

# Response from the Royal Society of Biology to the UKRI Open Access Review

May 2020

*The Royal Society of Biology (RSB) is a single unified voice, representing a diverse membership of individuals, learned societies and other organisations. We are committed to ensuring that we provide Government and other policymakers, including funders of biological education and research, with a distinct point of access to authoritative, independent, and evidence-based opinion, representative of the widest range of bioscience disciplines.*

*The Society welcomes the opportunity to respond to the UKRI Open Access Review. We are pleased to offer these comments, which have been informed by specific input from our members and Member Organisations across the biological disciplines. Our Member Organisations are listed in the Appendix.*

*Please note, where applicable, chosen answers to multiple-choice questions are highlighted in **grey**.*

## Full List of Consultation Questions

### Section A: Research Articles

#### **Q1. To what extent do you agree or disagree that it is clear what research articles are in-scope of UKRI's proposed OA policy (see paragraph 46 of the consultation document)?**

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**If anything is unclear, please explain why (1,350 characters maximum, approximately 200 words).**

We welcome the breadth of publication types classified as in-scope under UKRI's proposed OA policy. However, we recommend caution with regard to review articles. These are important scholarly outputs and vital for scientific advance, contributing perspective and establishing expertise, and adding significantly to career maturation and progression. Additionally, review journals are a powerful means of communicating and aggregating research outputs and knowledge.<sup>1</sup> Review articles are often not written in relation to individual funded research projects and may synthesise several. Currently, review journals are less likely to offer OA options, and Article Processing charges (APCs) are often costly. It is important that UKRI-funded scientists are able to publish reviews in key influential journals.<sup>2</sup> Clarification and extended guidance on OA requirements for review articles, and UKRI funding acknowledgement is needed.

#### **Q2. Are there any additional considerations that the UK HE funding bodies should take into account when defining research articles that will be in -scope of the OA policy for the REF-after-REF 2021?**

Yes / **No** / Don't know / No opinion.

<sup>1</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

<sup>2</sup> The Society of Biology, 2014. [Society of Biology response to the Independent Review of the Implementation of RCUK Policy on Open Access](#)  
The Royal Society of Biology, 1 Naorji Street, London WC1X 0GB - Tel: +44 (0)20 3925 3440 - [www.rsb.org.uk](http://www.rsb.org.uk) - [consultation@rsb.org.uk](mailto:consultation@rsb.org.uk)

**If yes, please expand** (1,350 characters maximum, approximately 200 words). Please see paragraphs 29-31 of the consultation document before answering this question.

**Q3. In setting its policy, should UKRI consider any other venues for peer-reviewed research articles which are not stated in paragraph 47 of the consultation document?**

Yes /  No / Don't know / No opinion.

**If yes, please expand** (700 characters maximum, approximately 100 words).

**Q4. Are there any specific challenges for you, your community or your organisation in terms of complying with the requirement in UKRI's proposed policy for immediate OA of in-scope research articles?**

Yes /  No / Don't know / No opinion.

**Please explain and, where possible, evidence your answer.** UKRI notes that there will be a period allowing for implementation before the policy comes into force (see paragraph 70 of the consultation document). (2,650 characters maximum, approximately 400 words.)

The biological sciences are increasingly collaborative, often international, interdisciplinary and multi-institutional. The proposed timetable for the policy is concerning to societies wanting to retain internationally competitive publishing activity, and for scientists wanting to be able to publish in the most appropriate journal internationally.

A zero embargo period using a green route under CC-BY licensing presents challenges when subscriptions remain the dominant model. With the present pandemic many society publishers and library budgets will be further squeezed as a result of COVID-19. There are therefore significant uncertainties which make planning and adaptation difficult.

A small number of learned society publishers, including Portland Press Ltd (PPL) are trialling novel transitional models that charge minor uplifts on subscription packages to permit unlimited, APC-free OA publishing (currently uniquely offered). There is concern that widespread encouragement of immediate AAM deposition could threaten existing subscriptions before the system has evolved under transformative offerings. However, there are other publishers already permitting immediate routes.

Gold OA ensures that the best and most reliable possible version of an article is made openly available, with the publisher responsible for tying corrections/retractions/updates, or metadata alterations to it through mechanisms such as Crossmark. For example, in 2019, PPL published 22 article corrections.

**Q5. Should UKRI's OA policy require a version of all in-scope research articles to be deposited in a repository, irrespective of whether the version of record is made OA via a journal or publishing platform?**

Yes /  No / Don't know / No opinion.

**Please explain your answer** (700 characters maximum, approximately 100 words). Please note that some Research Councils already require articles to be deposited in specific repositories, as detailed in the terms and conditions of funding. UKRI does not expect this to change.

The use of a repository can increase accessibility, but in parallel with a primary point of deposit in a journal, this can complicate tracing the reach and use of articles. Especially in terms of version control and maintaining the 'best-quality' version of an article including any corrections. UKRI should work to ensure

high technical standards in any choice of repository, and discourage choice of a repository with a limited shelf-life or poor functionality. Primary articles from many disciplines will be of high value to the community many years after publication. The capacity to trace updates and corrections remains vital.

**Q6. For research articles, are there any additional considerations relating to OA routes, publication venues and embargo periods that the UK HE funding bodies should take into account when developing the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (2,000 characters maximum, approximately 300 words). Please see paragraphs 29-31 of the consultation document before answering this question.

The wide range of the life sciences requires consideration. Certain journals may become economically unsustainable<sup>3</sup> and this could limit publication venues for researchers participating in the REF. Limiting the rate of publication of specialist articles in niche biological topics could be to the detriment of research progress.

**Q7. To what extent do you agree or disagree that where compliance with UKRI's OA policy is achieved via a repository, a CC BY licence (or Open Government Licence where needed) should be required for the deposited copy?**

Strongly agree / Agree / Neither Agree nor disagree / Disagree / Strongly disagree / Don't Know / No opinion.

**Please explain your answer** (1,350 characters maximum, approximately 200 words).

We acknowledge that there are some concerns about CC-BY licence and the commercial use of research, with some potential for economic harm and implications for the research landscape. For example, mandating a CC-BY licence may breach existing agreements by which researchers obtain additional funding from industry partners; this could preclude future partnerships, effectively closing some doors to commercial collaboration of UK science. The impact of a CC-BY requirement would require close monitoring and review should detrimental effects emerge.

