



HAL
open science

The OA Diamond Journals Study. Part 2: Recommendations

Arianna Becerril, Lars Bjørnshauge, Jeroen Bosman, Erik Jan Frantsvåg,
Bianca Kramer, Pierre-Carl Langlais, Pierre Mounier, Vanessa Proudman,
Claire Redhead, Didier Torny

► **To cite this version:**

Arianna Becerril, Lars Bjørnshauge, Jeroen Bosman, Erik Jan Frantsvåg, Bianca Kramer, et al..
The OA Diamond Journals Study. Part 2: Recommendations. [Research Report] OPERAS. 2021.
hal-03391208

HAL Id: hal-03391208

<https://hal.science/hal-03391208v1>

Submitted on 3 Jan 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

The
OA
Diamond
Journals Study

Exploring
collaborative
community-driven
publishing models
for Open Access

Part
Recommendations

Title:

The OA Diamond Journals Study.
Part 2: Recommendations

Authored by:

Arianna Becerril, Lars Bjørnshauge, Jeroen Bosman, Jan Erik Frantsvåg, Bianca Kramer, Pierre-Carl Langlais, Pierre Mounier, Vanessa Proudman, Claire Redhead, Didier Torny

DOI:

10.5281/zenodo.4562790

Report dated:

March 2021

All content published can be shared (CC BY 4.0)
creativecommons.org/licenses/by/4.0

**This report was supported by:**

Science Europe
cOAlition S



▶ **Acknowledgements**

Supporting Organisations

OPERAS

open scholarly communication in the european research area for social sciences and humanities

OPERAS is the Research Infrastructure supporting open scholarly communication in the social sciences and humanities (SSH) in the European Research Area. Its mission is to coordinate and federate resources in Europe to efficiently address the scholarly communication needs of European researchers in the field of SSH. OPERAS' aim is to make Open Science a reality for research in the SSH and achieve a scholarly communication system where knowledge produced in the SSH benefits researchers, academics, students and more generally the whole society across Europe and worldwide, without barriers.

SPARC* Europe

SPARC Europe is a Dutch Foundation with over 140 organisations from 23 countries supporting its work. It is working to make Open the default in Europe. Its work centres around 3 goals: Driving Open Access, expanding access to research data and accelerating Open Education in Europe through policy development and advocacy programmes.



Utrecht University

Utrecht University Library offers support in every phase of searching for, managing and publishing scientific information. At the library, Jeroen Bosman and Bianca Kramer perform research and provide expertise on open scholarship.



Uit The Arctic University of Norway holds a long standing commitment to open science. The university library organizes one of the most important conferences on scholarly communication in Europe, the Munin Conference. Jan Erik Frantsvåg, open access advisor at the university library, has a strong expertise in this topic and has published a number of scholarly articles on subjects relevant to the study.



The Center for the Sociology of Innovation (CSI), founded in 1967, became one of the world's leading research centres in the field of Science and Technology Studies in the 1980s, when Michel Callon and Bruno Latour among others developed a new approach known as the «sociology of translation» or Actor-Network Theory (ANT). At CSI, Didier Torny's research focuses on higher education and research public policies, as well as the political economy of academic publishing.

OASPA

OASPA (Open Access Scholarly Publishing Association) is a membership organisation representing a broad community of organisations engaged in open scholarship, including scholar-led and professional publishers of books and journals, across varied geographies and disciplines, as well as infrastructure and other services. OASPA works to encourage and enable open access as the predominant model of communication for scholarly outputs, and to ensure a diverse, vibrant, and healthy open access community.

DOAJ DIRECTORY OF OPEN ACCESS JOURNALS

DOAJ is a community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals. Currently, DOAJ lists more than 10,000 OA non-APC journals.



Redalyc/Amelica is a collaborative infrastructure for advancing diamond OA publishing. It provides journal production technology, editorial professionalization, journal quality assessment, visibility and discoverability services, metrics, full-text indexing and Linked Open Data. Currently, it indexes 1500 OA journals from 633 publisher institutions from 31 countries. The online collection offers around 800,000 full-text articles.



LIBER (Ligue des Bibliothèques Européennes de Recherche – Association of European Research Libraries) is Europe's principal association of research libraries, consisting of nearly 450 national, university and other libraries from more than forty European countries.



ENRESSH (the "European Network for Research Evaluation in the Social Sciences and the Humanities") is a network of researchers, research administrators and librarians that has grown out of a COST Action, starting in April 2016 and ending in April 2020. It brought together more than 125 participants from 36 countries.

Contributors

Arianna Becerril
Redalyc/AmeliCA

Lars Bjørnshauge
DOAJ

Jeroen Bosman
Universiteit Utrecht

Jan Erik Frantsvåg
UiT The Arctic University of Norway

Bianca Kramer
Universiteit Utrecht

Pierre-Carl Langlais
Université Montpellier 3 / OPERAS

Pierre Mounier
OPERAS

Vanessa Proudman
SPARC Europe

Claire Redhead
OASPA

Didier Torny
CNRS

Funders



Science Europe [↗](#) is an association of major Research Funding Organisations and Research Performing Organisations. It was established in October 2011 and is based in Brussels.



cOAlition S [↗](#) is an international consortium of research funding and performing organisations supporting Plan S, an initiative for Open Access publishing that was launched in September 2018. Plan S requires that, from 2021, scientific publications that result from research funded by public grants must be published in compliant Open Access journals or platforms.

