 and WP4) and structured feedback letters (WP5). Quotes extracted from our thematic coding are included throughout the report, with reference to relevant stakeholder groups and the appropriate source.

Use of artificial intelligence (AI) as part of this work As highlighted above, generative artificial intelligence was used as part of this work. We note the following:

- The WP3 analysis made use of ChatGPT and, particularly, the GPT-4 model. This work took place in January 2024 and involved asking questions related text extracts coded by a human analyst. The purpose of this effort was to further dive into the evidence base and explore a range of views that may otherwise be hidden or deprioritised through thematic coding due to their low occurrence.
- We highlight that only anonymised information was processed via artificial intelligence and that none of the data analysed in this manner can be used for the purposes of training large language models.

Limitations

This present report is subject to the following limitations:

WP1 – Initial stakeholder feedback survey

- The initial stakeholder feedback survey was open to a global audience, but respondents were mainly based in high income countries.
- The initial stakeholder feedback survey required respondents to speak sufficiently good English to both fully understand the TRP proposal and provide their views.
- Some stakeholders, especially in the publishing community and in low- and middle-income countries, were not comfortable with responding through the initial stakeholder feedback survey due to the low level of operational detail included in the TRP proposal.
- The initial stakeholder feedback survey data is not statistically robust and, therefore, has only been used to inform further stages of work rather than forming part of our findings.

WP2 – Exploratory focus groups

- 72 participants were recruited to join focus groups via convenience sampling, that is, we consulted with individuals who were both available and willing to communicate. Therefore, viewpoints expressed in this report may not be fully representative of the wider community relevant to this study.
- While we ran a further two focus groups to capture responses from stakeholders in alternative time zones from the original eight focus groups, responses from Oceania and parts of Asia are likely to be underrepresented. Please note that this observation only applies to focus groups, and different considerations apply to the online researcher survey.

WP4 – Online researcher survey

- Researchers who have a recently updated their ORCID profile may be more likely to be aware of the latest developments in scholarly communication. As a result, their views may not be representative of the ‘average’ researcher.
- Although a random sample of researchers have been approached from the population available via ORCID, it is likely that self-selection played a role in deciding whether to complete the survey. For example, researchers who thought that the survey would directly affect them as well as researchers who agree with cOAlition S’ ethos may have been more positively inclined to respond the invitation received.
- The online researcher survey required respondents to speak sufficiently good English to both fully understand the TRP proposal and provide their views.

- Because of the abstract nature of the TRP proposal, we could not directly ask researchers to give their opinion about the proposal itself. Instead, in the design of the survey, we had to translate the TRP proposal to questions that relate more directly to researchers' experiences. This means that the survey is not directly about the TRP proposal but about our interpretation/translation of the proposal. It also means that some elements of the TRP proposal couldn't be covered in the survey.
- Although achieving a large number of responses and excellent global reach, the online researcher survey did not achieve its target participation rates in Northern Africa (-143 responses); Sub-Saharan Africa (-42 responses); Central America and the Caribbean (-35 responses); and Oceania (-159 responses).

WP5 – Structured organisational feedback

- While we approached a total of 27 organisations from a variety of stakeholder groups for feedback, we received nine responses, which naturally limited our ability to engage with the target areas of interest.

Engagement with underrepresented and marginalised communities

- This project made significant efforts to engage with underrepresented and marginalised communities, with a focus on WP2, WP4 and WP5. These efforts were in the form of direct emails, including from the consulting team and cOAlition S, as well as via social media (X and LinkedIn). Additionally, members of the consulting team with ties to and networks in underrepresented and marginalised regions (particularly Africa, Latin America and Asia) actively solicited responses through their contacts as well as through in-person meetings and events. Nevertheless, only WP4 achieved the desired levels of engagement across most underrepresented and marginalised regions.