**Q8. To what extent do you agree or disagree that UKRI's OA policy should have a case-by-case exception allowing CC BY-ND for the version of record and/or author's accepted manuscript.**

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain your answer. UKRI particularly welcomes evidence supporting: specific cases where ND is considered necessary; an ND exception not being necessary; any implications an ND exception could have for access and reuse** (2,000 characters maximum, approximately 300 words).

A 2019 Taylor and Francis author survey which probed researcher attitudes to the different licence types, found that CC-BY continues to be the least popular licence with CC-BY-NC-ND being the most popular.<sup>4</sup> While the bioscience community is gradually adjusting to requirements for CC-BY licences, many authors remain nervous and there is still a need for information.<sup>5</sup> While the arts, humanities and social sciences are the expected areas where exceptions will be sought, guidance for interdisciplinary research will be

<sup>3</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)

<sup>4</sup> Taylor and Francis Group, 2019. [Taylor and Francis Researcher Survey](#)

<sup>5</sup> The Society of Biology, 2014. [Creative Commons licences: Guidelines for Authors and Users](#)

important. There is a risk of administrative overload to grant exemptions on an individual case-by-case basis only. Some disciplinary exemptions or at journal level would be pragmatic, but keeping the door open to unanticipated individual cases would also be wise.

**Q9. Would the proposed licensing requirements for UKRI's OA policy, which exclude third-party content (see paragraph 55 of the consultation document), affect your or your organisation's ability to publish in-scope research articles containing third-party content?**

Yes / No / Don't know / No opinion.

**If yes, please explain how** (1,350 characters maximum, approximately 200 words).

**Q10. Are there other considerations UKRI should take into account regarding licensing requirements for research articles in-scope of its proposed OA policy?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (1,350 characters maximum, approximately 200 words).

**Q11. For research articles, are there any additional considerations relating to licensing that the UK HE funding bodies should take into account when developing the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (2,000 characters maximum, approximately 300 words). Please see paragraphs 29-31 of the consultation document before answering this question.

**Q12. Which statement best reflects your views on whether UKRI's OA policy should require copyright and/or rights retention for in-scope research articles?**

- UKRI should require an author or their institution to retain copyright and not exclusively transfer this to a publisher
- UKRI should require an author or their institution to retain specific reuse rights, including rights to deposit the author's accepted manuscript in a repository in line with the deposit and licensing requirements of UKRI's OA policy
- UKRI should require an author or their institution to retain copyright AND specific reuse rights, including rights to deposit the author's accepted manuscript in a repository in line with the deposit and licensing requirements of UKRI's OA policy
- UKRI should not have a requirement for copyright or rights retention
- Don't know
- No opinion

**Please explain your answer. UKRI particularly welcomes views as to whether it is necessary to require copyright and/or rights retention if its policy were to require a CC BY licence, which enables reuse. If you selected answer b or c, please state what reuse rights you think UKRI's OA policy should require to be retained** (2,000 characters maximum, approximately 300 words). Please note that views are not sought on whether institutions should hold the copyright to work produced by their employees as this is subject to Section 11 of the Copyright, Designs and Patents Act 1988 and institutional copyright policies.

A small RSB individual member survey investigating Open Access policies highlighted 50% of survey participants retained copyright of published articles followed by 19% being owned by the publisher and less

than 5% being retained by institutions and other organisations such as the UK government.<sup>6</sup> The RSB values the importance of authors having the option to retain copyright to their work and encourages the importance of an informed individual choice. Many learned publishers permit author copyright retention as a matter of course. Currently there is a need for more effective engagement on this topic.

**Q13. Regarding research articles in-scope of UKRI's OA policy, to what extent do you agree or disagree with each of the seven proposed technical standard requirements for journals and OA publishing platforms?** For each of the seven standards (see paragraphs 67a-67g of the consultation document):

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

- a. Agree
- b. Agree
- c. Agree
- d. Agree
- e. Agree
- f. Agree
- g. Agree

For each of the seven standards (see paragraphs 67a-67g of the consultation document), **please explain your answer** (700 characters maximum, approximately 100 words, per standard).

- a. persistent digital object identifiers (PIDs) for research outputs must be implemented according to international standards such as DOI, URN or Handle
- b. article-level metadata must be used according to a defined application profile that supports UKRI's proposed OA policy and is available via a CC0 public domain dedication; the metadata standard must adhere to international best practice such as the Crossref schema and OpenAIRE guidelines
- c. machine-readable information on the OA status and the licence must be embedded in the article in a standard non-proprietary format
- d. long-term preservation must be supported via a robust preservation programme such as CLOCKSS, Portico or an equivalent
- e. openly accessible data on citations must be made available according to the standards set out by the Initiative for Open Citations (I4OC)

In measuring the quality of research outputs, a more sophisticated use of data would be valuable in many areas of the life sciences. Citation data adjusted to take into account the different citation practices of each discipline and its specific context, known biases, and the time since the research was published, could be used to assist the process of peer review by providing useful contextual information.<sup>7</sup> The Society regards as vital high standards of durable curation, with searchable and meaningful metadata as well as the facility for text and data mining<sup>8</sup>.

---

<sup>6</sup> The Royal Society of Biology, 2019. Individual members Open Access review survey

<sup>7</sup> The Royal Society of Biology, 2016. [The Royal Society of Biology has responded to the Review of the Research Excellence Framework \(REF\)](#)

<sup>8</sup> The Society of Biology, 2014. [Statement on text, data mining and interoperability](#)

f. self-archiving policies must be registered in the SHERPA RoMEO database that underpins SHERPA/FACT

The Society highly commends the use of databases such as SHERPA RoMEO which showcases the policies of academic journals on copyright and self-archiving.

g. unique PIDs for research management information must be used and must include the use of ORCID to identify all authors and contributors

Developments such as widespread adoption of ORCID IDs are a step in the right direction for improved inter-operability of databases and more freely available information.<sup>9</sup> A Ringgold based, or similar, check for corresponding author affiliations can also assist with supporting OA publication for authors in institutions with read/publish transformative agreements. From a diversity and inclusion perspective, the use of ORCID IDs can help address concerns about loss of publication record should researchers change their name for example following marriage, divorce or gender transition.