Steering Group

Zoé Ancion
ANR

Lidia Borrell-Damià
Science Europe

Victoria Tsoukala
European Commission

Sabina Leonelli
University of Exeter

Gareth O'Neill
Technopolis

Johan Rooryck
cOAlition S

Nora Papp-Le Roy
European Science Foundation / cOAlition S

Technical Team

Alison Cavatore
Copy-editing

Arnaud Gingold
Interviews

Pierre-Carl Langlais
Focus groups and data analysis

Chloé Lebon
Administration and finance

Laetitia Martin
Typesetting and design

Pierre Mounier
Project supervision and management

Paulin Ribbe
Project management

Judith Schulte
Communication

Angela Walseng
Communication



Authors

Arianna Becerril
Redalyc/AmeliCA

Lars Bjørnshauge
DOAJ

Jeroen Bosman
Universiteit Utrecht

Jan Erik Frantsovåg
UiT The Arctic University of Norway

Bianca Kramer
Universiteit Utrecht

Pierre-Carl Langlais
Université Montpellier 3 / OPERAS

Pierre Mounier
OPERAS

Vanessa Proudman
SPARC Europe

Claire Redhead
OASPA

Didier Torny
CNRS

Executive Summary

Context

From June 2020 to February 2021, a consortium of ten organisations undertook a large-scale study on open access journals across the world that are free for readers and authors, usually referred to as “OA diamond journals”. This study was commissioned by cOAlition S [\[7\]](#) in order to gain a better understanding of the OA diamond landscape.

Presentation

The study undertook a statistical analysis of several bibliographic databases, surveyed 1,619 journals, collected 7,019 free text submissions and other data from 94 questions, and organised three focus groups with 11 journals and 10 interviews with hosting platforms. It collected 163 references in the academic literature, and inventoried 1048 journals not listed in DOAJ.

The results of the study are available in the following outputs:

- › References Library - DOI: [10.5281/zenodo.4562816](https://doi.org/10.5281/zenodo.4562816) [\[7\]](#)
- › Journals Inventory - DOI: [10.5281/zenodo.4562828](https://doi.org/10.5281/zenodo.4562828) [\[7\]](#)
- › Dataset - DOI: [10.5281/zenodo.4553103](https://doi.org/10.5281/zenodo.4553103) [\[7\]](#)
- › Findings Report - DOI: [10.5281/zenodo.4558704](https://doi.org/10.5281/zenodo.4558704) [\[7\]](#)
- › Recommendations Report- DOI:[10.5281/zenodo.4562790](https://doi.org/10.5281/zenodo.4562790) [\[7\]](#)

Objectives and topics

cOAlition S defined three objectives concerning recommendations to be made to various stakeholders:

- › Identify scholarly publishing sectors where efficiency gains, collaboration and training in terms of shared services or infrastructure are required;
- › Identify the main challenges faced by collaborative non-commercial journals and platforms in meeting the needs of open access policies and industry-standard operational and technical requirements, and formulate recommendations to overcome these challenges;
- › Provide an action plan and recommendations for principles and funding mechanisms with agreed, equitable, transparent, efficient and effective ways for a range of actors to co-finance relevant collaborative non-commercial non-APC journals and platforms.

This document presents the recommendations based on the results of extensive research into the OA diamond landscape. Recommendations have been grouped into five different topics:

- › Technical support
- › Compliance with Plan S
- › Capacity-building
- › Effectiveness
- › Sustainability

Key target stakeholders

Four key target groups will be critical to realise these recommendations:

- › **Funders:** Research Funding Organisations, i.e. RFOs such as national funding agencies, government, private foundations or other organisations in their funding capacity. In some cases “cOAlition S funders” are specifically mentioned, although these recommendations are written for a broader group;
- › **Institutions:** Universities or Research Performing Organisations, i.e. RPOs (including research departments, university presses and libraries) and all other public research performing organisations;
- › **Societies:** Independent scholarly associations, learned societies and foundations supporting the advancement of knowledge in a certain field of research;
- › **Infrastructures:** Organisations that provide support services to the OA diamond journals to perform certain technical tasks, such as copy-editing, typesetting, hosting, indexing, dissemination, archiving or preservation.

Note that institutions and societies function as owners of journals in most cases, but can also provide funding and services, and furthermore, journals may be established by scholars within an institution which it may then host or otherwise support.