Appendix B. WP1 illustrative findings

This Appendix presents an overview of quantitative findings captured as part of the early feedback survey ran in November 2023. These results are included for completeness: as discussed in the main text, these findings were used to shape later parts of the consultation process and **did not directly inform the conclusions and recommendations presented in the report.**

A breakdown of participants by stakeholder type and geographical area can be seen in Figure B1 and Figure B2. Please note that the 'other' category in the two graphs were for respondents to self-describe their occupation and geographic area, to ensure accurate representation beyond pre-defined categories. As shown in Figure B2, feedback was primarily received from Western Europe, Northern Europe and North America, which biases results towards the Global North; this survey was, however, not meant to capture representative views but only early feedback to inform next steps in the consultation. For this very reason, the results presented in this Appendix are illustrative only.

Figure B1. Initial stakeholder feedback survey by stakeholder type.

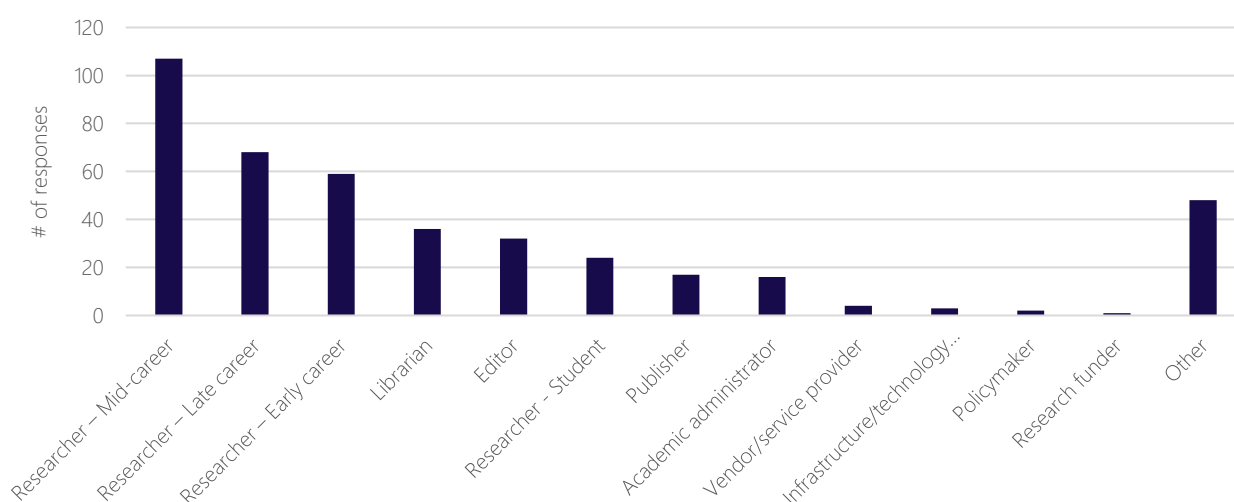
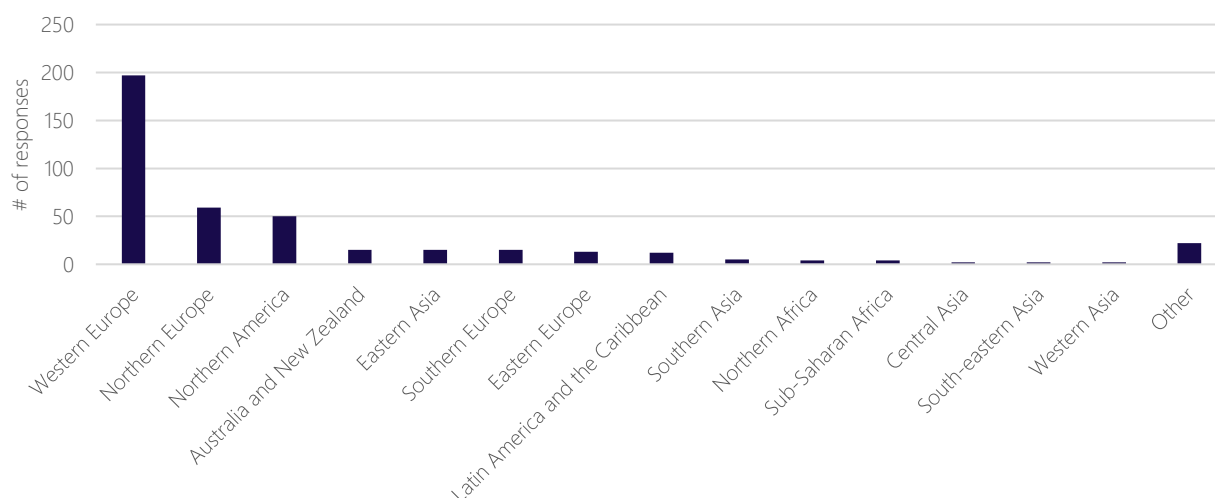