**Q14. Regarding research articles in-scope of UKRI's OA policy, to what extent do you agree or disagree with each of the five proposed technical standard requirements for institutional and subject repositories?** For **each** of the five standards (see paragraphs 68a-68e of the consultation document):

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

- a. Agree
- b. Agree
- c. Agree
- d. Agree
- e. Agree

For **each** of the five standards (see paragraphs 68a-68e of the consultation document), please explain your answer (700 characters maximum, approximately 100 words, per standard).

- a. PIDs for research outputs must be implemented according to international standards such as DOI, URN or Handle
- b. article-level metadata must be implemented according to a defined application profile that supports the proposed UKRI OA policy and is available via a CC0 public domain dedication; this should include the persistent identifier to both the author's accepted manuscript and the version of record; the metadata standard must adhere to international best practice such as the OpenAIRE guidelines
- c. machine-readable information on the OA status and the licence must be embedded in the article in a standard non-proprietary format
- d. unique PIDs for research management information must be used and must include the use of ORCID to identify all authors and contributors
- e. the repository must be registered in the Directory of Open Access Repositories (OpenDOAR)

---

<sup>9</sup> The Royal Society of Biology, 2016. [The Royal Society of Biology has responded to the Review of the Research Excellence Framework \(REF\)](#)



There is concern that indexing and discoverability within some repositories may be sub-optimal, and indeed the Green OA route that Plan S supports might encourage articles that are more accessible but less discoverable.<sup>10</sup> The Society regards as vital high standards of durable curation, with searchable and meaningful metadata as well as the facility for text and data mining<sup>11</sup>. Adoption of standards across new repositories is essential to facilitate search and robust data gathering.

**Q15. To support the adoption of technical standards for OA, are there other standards, actions and/or issues UKRI should consider?**

Yes / No / Don't know / No opinion.

**Please explain your answer** (2,650 characters maximum, approximately 400 words).

The Society expects that there will continue to be innovation and development in this area, we support the concept of encouraging a Contributor Roles Taxonomy (CRediT) approach to acknowledge the different roles authors have contributed to a scholarly publication output. However, there are many different and valuable roles to be played in research and the flexibility to capture them is important. This area needs further development. Open discussion with UKRI about development of standards would be welcome as this takes time and investment. Support for development of read/publish and other transformative offerings is also important. For all options, communication to inform funded researchers and institutions will be vital.

**Q16. To support the implementation of UKRI's proposed OA policy requirement for research articles to include an access statement for underlying research materials (see paragraph 69 of the consultation document), are there any technical standards or best practices that UKRI should consider requiring?**

Yes / No / Don't know / No opinion.

**Please explain your answer** (1,350 characters maximum, approximately 200 words).

Many societies are encouraging or mandating Open Data and deposition of supporting data in accessible repositories, or by adoption of Transparency and Openness Promotion guidelines (via <https://osf.io/9f6qx/>). We recommend ARRIVE guidelines for animal research studies.<sup>12</sup>

**Q17. UKRI's OA policy is proposed to apply to in-scope research articles accepted for publication on or after 1 January 2022. Which statement best reflects your views on this?**

- The policy should apply from 1 January 2022
- The policy should apply earlier than 1 January 2022
- The policy should apply later than 1 January 2022
- Don't know
- No opinion

**Please explain your answer. UKRI particularly welcomes detailed evidence as to the practical implications of the choice of date. If you selected b or c, please also state what you consider to be a feasible implementation date** (2,000 characters maximum, approximately 300 words).

The need for more technical investment, establishment of sustainable market rates models and the renegotiation of existing publishing agreements are all areas that could cause difficulties for smaller learned

---

<sup>10</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

<sup>11</sup> The Society of Biology, 2014. [Statement on text, data mining and interoperability](#)

<sup>12</sup> The [NC3Rs](#) Animal Research: Reporting of In Vivo Experiments [guidelines](#)

society publishers when rapid change is required.<sup>13</sup> While learned societies would prefer their journals to be able to accept UKRI-funded studies from day one of the new policy, a fast development could preclude this for a time. Some societies, already developing OA models e.g. The Biochemical Society's Portland Press have established transformative agreements with pilot programmes to assess usage and implications. While the deals will provide a compliant route by January 2022, it will be premature to assess the implications.

**Q18. For research articles, are there any considerations that UKRI and UK HE funding bodies need to take into account regarding the interplay between the implementation dates for UKRI's OA policy and the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (2,000 characters maximum, approximately 300 words).

The Society believes REF policies are powerful drivers of publication practice. How policies are perceived and interpreted in the community is also a powerful driver. Careful and continuous communication and monitoring of policy impacts are vital to avoid unintended consequences.

**Q19. Do you think the proposals outlined in Section A will have any financial cost implications for you or your organisation?**

Yes / No / Don't Know / No opinion.

**Please expand, providing evidence to support your view, where possible** (2,000 characters maximum, approximately 300 words).

There is a risk that revenue flows will be impacted with the proposal outlined in Section A. New systems will be needed to implement automations of transformative offerings, these will have costs associated with them and with integrating novel technology. Additionally, many transformative agreements will be associated with an increase in reporting activity returning data on reader usage and publishing usage to institutions.

Further, availability of an embargo-free Green OA route risks undermining the viability of transformative agreements and legacy subscription revenue. At present, a 12-month embargo prior to uploading to repository is the most common established practice for learned society publishers in the biological sciences.

**Q20. Do you think the proposals outlined in Section A of the consultation document will result in financial benefits for you or your organisation?**

Yes / No / Don't Know / No opinion.

**Please expand, providing evidence to support your view, where possible** (2,000 characters maximum, approximately 300 words).

Very little is available in terms of data, and therefore projections are insecure. Indicative assessments by PPL based on Transition Agreements (to March 2020) balancing income (£188k) against 2019 spend on subscriptions (£154k) plus APC (£23k) is not likely to represent an uplift because of increased costs and

---

<sup>13</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)



potential losses of APC in hybrid journals. Transitional Agreement pilots will not return data until January 2022.

**Q21. Can you provide any evidence of a changing balance of costs across research organisations arising from an emphasis on publishing costs rather than read costs?**

Yes / No / **Don't know** / No opinion.

**Please expand** (2,000 characters maximum, approximately 300 words).

Societies are very aware of the potential restrictions on individual researchers with difficulty accessing funds for APC payments. Societies want to support systems that facilitate ease of appropriate publication of research for authors, and ease of access to it for other researchers. Initial transformative deals have been pitched to try to maintain cost efficiency for institutions to support this.