List of Recommendations

Id	Topic	Recommendation	Target
R_{1.1}	Technical support	Better coordinate editorial and quality assurance service provision	Infrastructures and Institutions
R_{1.2}		Formalise legal ownership and governance rules	Institutions, Societies and Infrastructures
R_{1.3}		Increase infrastructure capacity to support bibliodiversity	Funders, Institutions and Infrastructures
R_{2.1}	Compliance	Raise awareness and understanding of open licenses and promote policy implementation	Funders, Institutions and Societies
R_{2.2}		Facilitate access to DOIs, particularly for smaller journals	Infrastructures and Institutions
R_{2.3}		Stimulate and enable journals to preserve their content	Funders
R_{2.4}		Encourage self-archiving policy registration	Funders, Institutions and Infrastructures
R_{2.5}		Improve access to formatting tools and services	Funders and Infrastructures
R_{3.1}	Capacity building	Create an OA diamond Capacity Centre	Funders, Infrastructures, Institutions and Societies
R_{3.2}		Develop an organised marketplace for OA diamond	Infrastructures
R_{3.3}		Organise an international symposium and workshop to prepare the creation of the Capacity Centre	Funders, Institutions and Infrastructure
R_{4.1}	Effectiveness	Further develop partnerships with the goal to help raise funds and seek out efficiencies	Institutions and Societies
R_{4.2}		Consider using more shared services and infrastructure	Institutions and Societies
R_{4.3}		Reflect on the mid- to long-term role of volunteers and in-kind contributions in running journals	Institutions and Societies
R_{4.4}		Diversify journals' funding streams	Institutions and Societies
R_{4.5}		Aim to consistently manage formal journal budgets	Institutions and Societies
R_{4.6}		Register OA diamond journals in DOAJ	Institutions and Societies
R_{5.1}	Sustainability	Collaborate on a funding strategy for OA diamond	Funders, Institutions and Societies
R_{5.2}		Consistently finance the operations of OA diamond journals	Funders
R_{5.3}		Invest in the future of OA diamond	Funders
	Conclusion	Towards a new OA commons	All

Action Plan for Implementation

We recommend to start implementing the recommendations in the following order:

1



Prepare the **International Workshop and Symposium (R_{3,3})** within 6 months to initiate a global conversation among the different stakeholders, in particular institutions and societies, to explore building the Capacity Center (R_{3,1}) and to implement recommendations about effectiveness (R₄).

2



Set up the **Funding Strategy (R_{5,1})** within 1 year to implement the other funding recommendations (R_{5,2} and R_{5,3}), coordinating within cOAlition S but also reaching out to other funding stakeholders across the world.

3



Build the **Capacity Center (R_{3,1})** within 2 years to support the implementation of other technical recommendations (R₁ and R₂).

Detailed Recommendations



1 Streamline Technical Support

Evidence from the findings

A large share of OA diamond journals are not included in established indexes, such as DOAJ (approximately 10,000 are in DOAJ out of an estimated 29,000), which leaves a large part of the landscape almost unknown and uncharted for key target groups. It is a serious obstacle to funding and policy organisations who set up and implement policies on open access, and to infrastructures that lack crucial information to provide services better fitted to the needs of the sector.

There are several areas where synergies could be found through better streamlined technical support and coordination on editorial and quality assurance tasks, between journals, institutions, infrastructures and service providers. Typesetting and copy-editing are the most outsourced editorial tasks (196 respondents), whereas access to anti-plagiarism software is not used by 41% of the journals surveyed, and the recruitment of peer reviewers is by far the main reported challenge (137 free text responses). Monitoring and reporting are also domains in which journal capacity is low (46% of the journals do not provide download statistics and 54% provide no statistics related to production management); journals could benefit from shared tools and services in this area. The majority (60%) rely more or less heavily on volunteers to perform their editorial tasks, which has not been well defined so far, and is clearly not recognised as a contribution in scholars' activity assessment. Invisible work can be considered as a major issue as it poses a risk to journals' stability.

The study also highlights a risk to the OA diamond landscape since only half of the survey respondents declare they have a legal document establishing ownership of the journal. This is not always identified as a risk by journal editors themselves, and the distribution of journals in that situation depends on the size of the journal and even more so on the countries where they are based. However, this important challenge needs addressing as it entails legal uncertainty regarding the governance of the journals and risks on the soundness of the decision-making process within the board of the journal and when it comes to managing succession.

Finally, the study clearly shows a discrepancy between the current infrastructure offering and the specific needs of OA diamond journals on several levels. While 60% of the respondents mention PKP OJS as the publishing software they use to host and disseminate their journal online, the hosting services mentioned are widely scattered which shows a lack of coordination in the sector as well as a limited ability of national and international platforms to address the diversity of the landscape. Several respondents note that some hosting platforms require applicant journals to have several years of publishing or to meet certain quality criteria, which can make the cost of entry too high for them. As a result, a number of journals are self-hosted or hosted on generic content management systems not well suited to handle academic content.



Infrastructures and Institutions

Better coordinate editorial and quality assurance service provision

► **Infrastructures and Institutions**

Develop tools, resources and processes to enhance the sharing of information on peer reviewers

The development of tools that enable the sharing of information on peer reviewers between journals within the same discipline and/or language will help resolve the issue of finding relevant and good reviewers.

Whereas such services **already exist in the commercial sector** [↗](#) and within most commercial publishers, similar support should be provided to OA diamond journals by public infrastructures and non-commercial service providers through collaboration between hosting platforms, academic institutions and publishing software developers.

► **Infrastructures**

Provide journal reporting capacity

Journals increasingly need to report in a transparent way on their activity to obtain funder support: on the number of submissions received, articles published during a certain period of time, project outputs funded by a specific funder and on the number of authors affiliated with a certain institution. Journals should be able to rely on a common infrastructure connecting them to funders, enabling a trusted exchange of information, such as the service provided by the **OA Switchboard** [↗](#). Hosting platforms and workflow management systems should be able to connect to such tools to enable a seamless flow of information between the different components of the ecosystem.