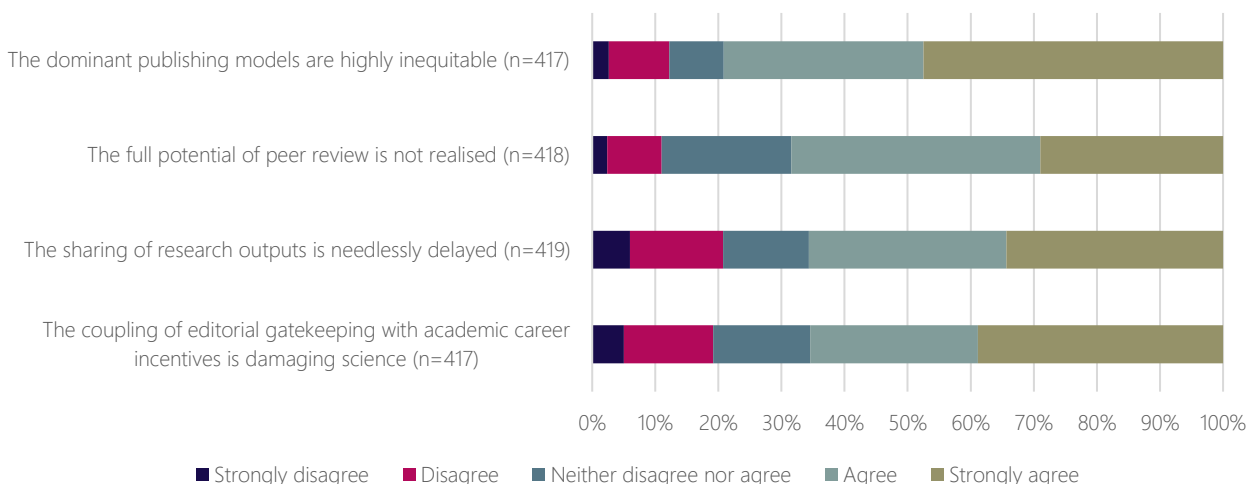
Figure B2. Initial stakeholder feedback survey responses by geographical area.



Why scholarly communication needs to change

In the first section of the survey, we asked respondents about their level of agreement with cOAlition S' rationale for change (see Figure B3).

Figure B3. Initial stakeholder feedback survey responses on 'Why scholarly communication needs to change'.

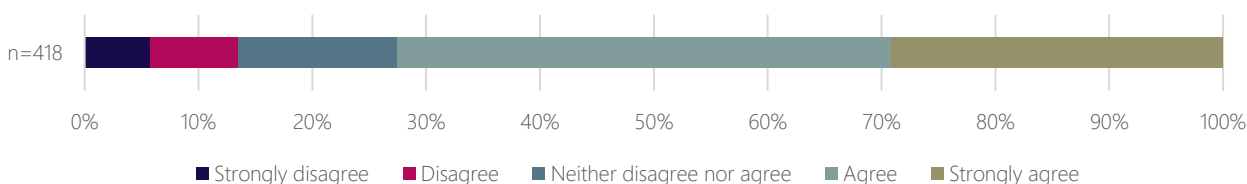


Respondents broadly agreed with all statements in cOAlition S' rationale. Agreement was highest with regards to the statement 'The dominant publishing models are highly inequitable' as 79% of respondents either 'strongly agreed' or 'agreed.' At least 65% of respondents either 'strongly agreed' or 'agreed' with all of the four statements. Disagreement was highest with regards to 'The sharing of outputs is needlessly delayed', where 21% of respondents 'strongly disagreed' or 'disagreed' with this statement. This resonates with criticisms discussed via focus groups, which highlighted that this statement appears to negatively characterise the process of peer review.