**Q22. Can you provide any evidence on cost increases and/or price rises (including in relation to OA article processing charges (APCs)s and subscriptions) and reasons for these?**

Yes / No / **Don't know** / No opinion.

**Please expand** (2,000 characters maximum, approximately 300 words).

At this stage, principles rather than outcome data are available.

**Q23. Do you think there are steps publishers and/or other stakeholders could take to improve the transparency of publication charges?**

**Yes** / No / Don't know / No opinion.

**Please expand.** Views are also welcome on how greater transparency might inform future funding levels (2,000 characters maximum, approximately 300 words).

Publishers could usefully provide more information on the costs and investments involved in publication, and learned society publishers could provide complementary information, where it applies, on the investment in community support they can achieve. Such exchange of information is also important between commercial publishers and owners, if they are different. For many, the distribution of costs across the system is an unknown, but this information is relevant to choices of where to publish, subscribe, pay for services or volunteer (e.g. participate in peer review). The Society Publishers Coalition is working to create a set of statistics which journals could report in order to show where APC or other charges are spent. A simple and standard set, if widely adopted, would allow comparison between journals and support transparency. The choice of statistics is important, both to give meaningful information and to avoid creating a gamed system.

**Q24. Regarding UKRI's consideration about restricting the use of its OA funds for publication in hybrid journals (see paragraph 80 of the consultation document), please select the statement that best reflects your views:**

- a. UKRI OA funds should not be permitted to support OA publication in hybrid journals
- b. UKRI OA funds should only be permitted to support OA publication in hybrid journals where they are party to a transformative agreement or similar arrangement
- c. **UKRI OA funds should be permitted to support OA publication in hybrid journals**
- d. None of the above
- e. Don't know
- f. No opinion

**Please explain and, where possible, evidence your answer** (2,650 characters maximum, approximately 400 words).

We and the majority of our member organisations have hybrid journals, often key journals for the discipline. Removing author capacity to publish in them via APC would be a big shift in community practice and potentially undermine important communication routes that have ensured visibility of high quality research to the appropriate academic community, and beyond. The purpose of providing unrestricted access to publications can be achieved through open access options within hybrid journals.

**Q25. To what extent do you agree or disagree that UKRI OA funds should be permitted to support OA costs that support institutional repositories?**

Strongly agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree / Don't know / No opinion.

**Please explain and, where possible, evidence your view** (2,650 characters maximum, approximately 400 words).

A survey was sent to RSB members to investigate individual views on OA policies. Open comment options enabled respondents to provide their personal views and experiences of OA policies. By using this qualitative method, we were able to acquire subjective views representing a small sub-set of our membership. Preliminary analysis highlighted 29% of survey respondents deposited accepted manuscripts into open repositories.<sup>14</sup> Reasons for depositing the accepted manuscripts included meeting requirements of the REF, institution or funder. The aspirations of repositories in encouraging data sharing and creating increased accessibility to publications is not routinely realised and standards and development across the landscape is needed. However, the allocation of UKRI funds to this complex problem, on an OA cost basis does not seem indicated. In the future, we aim to repeat the survey with a larger number of participants.

**Q26. To help accelerate policy adoption, should UKRI introduce any other restrictions on how UKRI OA funds can be used?**

Yes / **No** / Don't know / No opinion.

**Please explain your answer, including any views on how this could be implemented** (1,350 characters maximum, approximately 200 words).

**Q27. There are many business models that can support OA. A common model for journals is based on APCs, but there are also other models (such as membership models and subscribe to open). Are there changes or alternatives to the present UKRI funding mechanisms that might help support a diversity of OA models?**

Yes / **No** / Don't know / No opinion.

**Please expand** (2,650 characters maximum, approximately 400 words).

Supporting a diversity of models may not of itself drive desired improvements, although finding ways to support promising models that deliver against core objectives could be an effective approach.

**Q28. As discussed in paragraph 74 of the consultation document, transformative agreements are one way of moving to OA in a more cost-effective way. Are there approaches to managing transformative**

---

<sup>14</sup> The Royal Society of Biology, 2019. Individual members Open Access review survey

**agreements or other mechanisms and developments that UKRI should consider to help manage the transition to OA in a way that is cost-effective and offers public value to the UK?**

Yes / No / Don't know / No opinion.

**Please expand** (2,650 characters maximum, approximately 400 words).

For societies with a large commercial publishing partner transformative agreement preparations will likely be well underway, nevertheless realistic timescales and conditions for transformative deals are needed. Time and resource constraints can limit institutions' capacity to negotiate agreements with small publishers such as learned societies. The role of Jisc in supporting development of deals is helpful. It is important that time constraints do not drive small or self-published societies into publishing contracts, or 'lock-in' societies with existing partners, solely because of the difficulties of negotiating alternative arrangements.<sup>15</sup> Some read/publish deals may offer OA publishing routes at no or low additional charges, and author community awareness of these options probably needs help to grow. Early experience from learned publishers offering transformative deals is that researchers often do not know about the availability of unlimited APC-free publishing available via their institutions.

**Q29. Are there any existing or new infrastructure services that you think UKRI should fund the maintenance and/or development of, to support the implementation of its OA policy for research articles?**

Yes / No / Don't know / No opinion.

**If yes, please state what these are and explain and, where possible, evidence why UKRI should provide support** (2,650 characters maximum, approximately 400 words).

**Q30. To what extent do you agree or disagree that UKRI should provide or support a national shared repository?**

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain and, where possible, evidence your answer** (1,350 characters maximum, approximately 200 words).

A national repository would be a huge undertaking and require bespoke public funding which we would not wish to be at the expense of supporting research or its direct communication. A national archive that was accessible, visible, durable, well curated, seamlessly operable, and crucially that pointed to indexed published articles (that will be maintained as current, by including updates) could deliver real benefit. However, the cost could well be prohibitive, or the execution not achievable.

**Q31. Should UKRI require preprints to be made OA where there is a significant benefit with regard to public emergencies?**

Yes / No / Don't know / No opinion.

**If yes, is there a recognised definition of 'public emergency' and/or protocols that UKRI should consider if this policy is implemented?** (1,350 characters maximum, approximately 200 words).

The current pandemic provides a clear example of when the accessibility of pivotal research should be made available in the quickest time possible.