Institutions and Infrastructures

Acknowledge voluntary editorial work in the document metadata and support the creation of more relevant role taxonomies

Scholar and graduate student voluntary work in editorial functions should be documented and acknowledged in journal editorial workflow management processes by providing their identification in the article's standard metadata. Whereas existing contributor role taxonomies such as **CRedit** [↗](#) could play this role, they currently don't include editorial roles and therefore should be expanded. More generally, current discussions on improving rewards and incentives for researchers practising open science, such as the **OS-CAM** [↗](#), or the **COSO Recommendation** [↗](#) on "types of documents, productions and activities promoted by open science and eligible for evaluation", do not include such functions and should also be expanded.

Institutions

Improve research assessment policies to acknowledge peer review

Peer reviewing needs to be rewarded by acknowledging it in researchers' assessment policies to recognise reviewers for this essential work.

Funders and Institutions

Sponsor access to anti-plagiarism services

Very few journals know of the existence of shared anti-plagiarism services such as **Similarity Check** [↗](#) provided by Crossref. For a small additional fee, journals could access the service, provided their owning organisation is already a member of Crossref. Sponsors could fund access to such a service for many OA diamond journals.

RR1.2

Institutions, Societies and Infrastructures Formalise legal ownership and governance rules

Institutions and Societies

Support legal clarification on ownership of journals

Research and higher education organisations should specify the ownership status of their journals to avoid unnecessary legal risks for the journal such as hostile acquisition, and for better succession planning. This primarily concerns universities and other research performing organisations that do not know the existence of journals they “own”, particularly when they do not have a university press, nor provide any particular support from their library to scholars managing the journals. They could start by taking inventory of journals at their organisation and then call on support from legal offices to establish or clarify legal documentation that secures that ownership of the journals of their society or institution.

Institutions and Infrastructures

Develop legal and governance guidance, tools and templates

It is advised that research institutions and infrastructures provide journal editors with tools and templates to help formalise the journal's legal status, the ownership structure and guidance on good governance. As an example of the type of tools needed, in 2019 a group of editors, copy-editors and legal experts from several institutions released [a document](#) that lists several legal recommendations for the creation and publishing practices of an academic journal, dealing with specific topics such as trademark protection, attribution of an ISSN, management of the legal deposit, legal responsibility and including contract models to be used by journal editors.

R1.3

Funders, Institutions and Infrastructures Increase infrastructure capacity to support bibliodiversity

Funders

Support existing hosting services based on standard open source technologies

To be able to support and host new journals, hosting platforms need extended funding as the onboarding process of new journals is particularly costly and requires more human resources.

There is a need to fund software development to enable open source publishing software such as [OJS](#) and [Lodel](#) to be more flexible and accommodate a wider variety of journals with their specificities, including multimedia material management, innovative peer review practices or workflow management, and specific formatting.

Institutions and Infrastructures

Continue mapping and reach out to OA diamond journals

The [crowdsourced list of OA diamond journals](#) not indexed in DOAJ should continue to be managed and extended as it can be a useful tool for DOAJ and other infrastructures to identify journals that can be integrated and supported in the future. More generally, it provides crucial information to the community to better understand the diamond landscape and its dynamics. Similarly, infrastructures such as DOAJ would require more resources to be able to support journals from several regions of the world and linguistic areas, for example by extending their [ambassadors' program](#).

2 Ensure Compliance with Plan S

Evidence from the findings

▶ This study shows that OA diamond journals are not yet fully compliant with the standards specified in the Plan S technical requirements. Of the six criteria surveyed, a mere 4,3% of OA diamond journals comply with all criteria; and only 37% comply with more than half of all criteria. Regarding the use of open licenses, 37% of journals use a CC-BY license. Furthermore, only 49% of the journals embed machine-readable licenses in their metadata as required by Plan S.

Regarding the use of persistent identifiers, 55% of the journals use a DOI. The size of the journal correlates with their ability to attribute such identifiers to their articles. It is likely that Crossref membership fees are too high for many journals.

Regarding the preservation of content, 68% of the journals have no preservation policies. Of those who have a preservation policy, 60% use a standard archiving system that may comply with Plan S requirements. Local solutions like national libraries are quoted by 10% of the respondents.

With reference to self-archiving policy registration services, 9,804 journals state that they do not have a self-archiving policy. Only Sherpa/Romeo satisfies the Plan S recommendation, although other services are used in other regions or languages.

In terms of content structuration and formatting, which is a Plan S recommendation rather than a hard requirement, 75% of journals are unable to format their content either in XML or in HTML, providing only PDF in most cases. This is an issue because the PDF format, which has been designed to print digital content, is otherwise a technical limitation to online accessibility.

R2.1

Funders, Institutions and Societies Raise awareness and understanding of open licenses and promote policy implementation

cOAlition S, Funders and Institutions

Promote open licenses

Funders and institutions should strive to promote the introduction of open licensing where not yet available. Documentation, training and more general communication about open licenses should be provided to journal editors and owners, in particular, to explain differences between the varying types of CC licenses. The adoption of a CC-BY license by journal editors should not be only the result of an external pressure to “be compliant”, but the rationale behind it should be known and understood by them. Partnerships with [Creative Commons Foundation](#) and its [Global Network](#) could be useful to that aim.

cOAlition S, other Funders, Institutions and Societies:

Promote the importance of retroactively providing information on open license article metadata


Plan S requirements currently apply to new articles. Specific support is needed to retroactively embed open licenses in articles which are already published. This will enable the access and reuse of all articles in backlists, which are essential to some disciplines. This entails administrative work in particular to chase authors and collect authorisations from them.