Vision

We asked respondents whether they agreed with the vision set out in the TRP proposal, as shown in Figure B4.

Figure B4. Initial stakeholder feedback survey responses on the 'Towards Responsible Publishing' vision.

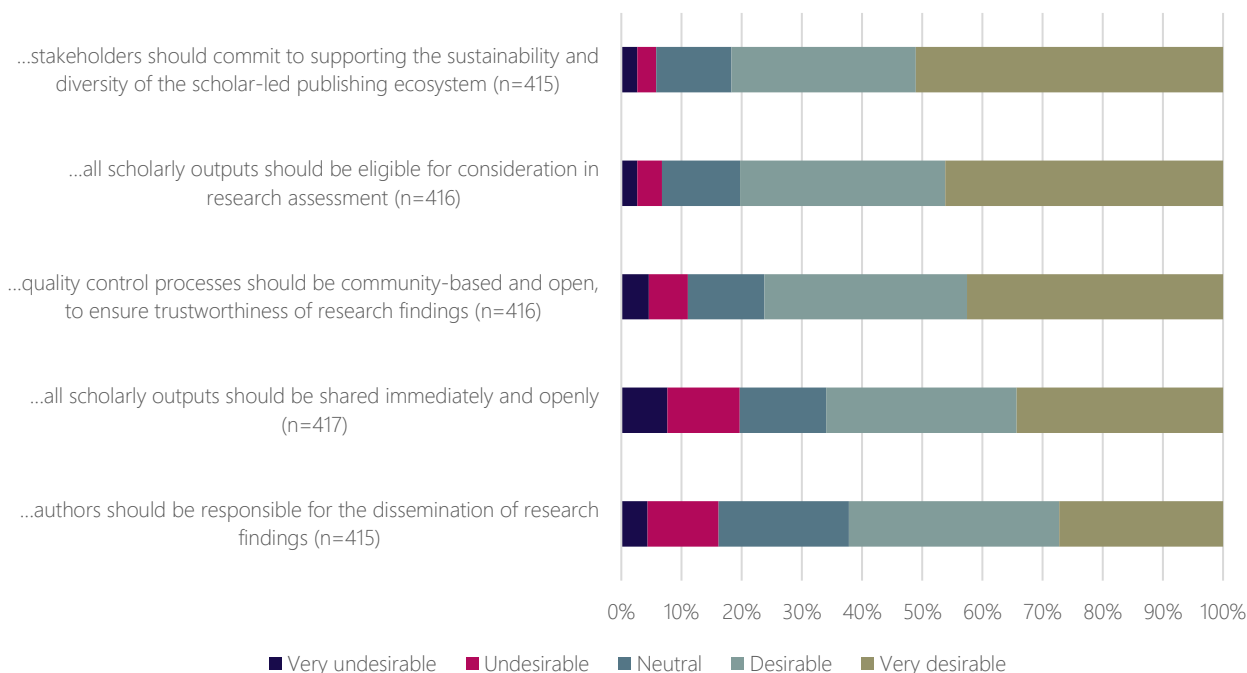


Respondents overall agreed with the vision, with a total of 74% of respondents stating 'strongly agree' or 'agree'. 13% of respondents 'strongly disagreed' or 'disagreed' with this statement.

Principles

The last part of the survey examined the five principles set out in the TRP proposal. In the survey, we asked respondents about the desirability of these principles within a community-based scholarly communication system fit for open science in the 21st century (see Figure B5).

Figure B5. Initial stakeholder feedback survey responses on the five principles.



Survey respondents broadly agreed with the five principles set out in the TRP proposal, with over 62% of respondents finding these principles 'very desirable' or 'desirable.' Desirability was highest in relation to the principle that 'stakeholders should commit to supporting the sustainability and diversity of the scholar-led publishing ecosystem' with 82% of respondents finding it 'very desirable' or 'desirable.' The lowest level of desirability was towards the principle 'all scholarly outputs should be shared immediately and openly' where 20% of respondents found this to be 'very undesirable' or 'undesirable.'