---

<sup>15</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

**Q32. Are there any supporting actions that UKRI could take alongside its OA policy to support the use of preprints in all disciplines?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (1,350 characters maximum, approximately 200 words).

The Society acknowledges the benefits of increased accessibility of preprints (properly marked) to assist in feedback, wider dissemination and visibility before peer review. However, the need for caution must be highlighted and applied, especially in fast-moving fields and in emergencies. The sheer volume of outputs means that without organisation, as performed by journal peer review processes, we cannot assume all papers will receive scrutiny.

A small survey of RSB individual members highlighted only 11.8% of survey participants uploaded preprints of their papers onto open repositories.<sup>16</sup> Reasons for advocating the use of preprints include; institutional or REF requirements, the acquirement of a citation to assist in grant and fellowship applications in a fast timeframe, gaining of a competitive advantage and the advancement of data sharing. The ability to reference preprints in grant applications is increasingly popular with researchers; also there is increasing criticism of journals that reject articles on the grounds that they have appeared in pre-print.

## **Section B: Monographs, Book Chapters and Edited Collections**

**Q33. To what extent do you agree or disagree that the types of monograph, book chapter and edited collection defined as in-scope and out-of-scope of UKRI's proposed OA policy (see paragraphs 96-98 of the consultation document) are clear?**

Strongly agree / Agree / Neither agree nor disagree / **Disagree** / Strongly disagree / Don't know / No opinion.

**If you disagree, please explain your view** (2,000 characters maximum, approximately 300 words).

We welcome that trade books are out of scope but the types of such should extend beyond 'monograph.' It is important that UKRI scholars and researchers can contribute book chapters and to edited collections. Monographs, books and collections are important syntheses of findings and interpretation and ensuring that UKRI researchers can participate alongside others in a sustainable production model is vital if these editions are to draw upon the best corpus of knowledge for the topic addressed.

**Q34. Should the following outputs be in-scope of UKRI's OA policy when based on UKRI-funded doctoral research?**

- Academic monographs Yes / **No** / Don't know / No opinion
- Book chapters Yes / **No** / Don't know / No opinion
- Edited collections Yes / **No** / Don't know / No opinion

**Please explain your view** (1,350 characters maximum, approximately 200 words).

These outputs require significant editorial input and costs are unlikely to be met (or achievable) via APC payments. They remain important contributions, often to emerging fields, and UKRI researchers should not be excluded from consideration in their commission.

---

<sup>16</sup> The Royal Society of Biology, 2019. Individual members Open Access review survey

**Q35. To what extent do you agree or disagree that UKRI's OA policy should include an exception for in-scope monographs, book chapters and edited collections where the only suitable publisher in the field does not have an OA programme?**

Strongly agree / Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain and, where possible, evidence your view (1,350 characters maximum, approximately 200 words).**

This would be a pragmatic accommodation for reality when restricted international publisher/imprint choice does not and will not soon include OA options.

**Q36. Are there any other considerations that the UK HE funding bodies should take into account when defining academic monographs, book chapters and edited collections in-scope of the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand (2,000 characters maximum, approximately 300 words). Please see paragraphs 29-31 of the consultation document before answering this question.**

The definition of 'out of scope' should be realistically broad and allow for within principle innovation in trade books.

**Q37. Regarding monographs in-scope of UKRI's proposed OA policy, which statement best reflects your view on the maximum embargo requirement of 12 months?**

- a. 12 months is appropriate
- b. A longer embargo period should be allowed
- c. A shorter embargo period should be required
- d. Different maximum embargo periods should be required for different discipline areas
- e. Don't know
- f. No opinion

**Please explain and, where possible, evidence your answer. If you answered b, c or d please also state what you consider to be (an) appropriate embargo period(s) (1,350 characters maximum, approximately 200 words).**

We do not foresee that sustainable monograph sales would be likely within 12 months. This would either dis-incentivise production with UKRI researchers (undesirable) or drive up charges (also undesirable).

**Q38. Regarding book chapters in-scope of UKRI's proposed OA policy, which statement best reflects your view on the maximum embargo requirement of 12 months?**

- a. 12 months is appropriate
- b. A longer maximum embargo period should be allowed
- c. A shorter maximum embargo period should be required
- d. Different maximum embargo periods should be required for different discipline areas
- e. Don't know
- f. No opinion

**Please explain and, where possible, evidence your answer. If you answered b, c or d please also state what you consider to be (an) appropriate embargo period(s) (1,350 characters maximum, approximately 200 words).**

On balance we accept the differentiation proposed of 12 months for natural sciences and 24 months for arts and humanities, but there are areas on the biosciences where embargo periods closer to the arts and humanities are likely to apply, for example in environmental and ecological sciences where research may be multi-year. Increasingly, studies and outputs are collaborations, for example but not exclusively, across biological and social sciences, and pragmatic (longer) application of embargos should apply to this kind of interdisciplinary work to encourage it.

**Q39. Regarding edited collections in-scope of UKRI's proposed OA policy, which statement best reflects your view on the maximum embargo requirement of 12 months?**

- a. 12 months is appropriate
- b. A longer embargo period should be allowed
- c. A shorter embargo period should be required
- d. Different maximum embargo periods should be required for different discipline areas
- e. Don't know
- f. No opinion

**Please explain and, where possible, evidence your answer. If you answered b, c or d please also state what you consider to be (an) appropriate embargo period(s) (1,350 characters maximum, approximately 200 words).**

While this is on balance less relevant to the biological sciences than for example arts, humanities and social sciences, the principles and market conditions are similar. Realistic cost recovery that doesn't rely too heavily on an APC model is preferable.

**Q40. Do you have any specific views and/or evidence regarding different funding implications of publishing monographs, book chapters or edited collections with no embargo, a 12-month embargo or any longer embargo period?**

Yes /  No.

**If yes, please expand (2,000 characters maximum, approximately 300 words). Please note that funding is further considered under paragraph 110 of the consultation document (question 53).**

**Q41. To what extent do you agree that self-archiving the post-peer-review author's accepted manuscript should meet the policy requirement?**

Strongly agree /  Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain and your view (1,350 characters maximum, approximately 200 words).**

The Society agrees that with appropriate embargo self-archiving the post-peer-review author's accepted manuscript should meet the policy requirement.