R2.2

Infrastructures and Institutions Facilitate access to DOIs, particularly for smaller journals

► **Infrastructures and Institutions**

Facilitate the acquisition of DOIs for smaller journals through Crossref Sponsoring Organisations

Crossref already offers a [sponsorship mechanism](#)  that allows intermediate organisations to purchase DOIs for journals, which is of particular interest to small journals. This sponsorship mechanism is not sufficiently known and wider use of it could help dramatically increase the adoption of DOIs by journals.

R2.3

Funders

Stimulate and enable journals to preserve their content

▶ **cOAlition S**

Amend the Plan S content preservation requirement to include more service providers

Currently, the Plan S technical requirement on preservation only mentions a few content preservation providers: “CLOCKSS, PORTICO or equivalent”. For journals to effectively comply, more alternatives need to be specified such as [LOCKSS](#), the [Internet Archive](#) and national library preservation services, for example.

▼ **cOAlition S and Infrastructures**

Facilitate the preservation of journal content by improving technical interoperability between services

As journals, in particular smaller ones, do not have the technical expertise to manage content preservation and they encounter difficulties to work with preservation service providers, support should be provided to hosting platforms to improve interoperability with preservation systems, following the example of the [PKP Preservation Network](#), or the more recent cooperation between [DOAJ](#), [Internet Archive](#) and [CLOCKSS](#).

▼ **cOAlition S and other Funders**

Support and develop the registry of archiving services

A registry of existing content preservation services already exists: the [Keepers Registry](#), developed by Jisc and now operated by the International Centre of ISSN. This registry provides information on existing content preservation services across the world and needs more financial support to help journals find clear and accessible information related to them.

R2.4

Funders, Institutions and Infrastructures Encourage self-archiving policy registration

► cOAlitions S Funders, Institutions and Infrastructures

Raise awareness of the importance of registering self-archiving policies

OA diamond journals need to be more aware of the importance of having a self-archiving policy and sharing that policy online. Funders, particularly cOAlition S, libraries, and their institutions will need to engage here to mobilise change by running a communication campaign, providing training and documentation, and by ensuring that infrastructures embed this information in their metadata.

cOAlition S

Amend the Plan S requirement on self-archiving policy to include other registration services

Referring to Sherpa/Romeo exclusively as a compliant self-archiving policy deposit service does not sufficiently address the cultural and linguistic diversity of OA diamond journals. Plan S requirements should therefore extend compliance with other well-established services across the world, such as [Dulcinea](#) in Spain, [Diadorim](#) in Brazil, [Aura](#) for diamond OA journals in Latin America, and others.

R2.5

Funders and Infrastructures Improve access to formatting tools and services



cOAlition S Funders and Infrastructures

Support the development of generic tools to generate structured content in XML and HTML

Being able to produce structured content in XML and/or HTML, embedding nested sections, footnotes, tables and figures, indexes and bibliographies, requires either access to expensive production tools, or production workflows that need skilled human resources to operate. A number of infrastructures have tools and services that facilitate structured content generation for the journals they serve such as [Ameli.ca](#), [PKP](#), [Metopes](#) and [OpenEdition](#). Funding would be necessary to develop the services (tools and skills) at a global level, extending access to such a service to a much larger number of journals, particularly all those using OJS on an institutional platform. This would require improved interoperability and collaboration between infrastructures.

3 Build Capacity

Evidence from the findings

The survey sample of over 1,600 journals reports that 86% of OA diamond journals publish fewer than 50 articles per year. These journals differ in size, maturity, expertise and experience. However, they are alike in that thousands of journals are carrying out similar activities to manage journal editing processes and to disseminate research, and many share common technical and financial challenges that could be addressed collaboratively. This study has revealed issues in a range of areas, e.g. with funding, indexing, quality assurance, marketing, intellectual property, managing DOIs or with having the future-fit technology and infrastructure in place to support text to XML/HTML conversion, for example.

While the majority of journals are satisfied that their current financial model serves them, 20% considered moving away from OA diamond or plan to do so with considerable concerns related to their longer-term feasibility and/or economic viability and the impact factor influencing their choices. Sharing knowledge and experience with other journals on financial sustainability models, and on how to demonstrate article impact and journal value (and funders and institutions moving away from using journal impact factor in research evaluations), can help build confidence here. Furthermore, when asked how research funders might support the financial sustainability of OA diamond journals, almost 100 journals stated they need more staff resources for editorial and technical support. Some of these respondents proposed sharing expertise between journals, either in the form of personnel or via a shared hosting platform or service. Finally, journals reported that having the expertise and staff resources can be more essential than obtaining extra funding.

It will therefore be important to build capacity in the OA diamond sector to connect a diverse and fragmented publishing landscape by utilising existing resources in expertise and by acquiring additional support to address concerns and shortcomings.