Appendix C. WP2 focus group contributors

We gratefully acknowledge the contribution of the following stakeholders to this project's focus groups (WP2).

Table C1. Focus group contributors (sorted alphabetically).

Name	Organisation	Role
Adrian Ho	University of Chicago	Scholarly Communications Librarian
Ali Bumajdad	Kuwait Foundation for the Advancement of Science	Professor of Chemistry
Angela Holzer	German Research Foundation	Programme Director
Arianna Becerril García	Redalyc	Executive Director
Bernd Pulverer	EMBO	Chief Editor
Björn Brems	Universität Regensburg	Professor
Cameron Neylon	COKI	Co-Lead
Charles Whalley	British Pharmacological Society	Head of Journals Publishing
Colleen Campbell	Max Planck Digital Library	Strategic Advisor and Coordinator
Damian Pattinson	eLife	Executive Director
Daniel Keirs	IOP Publishing	Head of Strategy and Performance
Daniela Saderi	PREReview	Executive Director
Danny Kingsley	Australian Access Federation	Lead, Trust and Identity Policy Working Group
Darco Jansen	Association of Universities of the Netherlands	Manager of Open Science and Open Access
Detlef Weigel	Max Planck Institute for Biology Tübingen	Director
Didier Torny	CNRS	Senior Researcher
Ella Colvin	Cambridge University Press	Publishing Director, Humanities and Social Sciences
Emma Wilson	Royal Society of Chemistry	Director of Publishing
Eurico Wongo Gungula	Óscar Ribas University	Rector
Frank James	Society for the History of Alchemy and Chemistry	Chair
Gustaf Nelhans	University of Borås	Associate Professor
Helena Cousijn	Datacite	Director of Community Engagement and Communications
Hero Macdonald	Deakin University	University Librarian
Iryna Kuchma	Electronic Information for Libraries	Open Access Programme Manager
James Milne	American Chemical Association	President, ACS Publications
Janet Catterall	Open Access Australasia	Librarian

Name	Organisation	Role
Janne Pölönen	Federation of the Finnish Learned Societies	Secretary General
Jean-François Lutz	University of Lorraine	CNRS Research Director
Jean-Sébastien Caux	SciPost	Founder
Jessica Polka	ASAPbio	Executive Director
Joanna Ball	Directory of Open Access Journals	Managing Director
Juan Pablo Alperin	Public Knowledge Project (PKP)	Scientific Director
Kamran Kardan	Knowledge E	Founder
Kathleen Shearer	Confederation of Open Access Repositories (COAR)	Executive Director
Kathryn Sharples	Wiley	Group VP, Publishing Strategy & Policy
Laura Rovelli	CLACSO Latin American Council of Social Sciences	Coordinator
Lei Shi	Tsinghua University Press	Director of Journal Center
Leslie Lansman	Association of Learned and Professional Society Publishers	Chair, Policy Committee
Lidia Borrell-Damián	Science Europe	Secretary General
Lisa Griffith	National Open Research Forum	National Open Research Coordinator
Luke Drury	ALLEA, vice president	Vice President
Lulu Jiang	Chinese Academy of Sciences	Deputy Director of Data Publishing Lab
Lynn Kamerlin	Georgia Institute of Technology	Professor
Malavika Legge	Open Access Scholarly Publishing Association	Open Access Program Manager
Mangala Srinivas	Young Academy of Europe	Former Chair
Marc-André Simard	Natural Science and Engineering Research Council of Canada	Policy Analyst, Open Access
Maria Guerreiro	Dryad	Head of Partnerships
Mark Hahnel	Digital Science	Vice President of Open Research
Megan Phelan	American Association for the Advancement of Science	Communications Director, Science Family Journals
Moumita Koley	Future of Scientific Publishing Project	Consultant Campaign Manager
Nokuthula Mchunu	African Open Science Platform	Deputy Director
Pierre Mounier	OpenEdition	Associate Director for International Development
Remedios Melero	IATA-CSIC	Researcher
Richard Delahunty	Taylor & Francis	Global Portfolio Director
Richard Sever	bioRxiv	Co-Founder