**Q42. Regarding monographs, book chapters and edited collections, are there any additional considerations relating to OA routes, deposit requirements and delayed OA that the UK HE funding bodies should take into account when developing the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand (2,650 characters maximum, approximately 400 words). Please see paragraphs 29-31 of the consultation document before answering this question.**



A sustainable, unsupported by author-charge, healthy book publishing activity is unlikely with embargos of 12 months.

**Q43. To what extent do you agree or disagree with CC BY-ND being the minimum licencing requirement for monographs, book chapters and edited collections in-scope of UKRI's proposed OA policy?**

Strongly agree /  Agree / Neither agree nor disagree / Disagree / Don't know / No opinion.

**Please explain and, where possible, evidence your view** (1,350 characters maximum, approximately 200 words).

**Q44. To what extent do you agree or disagree that UKRI's OA policy should include an exception for in-scope monographs, book chapters and edited collections requiring significant reuse of third-party materials?**

Strongly agree /  Agree / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain your view** (1,350 characters maximum, approximately 200 words). Questions 45-46 concern how 'significant reuse' may be defined.

**Q45. To what extent do you agree or disagree that if an image (or other material) were not available for reuse and no other image were suitable, it would be appropriate to redact the image (or material), with a short description and a link to the original?**

Strongly agree / Agree / Neither agree nor disagree /  Disagree / Strongly disagree / Don't know / No opinion.

**Please explain your view** (1,350 characters maximum, approximately 200 words).

The Society believes images considered relevant to the description or argument by the author are integral to the presentation.

**Q46. Do you have a view on how UKRI should define 'significant use of third-party materials' if it includes a relevant exception in its policy?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (2,000 characters maximum, approximately 300 words).

The Society believes images considered relevant to the description or argument by the author are integral to the presentation.

**Q47. Do you have any other comments relating to licensing requirements and/or the use of third-party materials, in relation to UKRI's proposed OA policy for academic monographs, book chapters and edited collections?**

Yes /  No.

**If yes, please expand** (1,350 characters maximum, approximately 200 words).

**Q48. Regarding monographs, book chapters and edited collections, are there any additional considerations relating to licensing requirements and/or third-party materials that you think that the**

**UK HE funding bodies should take into account when developing the OA policy for the REF-after-REF 2021?**

Yes / No / Don't know / No opinion.

**If yes, please expand** (2,650 characters maximum, approximately 400 words). Please refer to paragraphs 29-31 of the consultation document before answering this question.

The Society supports the view that an exemption for REF-eligible books should be included in consideration of those held by a CC-BY-ND license.

**Q49. Which statement best reflects your views on whether UKRI's OA policy should require copyright and/or rights retention for in-scope monographs, book chapters and edited collections?**

- a. UKRI should require an author or their institution to retain copyright and not exclusively transfer this to a publisher
- b. UKRI should require an author or their institution to retain specific reuse rights, including rights to deposit the author's accepted manuscript in a repository in line with the deposit and licensing requirements of UKRI's OA policy
- c. UKRI should require an author or their institution to retain copyright AND specific reuse rights, including rights to deposit the author's accepted manuscript in a repository in line with the deposit and licensing requirements of UKRI's OA policy
- d. UKRI's OA policy should not have a requirement for copyright or rights retention
- e. Don't know
- f. No opinion

**Please explain and, where possible, evidence your answer. If you selected answer b or c, please state what reuse rights you think UKRI's OA policy should require to be retained** (2,000 characters maximum, approximately 300 words). It is not necessary to repeat here, in full, information provided in response to question 12. Please note that views are not sought on whether institutions should hold the copyright to work produced by their employees as this is subject to Section 11 of the Copyright, Designs and Patents Act 1988 and institutional copyright policies.

**Q50. Regarding the timing of implementation of UKRI's OA policy for monographs, book chapters and edited collections, which statement best reflects your view?**

- a. The policy should apply from 1 January 2024
- b. The policy should apply earlier than 1 January 2024
- c. The policy should apply later than 1 January 2024
- d. Don't know
- e. No opinion

**Please explain and, where possible, evidence your answer. If you selected b or c, please also state what you consider to be a feasible implementation date** (2,000 characters maximum, approximately 300 words).

Clear guidance for grant recipients will be important. The exemption for existing contracts that prevent this date is welcome.

**Q51. In order to support authors and institutions with policy implementation UKRI will consider whether advice and guidance can be provided. Do you have any suggestions regarding the type of advice and guidance that might be helpful?**

Yes/ No.

If yes, please expand (2,000 characters maximum, approximately 300 words).

**Q52. Regarding monographs, book chapters and edited collections, are there any other considerations that UKRI and the UK HE funding bodies need to take into account when considering the interplay between the implementation dates for the UKRI OA policy and the OA policy for the REF-after-REF 2021 OA?**

Yes / No / Don't know / No opinion.

If yes, please expand (2,650 characters maximum, approximately 400 words).

The Society proposes appropriate review of the policy impacts should be undertaken by UKRI.

**Q53. Do you have any views regarding funding levels, mechanisms and eligible costs to inform UKRI's considerations about the provision of funding for OA monographs, book chapters and edited collections in-scope of its proposed policy?**

Yes / No.

If yes, please expand (2,650 characters maximum, approximately 400 words).

Clear guidance for researchers/authors on allowable or built in costs will be important at an early stage.

**Q54. To support the implementation of UKRI's OA policy, are there any actions (including funding) that you think UKRI and/or other stakeholders should take to maintain and/or develop existing or new infrastructure services for OA monographs, book chapters and edited collections?**

Yes / No / Don't know / No opinion.

If yes, please state what these are and, where relevant, explain why UKRI should provide support (2,650 characters maximum, approximately 400 words).

**Q55. Are there any technical standards that UKRI should consider requiring and/or encouraging in its OA policy to facilitate access, discoverability and reuse of OA monographs, book chapters and edited collections?**

Yes / No / Don't know / No opinion.

Please expand (2,000 characters maximum, approximately 300 words).

Robust standards for metadata and searchability, as for articles, should apply to increase accessibility and visibility. It is important that scholarly synthesis is as visible as possible.

**Q56. Do you have any other suggestions regarding UKRI's proposed OA policy and/or supporting actions to facilitate access, discoverability and reuse of OA monographs, book chapters and edited collections?**

Yes / No / Don't know / No opinion.

If yes, please expand (2,000 characters maximum, approximately 300 words).

Robust standards for metadata and searchability, as for articles, should apply to increase accessibility and visibility. It is important that scholarly synthesis is as visible as possible.