R3.1

Funders, Infrastructures, Institutions and Societies Create an OA diamond Capacity Centre

Explore the feasibility of collaborating with a range of OA diamond stakeholders to build technical, editorial, financial and administrative capacity to strengthen the OA diamond service offering. A new OA diamond Capacity Centre would coordinate and provide a variety of services for a wide range of communities addressing common themes to help grow, strengthen, innovate and save costs for the OA diamond sector. It will contain two key components: a network in the form of a Community of Practice (CoP), and a resource centre that provides toolkits, training and workshops—adaptable for various disciplines—as well as journals, in different languages. The CoP will contain members of existing networks, experts and OA diamond editors, managers or publishers with the aim of building strong lines of communication between OA diamond journals of different maturities. The Capacity Centre will support them in building capacity and working together in areas such as accounting, funding, indexing, editorial workflows and peer review, marketing, open licensing, preservation and other areas. The CoP would strive to federate and collaborate with key existing OA diamond communities and networks organised around regions, disciplines or languages to help accelerate progress for a larger group of journals and platforms. It would also help build new communities where necessary. The CoP would have regular meetings in a range of geographical regions, could form new consortia for more competitive pricing bids, collaborate on joint projects, raise awareness of the value of OA diamond to learned societies and others, share expertise, and address common issues more effectively together based on lessons learnt. Above all, the Centre would focus on building more shared services and infrastructure for the benefit of open scholarship and, over time, provide a strong service infrastructure that many can depend upon. It would also supply support for smaller OA diamond journals by providing them with more capacity and resources to support them on the transition to a more connected, collaborative and unified OA diamond publishing system.

R3.2

Infrastructures Develop an organised marketplace for OA diamond



Create a controlled and organised marketplace to locate service providers and experts where outsourcing is necessary in areas such as accounting, copy-editing, indexing, marketing and technology, and encourage quality while promoting healthy competition. This will serve to help many OA diamond journals find fair, reliable and high-quality service providers. Examples of such systems are the *Jisc Dynamic Purchasing System* [↗](#).



R3.3

Funders, Institutions and Infrastructure Organise an international symposium and workshops to prepare the creation of the Capacity Centre

-
- Organise a symposium and workshops to present the vision and the Capacity Centre to the OA diamond publishing community with existing international (e.g. Redalyc, SCIELO, Ubiquity) and national platforms (e.g. Croatia, Denmark, Finland, France, Japan, Netherlands), and with key OA diamond publishing stakeholders including organisations such as AEUP, ALLEA, ALPSP, AmeliCA, cOAlition S, DOAJ, EASE, EUA, LIBER, OASPA, OPERAS, PKP, Science Europe, SPARC Europe and others to discuss the concept, raise awareness of current regional solutions and start to scope it out.
-

4 Increase Effectiveness

Evidence from the findings

▶ We estimate there are approximately 29,000 OA diamond journals worldwide and only 11,504 of these are registered in DOAJ as of February 2021, which makes it difficult for funders to locate the OA diamond journals in their regions. Eighty-six percent of them publish fewer than 50 articles per year. This diverse and fragmented landscape of journals grew over time. Journals carry out similar activities and need to locate resources for payables such as editing, copy-editing, typesetting, and technical and software support costs. Working more formally together in partnerships within and across borders can help journals to streamline such costs.

As far as the financial health of OA diamond journals is concerned, just over 40% of journals reported breaking even and 25% stated a loss. Almost one-third of journals reported not knowing their financial status, with over one-third of these reported by both university-owned journals and university presses. Furthermore, 19% reported not knowing their costs of the previous year. This lack of information is concerning when financial stability is precarious and where losses are made unintentionally, particularly since it makes budget and efficiency planning difficult.

Payables are kept down by many journals with the utilisation of volunteers, with the majority that rely highly on volunteers running on 1 FTE. Sixty percent of journals depend on volunteers to carry out their work with 86% reporting having either a high or medium reliance on them. Volunteers can therefore be considered essential to running the journal and keeping payables down. However, not enough is known about the motivations for utilising volunteers, i.e. to what extent this is embedded in the culture of the discipline or region, or whether it is rather a means to carry out a task at as low a cost as possible. Volunteering is mentioned as a challenge in free text comments by almost 50 respondents who expressed concerns about the reliance on the goodwill of volunteers and on the dedication of certain individuals who sustain journals who cannot be necessarily relied upon in the mid- to long-term. Since so many OA diamond journals are dependent on volunteers, this may threaten the sustainability of journals that are essential to research communities.

OA diamond journals report a wide range of funding mechanisms to fund operations and development costs, from in-kind support, voluntary labour, grants, collectively-organised funding, donations, shared infrastructure, membership, funding proportional to the articles published, freemium services, Subscribe to Open and more. This indicates that a range of funding options exist and could be utilised by journals to raise funds if they are aware of the options available to them.

Journals also reported their need to gain efficiencies, with 25% calling for more direct funding and shared services; one-quarter of these mentioned shared platforms. They recognise that costs can be saved by joining up services when managing DOIs, hosting, anti-plagiarism services, for copy-editing, translation, or software maintenance services. Many also called for financial support for technical infrastructure, particularly for journal hosting—an area where shared services could serve journals well.

In the short to medium term, the owners of OA diamond journals and their publishing support staff in institutional publishing departments, libraries, at university presses, or in learned societies, for example, will need to help OA diamond journals implement a range of recommendations.