Name	Organisation	Role
Richard White	University of Otago	Copyright & Open Access Manager
Roheena Anand	PLOS	Executive Director, Global Publishing Development
Rosie Higman	London School of Economics	Open Research Services Manager
Ross Mounce	Arcadia Fund	Director of Open Access Programmes
Stephan Kuster	Frontiers	Head of Institutional Relations
Susan Murray	African Journals Online	Executive Director
Thomas Guillemaud	Peer Community In	Co-Founder
Thomas Lemberger	Review Commons	Project Leader and Associate Editor
Tianfang Dou	Tsinghua University	Associate University Librarian
Tieming Zhang	Society of China University Journals	President
Toby Green	Policy Commons	Publisher
Tony Ross-Hellauer	TU Graz	Leader – Open and Reproducible Research Group
Vinciane Gaillard	European University Association	Deputy Director for Research and Innovation
Wind Cowles	Princeton University	Associate Dean for Data, Research and Teaching
Yensi Flores Bueso	Global Young Academy	Co-Chair of the Executive Committee
Zhao Yandong	Chinese Renmin University	Senior Researcher in Research Policy and Research Integrity
Zhe Chen	Open Science Promotion Consortium	Director

Appendix D. WP4 sampling strategy

The methodology for the distribution and analysis of researcher survey data, sourced from the 2023 ORCID database, involved a multi-step process. Initially, a comprehensive data extraction was conducted, retrieving relevant details such as researcher IDs, given names, family names, countries of residence, and email addresses. To ensure adherence to privacy norms and regulations, records lacking publicly available information were excluded from the dataset. This filtering process yielded a total of 333,105 email addresses corresponding to 213,511 unique researcher IDs.

Recognising the importance of capturing a globally representative sample of researchers' opinions, the country data was utilised to map the number of researchers per region, as delineated in Table D1.

Table D1. Original distribution of ORCID IDs by region.

Continent	Region	ORCID IDs
Africa	Northern Africa	4,753
	Sub-Saharan Africa	4,666
Americas	Latin America and the Caribbean	41,979
	Northern America	22,162
Asia	Central Asia	1,030
	South-eastern Asia	10,325
	Southern Asia	22,318
	Eastern Asia	26,942
	Western Asia	13,307
Europe	Northern Europe	15,935
	Southern Europe	32,115
	Western Europe	21,346
	Eastern Europe	18,505
Oceania	Australia and New Zealand	5,932
	Micronesia	20
	Melanesia	80
	Polynesia	36

Upon analysis, a noticeable geographical imbalance in the distribution of researchers across continents was evident based on the regional classifications employed in this study. Three key adjustments were proposed to address this disparity. The first involved the consolidation of all regions within Oceania into a single entity due to the minimal number of records in some areas, which did not warrant separate categorisation. The same was performed for Central Asia, who was incorporated with Eastern Asia. The third adjustment pertained to the Latin America and Caribbean region, where the number of researcher IDs disproportionately represented the region's geographic and scientific system diversity. Consequently, a division was proposed along the intermediate regional lines, effectively segregating Central America and the Caribbean from South America. This subdivision balanced the number of records detailed in Table D2.

Despite these adjustments, regional disparities in the number of researchers persisted. To mitigate this, a calculated approximation of the necessary sample sizes from each region was determined to optimally represent their respective research communities. This calculation was informed by data from the UNESCO Institute for Statistics (concerning researchers in R&D per million people, in FTE) and the United Nations Statistics Division (Standard Country for Statistical Use). Utilising the most recent data available for each country, the sample size for each group was calculated based on the Cochran formula, commonly employed for determining sample sizes in surveys and experiments. The

calculation was predicated on a 95% confidence level and a presumed population proportion of 0.5, aiming to maximize sample size within a 5% margin of error.

Table D2. Adjusted distribution of ORCID IDs by region.