## Section C: Monitoring Compliance

**Q57. Could the manual reporting process currently used for UKRI OA block grants be improved?**

Yes / No / Don't know / **No opinion**.

**If yes, please explain how** (2,000 characters maximum, approximately 300 words).

Q58. Except for those relating to OA block grant funding assurance, UKRI has in practice not yet applied sanctions for non-compliance with the RCUK Policy on Open Access. **Should UKRI apply further sanctions and/or other measures to address non-compliance with its proposed OA policy?**

Yes / No / Don't know / **No opinion**.

**Please explain your answer** (2,000 characters maximum, approximately 300 words).

**Q59. To what extent do you agree or disagree with the example proposed measures to address non-compliance with the proposed UKRI OA policy (see paragraph 119 of the consultation document)?**

Strongly agree / **Agree** / Neither agree nor disagree / Disagree / Strongly disagree / Don't know / No opinion.

**Please explain your answer** (2,000 characters maximum, approximately 300 words).

The RSB agrees with the process of primarily sending a letter for minor breaches providing the opportunity for the research organisation to action. Grant recipients should be advised and reminded of policy requirements regularly.

## Section D: Policy Implications and Supporting Actions

**Q60. Do you foresee any benefits for you, your organisation or your community arising from UKRI's proposed OA policy?**

**Yes** / No / Don't know / No opinion.

**Please expand** (2,650 characters maximum, approximately 400 words).

Individual members of the RSB and those of our learned society member organisations (MOs) are readers, authors, peer reviewers, editors of research articles; as well as subject discipline champions and supporters. The RSB publishes two journals: The Journal of Biological Education (with OUP); and Emerging topics in Life Sciences (a partnership review journal with the Biochemical Society and Portland Press, launched in 2017). Our membership is also representative of Member Organisations, some of which are learned publishers through their independent operations or under contract with commercial publishers. We additionally have research funders and libraries, academic institutes and contract research organisations and Small to Medium Enterprises (SMEs) among our Members and Supporting Members.

We are in favour of the development of innovative publication policies that deliver open access and preserve the best features of current systems.<sup>17</sup> Constructed with a view to improving discoverability of research; assuring its long-term archiving; and promoting its availability for data mining<sup>18</sup> and further research by researchers across several bioscience disciplines.

---

<sup>17</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>18</sup> The Society of Biology, 2014. [Statement on text, data mining and interoperability](#)

Learned societies with a disciplinary focus, and often charitable objects to support their discipline, have a clear mission to ensure that their journals communicate and curate high quality relevant research, and to offer researchers the opportunity to communicate their research in authoritative journals to the widest audience to advance their field. Most of the journals associated with our Member Organisations publish articles from researchers worldwide, and therefore need to be able to accommodate a variety of publication and dissemination requirements, as well as a wide variety of circumstances in terms of funding base.<sup>19</sup> Learned bioscience publishers want their journals, often flagships for their discipline, to be available to all researchers to choose as a potential vehicle for their publication; and compliance with the proposed UKRI OA policy will assist with that objective.

All of our Member Organisations with a large investment in scholarly publishing have developed open access publishing routes compliant with major public research funder requirements to date, this includes OA journals, and creating OA routes within established or new subscription journals (hybrid journals).<sup>20</sup> We welcome further discussion on the topic of leniency of hybrid journals that have some form of transformative agreement or similar arrangements in place.

**Q61. Do you foresee UKRI's proposed OA policy causing and/or contributing to any disadvantages or inequalities?**

Yes / No / Don't know / No opinion.

**If yes, please expand, referencing specific policy elements and including any comments on how UKRI could address any issues identified (2,650 characters maximum, approximately 400 words).**

Many of our Member Organisations that are learned societies view OA developments from a broad perspective. Most agree that the transition to OA will assist with their charitable objectives to maximise access to research outputs. However, compliance with the proposed OA policy could destabilise their capacity for future financial investment in their discipline. Achieving compliance could require structural and revenue flow changes and potential loss of income, impacting major activities within their discipline. This includes (yet is not limited to) supporting the skills pipeline and career development, engaging with the public dissemination of science and offering expert advice to policy makers, in addition to funding international collaborative research.<sup>21</sup> Our membership invested over £20m in 2016 into these activities. When investigating the financial status of our Member Organisations, our survey indicated that in general over 40% of organisations' annual income derived from journal revenue.<sup>22</sup> In some cases it is as high as 90%.

It is essential to consider the potential research landscape disruption of a destabilised learned society sector. An effective transition period could ensure that Learned Societies currently reliant on publishing income are able to continue supporting the skills pipeline and career development in their discipline, engage with the public dissemination of science and offer expert advice to policy makers.<sup>23</sup> We see it as important that the proposed policy impacts are implemented in such a way as to benefit rather than cost the public and private sectors overall.

---

<sup>19</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>20</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

<sup>21</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)

<sup>22</sup> The Royal Society of Biology, 2019. Member Organisation Open Access review survey

<sup>23</sup> The Society of Biology, 2013. [Society of Biology response to the Business, Innovation and Skills Select Committee on Government Open Access Policy](#)

Creation of compliant publications outside the learned society sector, either shifting or consolidating the business base is also a possibility. The focus of these may not be disciplinary support and ensuring access to publication routes for less well funded researchers. Commercial well-resourced publishers, are likely to be better able to adapt during this period than most Society publishers. The sector risks of any rapid transition to a different publishing landscape should be kept under close review.<sup>24</sup> Additionally, new policies should take into account or be considerate of the current inequalities in publishing, access and metrics especially related to gender and BAME researchers.

With the current pandemic universities are facing severe financial difficulty with overworked staff, and redundancies. A costly OA policy that requires staff input to instigate will be difficult to achieve at this time, and could detract from essential core business.

**Q62. Do you foresee any positive and/or negative implications of UKRI's proposed OA policy for the research and innovation and scholarly communication sectors in low-and-middle-income countries?**

Yes / No / Don't know / No opinion.

**If yes, please expand, referencing specific policy elements and including any comments on how UKRI could address any issues identified (2,650 characters maximum, approximately 400 words).**

The RSB has both national and international audiences including those in the EU, US and other countries. We are aware of concern that potential international fellows in UK labs, from the US and low-and-middle-income countries, may be deterred from collaboration if the publication mandates of UK collaborators or hosts puts the journals in which they want to publish off-limits, and which would be regarded as important destinations for high-quality research in their home countries. It would be a regrettable outcome if moves to establish a momentum for change and to carry communities forward together, in effect dissuaded or disadvantaged researchers moving between countries, or indeed host countries that benefit from circulating talent.<sup>25</sup> Without a broadly uniform international approach this remains a risk.