Institutions and Societies **Further develop partnerships with the goal to help raise funds and seek out efficiencies**

Academic communities from institutions and societies will be important to help progress and support OA diamond shortcomings. They will be essential to help their OA diamond journal peers to save costs, innovate, collaborate and become more efficient. Working more strategically together can result in getting access to development grants more effectively, to achieve more competitive rates following the library consortium model, for example, and in new consortia and shared services. These may be organised by discipline, by languages journals have in common, or within a specific region (international, national or sub-region). New communities will complement existing structures and all will be encouraged to join the OA diamond CoP. These communities will be crucial to help implement change for OA diamond journals by utilising existing expertise and resources.



R4.2

Institutions and Societies Consider using more shared services and infrastructure

▼ A more mature and interconnected shared service and infrastructure framework is needed to alleviate OA diamond resource pressures, for reasons of efficiency and to save costs. Regional, national, international hosting platforms or those focussed on multidisciplinary or domain-specific themes can provide more services to smaller journals, for example by providing optimised workflow systems, hosting, indexing services, more advanced metadata services, usage data reporting systems or preservation. National and regional hosting platforms can take on such a role—though not exclusively—by bundling a number of services in one place, e.g. [Redalyc/Ameli.ca](#) and [Scielo](#) in Latin America, [Journal.fi](#) in Finland, [Tidsskrift.dk](#) in Denmark, [openjournals.nl](#) in the Netherlands, [Hrčak](#) in Croatia or [OpenEdition](#) in France.

▲

R4.3

Institutions and Societies

Reflect on the mid- to long-term role of volunteers and in-kind contributions in running journals

The owners of journals should analyse the way that volunteers and in-kind contributions are used to lead and support OA diamond. Volunteering might be transformed into making more formal mid- to longer-term commitments by the institution, including more paid work where feasible or advisable. When it underpins the development of young academics, this could be reinforced and formally rewarded by the institution and funder.

R4.4

Institutions and Societies Diversify journals' funding streams

-
- ▼ When OA diamond journal operations are not fully funded, and to prevent too much of a dependence on a single funding stream or funding model, OA diamond journals should seek to utilise one or more additional funding streams to cover costs. Choosing the appropriate funding stream will be dependent on the local funding context, e.g. national OA policy, the possibilities within the legal remits of the journal's organisation (university, not-for-profit, for-profit), available grants, service offering, and community-funding culture suited to the level of maturity of the journal or its subject domain.
-

R4.5

Institutions and Societies Aim to consistently manage formal journal budgets

It is advised that OA diamond journals might more regularly manage budgets based on standardised cost structures, e.g. income streams, recording indirect (in-kind, voluntary or infrastructure) and direct costs or payables to enable them to evaluate losses and explore efficiency gains more effectively.

R4.6

Institutions and Societies Register OA diamond journals in DOAJ

- ▶ To allow funders to know about the OA diamond journal offering and whether it complies with quality standards, it is recommended that OA diamond journals that comply with their standards register in [DOAJ](#). This would allow funders to use DOAJ as a resource to locate quality journals in need of funds.

Sustain and Invest in the Future

Evidence from the findings

Forty-one percent of journals are owned by universities, with learned societies or other research organisations having a much smaller stake in OA diamond journals (at 14% and 8% respectively). They are largely financially supported by Research Performing Organisations (541), by national funding/government agencies (351) and by publishers (320). Almost 200 are supported by scholarly or learned societies. Other funders include museums/archives/heritage institutions (GLAM), NGOs or charities, international funding agencies, national academies and RFOs, among others. Journals are clearly indebted to their funders. However, despite stable sources of funding from governments, for example, some journals are concerned that changes in policy or a sudden crisis, like the COVID-19 pandemic, will negatively affect them.

Although almost two-thirds of respondents are confident about the sustainability of their journal in the next three years, 18% are considerably less confident and 28% percent are somewhere in between. Those with the least confidence in their financial security are university presses, individuals and learned societies, demonstrating the particular precarity of publishing. Furthermore, just over 40% of journals report breaking even and 25% state a loss, with almost two-thirds of these owned by government agencies.

Some journals argue that research funders have the responsibility to support or even favour OA diamond journals since they are often excluded from discussions on funding OA. While, the Plan S Principle 5 states that «the Funders support the diversity of business models for Open Access journals and platforms», perceptions will change once funders focus on OA diamond in addition to Gold OA and legacy publishing. This action has a significant potential to cover existing gaps in OA publishing. When asked how funders could help sustain journals, ideas range from calling for support for more structural funding, to sustain operations, to direct funding for payables to funding specific items such as infrastructure. Almost 150 journals called for more long-term structural funding from funders to help sustain the operations of their journal. About 75 journals saw grants as a way for funders to support OA diamond and called for more short- or medium-term funding, as well as more micro-grants that could fund specific services such as hosting.

Journals stated that funds are needed for payables where in-kind contributions cannot be found. The five main expenses/payables of the journal are: editing, copy-editing, technical and software support and typesetting. In addition, almost 100 journals reported the need for more staff resources, either FTE or in-kind contributions from universities or their libraries, to assist with editorial and technical support. Funding is specifically needed to fund operational costs.

Over 70% of OA diamond journals reported running on 1-2 FTEs or less, and over 60% of journals report annual costs under \$/€10,000. This will be needed in the short, medium and long term. In addition, a different kind of investment will be needed to build a more connected, efficient and effective OA diamond digital publishing ecosystem and infrastructure.