Continent	Region	ORCID IDs
Africa	Northern Africa	4,753
	Sub-Saharan Africa	4,666
Americas	Central America and the Caribbean	7,847
	Northern America	22,162
	South America	34,791
Asia	South-eastern Asia	10,325
	Southern Asia	22,318
	Eastern and Central Asia	27,972
	Western Asia	13,307
Europe	Northern Europe	15,935
	Southern Europe	32,115
	Western Europe	21,346
	Eastern Europe	18,505
Oceania	Oceania	6,013

Table D3 shows the number of available ORCID IDs in the database and Researchers per region, adding the results of the sampling process in three calculations. The first is the number of respondents needed to represent that research community. The second is the number of e-mails sent and the last one is the response rate needed to reach the desired number of responses.

Table D3. Sample size and response rate calculations.

Continent	Regions	IDs	Researchers	Needed	Sent	Resp. rate
Africa	Northern Africa	4,753	189,000	383	4,753	0.08
	Sub-Saharan Africa	4,666	93,000	383	4,666	0.08
Americas	Central America and the Caribbean	7,847	53,000	381	7,847	0.05
	Northern America	22,162	1,705,000	384	12,800	0.02
	South America	34,791	286,000	384	12,800	0.01
Asia	Central Asia	1,030	30,000	379	1,030	0.37
	Eastern Asia	26,942	3,611,000	384	12,800	0.01
	South-eastern Asia	10,325	422,000	384	10,325	0.04
	Southern Asia	22,318	615,000	384	12,800	0.02
Europe	Western Asia	13,307	272,000	384	12,800	0.03
	Eastern Europe	18,505	725,000	384	12,800	0.02
	Northern Europe	15,935	567,000	384	12,800	0.02
	Southern Europe	32,115	454,000	384	12,800	0.01
Oceania	Western Europe	21,346	1,092,000	384	12,800	0.02
	Oceania	6,013	147,000	383	6,013	0.06

Appendix E. Mapping to TRP principles

Table E1 provides a summary of the findings of our consultation, mapped to TRP principles. From discussion with the cOAlition S team, we understand that the intent of the TRP principles was slightly different from what consultation participants thought from reading the proposal independently. To enable better interpretation of our findings and to inform our conclusions more directly, Table E1 includes a column titled 'intent', where this is highlighted more clearly. Please note that Table E1 focuses on quantitative findings only, i.e. it provides references to specific figures. We highlight that qualitative discussion relating to the TRP principles are available throughout this report.

Table E1. Key findings against principles in the TRP proposal.

#	Principle	Intent	Key figures	Key findings
P1	Authors are responsible for the dissemination of their findings	Promoting preprint posting	Figure 6 Figure 12	Survey respondents broadly agreed that preprint posting is a beneficial practice. They would welcome its inclusion as part of journal workflows.
P2	All scholarly outputs are shared immediately and openly	Promoting open licensing	Figure 3	Survey respondents strongly support open access publication as a means to reaching one's intended audience. An implication of this practice is the need to choose and apply open licensing terms. Please note that licensing was not directly addressed as part of the online researcher survey.
P3	Quality control processes are community-based and open, to ensure trustworthiness of research findings	Promoting open peer review	Figure 8 Figure 9 Figure 13	Survey respondents broadly support open peer review, with a preference for anonymous rather than attributed peer review reports. They would welcome its inclusion as part of journal workflows.
P4	All scholarly outputs are eligible for consideration in research assessment	Promoting inclusion of preprints and peer review reports in recognition and reward mechanism	Figure 10 Figure 11	The findings presented are closely aligned with cOAlition S' call for inclusion of a broader range of research outputs as part of recognition and reward mechanisms. Although publishing reform and recognition and rewards mechanisms are closely connected, contributors highlighted that these are likely to move on different timescales.
P5	Stakeholders commit to supporting the sustainability and diversity of the scholar-led publishing ecosystem	Promoting the financial sustainability of a diverse scholarly communication ecosystem	N/A	Only limited commentary was provided on Principle 5, as this was framed in very high-level terms. Nevertheless, most contributors recognised the essential role of funding and, in particular, of a need to shift current financial commitments if cOAlition S' proposed changes are to be realised.



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