R5.1

Funders, Institutions and Societies Collaborate on a funding strategy for OA diamond

National funding and government agencies, RFOs, including cOAlition S, RPOs, libraries and other owners and funders of OA diamond journals, collaborate to develop national and international funding strategies for OA diamond publishing for the next five years. A strategy would specify what to fund in two areas: operations and development.


This new strategy would provide guidance on [funding principles](#) and criteria for selection based on international OA goals and national priorities. It will also call on lessons learnt from the [Global Biodata Coalition](#) or expertise at [Invest in Open Infrastructure](#).

The strategy would also advise on *how* to fund what, with concrete scenarios to help fund operations. This strategy might aggregate and evaluate existing international and national RFO funding mechanisms or scenarios that could inform funders on how to fund beyond grants, such as by pooling donations amongst funders, paying membership, services fees for DOIs for example or by investing in shared infrastructure. It may also inspire the development of new funding mechanisms, such as funding OA diamond by article or by authorship ratio, for example. A number of funding scenarios are part of the follow-up study conducted by the Centre for the Sociology of Innovation at Mines ParisTech due out in late 2021. A few high-level areas to target are described below.

R5.2

Funders

Consistently finance the operations of OA diamond journals

▼ We owe the wide OA diamond offering largely to RPOs, national funding and government agencies, publishers, learned societies, and libraries. They have primarily been funding their operations, including staff, payables or in-kind contributions. It is crucial that these commitments continue. However, this needs to be done more extensively and, above all, more consistently through more regular annual funding, since current support falls short of current needs. RFOs have not always made significant contributions here. Libraries have been increasingly involved in collectively funding Open Access through SCOAP3, OLH, OpenEdition Freemium, and SCOSS, and some are heavily investing in supporting OA publishing. Some even have dedicated funds for OA diamond, like the Amsterdam [UvA Diamond OA fund](#) .

Funding should focus on journals that deliver on quality criteria as specified by DOAJ. Operational funding is needed to address the costs of additional staff for editing, technical support or infrastructure, for example, or payables such as widespread expenses for editing, copy-editing, technical and software support, typesetting, and DOI management. How exactly diamond journal operations will be funded, and by whom, will be determined by the funding strategy as specified in the previous section. Furthermore, once investments in new activities to mature OA diamond journals and their services/ infrastructure have taken hold and proven their worth over time (as specified below), support will be needed to fund the operations of shared services and infrastructure by a broad range of funders.

▲

R5.3

Funders Invest in the future of OA diamond

Funders have the potential to help create a new optimised and thriving OA publishing ecosystem to support research. Investment through development funds is needed to innovate and help create a more unified, interconnected and interoperable OA diamond infrastructure and offering. In addition to providing funding for operations, it will be important for funders and research institutions to prioritise investing in helping journals meet industry standards and in lighthouse projects that develop shared services or infrastructure for a more coherent publishing system that serves scores of journals—many of them small—and hosting platforms worldwide. This investment will strengthen publishing service provisions, journal quality and visibility and should eventually alleviate strains on resources for OA diamond journals and hosting platforms. For this to work in the mid- to long-term, journals could benefit from a more collaborative way of working to transition to a more efficient, shared and mature service offering.

In practical terms, funders can also provide more short-, medium- and long-term lightweight grants, such as microgrants, to innovate and develop the OA diamond journal and hosting platform and its service/infrastructure. Development grants are needed to help provide technical support for peer review management, good governance and legal documentation, for example, or to meet important industry standards, such as open licensing, improved structured digital formats for maximum accessibility and to help archive and preserve the research output of OA diamond journals. Further investment in this area can help multiple journals join forces in new regional, national or domain-specific publishing platforms, or other shared services that address these areas.

Funders can also demonstrate their commitment to and belief in open access by investing in building capacity amongst OA diamond editors across countries and by helping to build an OA diamond Capacity Centre. These activities will help bring the fragmented OA diamond publishing landscape together to collaborate in a new coordinated way for the good of a more interconnected OA publishing ecosystem that contributes to a new OA commons.

Conclusion

Towards a New OA Commons

Our vision is to create a diverse, thriving, innovative and more interconnected and collaborative OA diamond journal ecosystem that supports bibliodiversity and serves many languages, cultures and domains in the future: The OA Commons. The OA Commons will be a new more integrated international OA publishing system and ecosystem that serves the research community. The current fragmented OA diamond landscape needs to be built as a community that will support diversity and include a wide range of different academic communities in different languages. Whilst it is important to maintain the diversity in branding, topic and language, the underlying publishing work-processes and services of the OA diamond journal can be better streamlined and shared.

The OA Commons will be community-driven and will bring communities together who already are or want to work together to become more effective, efficient and to build capacity for OA diamond journals. It will help them grow and innovate in a more collaborative way. They will be motivated to connect and collaborate for their own needs, and for the greater good of open research. These communities will have the say in how the OA Commons is governed, developed and maintained.

In summary, the OA Commons will bring together the world's community-driven and governed journals and platforms, connecting and supporting them in a new more coordinated way. This vision can be realised if institutions, societies, government, funders—including cOAlition S—commit to funding operations and development in the short, medium and long term. This way the OA diamond community will be able to increase its significant contribution to a more healthy, equitable and sustainable publishing ecosystem well into the future.