The new policy should accommodate support for journal practices that allow under-funded researchers and those in developing countries to publish important work regardless of ability to pay (where price barriers apply, including APC). A high proportion of journal articles submitted to UK bioscience journals are international in origin, with corresponding authors in countries, institutions and with funders without OA mandates or access deals.

The RSB also remains concerned about the impact of the policy on international research collaborations. More than half of peer-reviewed UK author publications are produced in collaboration with colleagues from overseas.<sup>26</sup> An international collaborator may not be research council-funded or have the requirement or funds for OA. We are concerned that the new policy may serve to make UK collaboration less attractive; the Society urges UKRI to monitor this situation closely and take action as appropriate.

Research is a global endeavour and UK research and publication both supports and benefits from this. Both development of international research capacity, and awareness of research activity, are important to UK researchers. Many RSB Member Organisation journals provide support for publications from middle-income and emerging/developing country researchers, for example offering access to subscription content through *Research4Life* to low and low-middle income countries, and offering authors from low and low-

---

<sup>24</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)

<sup>25</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>26</sup> [The Finch Report](#)



middle income countries the chance able to publish for free or at very low cost in pure OA titles.<sup>27,28</sup> We regard it as likely that the proposed policy will not destabilise this.

**Q63. Do you anticipate any barriers or challenges (not identified in previous answers) to you, your organisation or your community practising and/or supporting OA in line with UKRI's proposed policy?**

Yes / No / Don't know / No opinion.

**If yes, please expand, including any supporting actions you think UKRI could undertake to remove or reduce any barriers identified (2,650 characters maximum, approximately 400 words).**

It is not desirable for researchers to feel unable to submit their work to the most appropriate journal because of a cost or deal barrier/deficit.<sup>29</sup> The allocation of APCs can be unclear for multi-authored, multi-grant papers or when a researcher moves institution during a project. Insufficient funding for publication or reading access could lead to the loss of some reasonably-priced high-impact journals, especially those published by societies.<sup>30</sup> UKRI's support for transformative and OA supporting models could help support sustainable transition, including for learned societies.

**Q64. Are there any other supporting actions (not identified in previous answers) that you think UKRI could undertake to incentivise OA?**

Yes / No / Don't know / No opinion.

**If yes, please expand (2,000 characters maximum, approximately 300 words).**

Active engagement with the researcher community, directly or through learned societies, is vital to ensure that researchers are aware of, convinced of, and heard about, the challenges and opportunities of an OA and accessible publishing landscape. Increased accessibility of research outputs should go hand in hand with enhanced standards of reporting therein, and recording behind research outputs. There is a significant task to be undertaken to really reap the potential benefits of a more open system, and to guard against potential pitfalls.

**Q65. Do you foresee any other implications (not identified in previous answers) for you, your organisation or your community arising from UKRI's proposed OA policy?**

Yes / No / Don't know / No opinion.

**If yes, please expand (2,000 characters maximum, approximately 300 words).**

## Section E: Further Comments

**Q66. Do you have any further comments relating to UKRI's proposed OA policy?**

Yes / No.

**If yes, please expand (2,650 characters maximum, approximately 400 words).**

---

<sup>27</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>28</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)

<sup>29</sup> The Society of Biology, 2013. [Society of Biology response to the Business, Innovation and Skills Select Committee on Government Open Access Policy](#)

<sup>30</sup> The Society of Biology, 2013. [Society of Biology response to the Business, Innovation and Skills Select Committee on Government Open Access Policy](#)

The corresponding author carries much of the responsibility in communication about OA policy and may require support when the reported research is funded by different sources through co-authors or collaborative projects. However, while there remains ambiguity surrounding the compliance obligations of different authors, the need for well communicated advice remains.<sup>31</sup>

The policy should help to deliver demonstrable fairness in pricing and cost options, ensuring that added value and appropriate investment are encouraged. This includes avoiding 'double dipping' as well as ensuring sufficient revenue is earned to maintain journal and community development. Learned societies have made representations in this area. Library subscription to complex bundles of journals, and the often low or variable rates of gold open access articles in hybrid journals are commonly noted as a reason for the difficulty of transparent pricing that recognises OA content. However, recognising and addressing this is a key challenge for publication policies. Journals should be supported to prioritise quality and rigour not quantity of content.<sup>32</sup> To address reservations regarding the cost of OA, the new policy should also ensure that it has the capacity to recognise the production costs of scholarly publishing, including in reviewing, producing and archiving of articles and the need for revenue streams to invest in developing new facilities and the community capacity to author, review, edit and use.<sup>33</sup>

Continuous development to adopt new technology and adapt to new research needs is also needed, as well as to curate and preserve robustly and accessibly. All of these functions require investment, even though many journals, particularly learned society journals, benefit from volunteer editors or peer reviewers from their academic community. A sustainable business model is essential for journal survival. Transforming business models to accommodate shifting funder and institutional policies can be a particular challenge for learned societies that are contracted to multi-year agreements with publishing partners or are small independent self-publishers. Both require workable timescales to facilitate change, and self-publishers require routes to negotiate with libraries and others more focused on large consortium agreements. The actions of Jisc have been supportive, however, this still remains a large task to tackle.

The current policies on open access publishing have the potential for significant unintended consequences on the UK research base and economy. We recommend that OA policy impacts are frequently monitored.

**Q67. Do you have any further comments relating to commonality between UKRI's proposed OA policy for outputs acknowledging UKRI funding and the OA policy for the REF-after-REF 2021?**  
Yes / No.

**If yes, please expand** (*2,650 characters maximum, approximately 400 words*).

There is a strong sense that improved communication and clear guidance on both would be beneficial, especially regarding principles of Open Access.<sup>34</sup> Persistent focus by research institutions on journal impact factor (IF) has had negative effects; dissuading this with clarity and force in order to reduce individual and institutional concentration on it could be a benefit across the piece.

A focus on published journal articles as an indicator of a researcher's quality also penalises those with industry experience, whose research experience might not be captured by such outputs. We welcome making a range of scientific outputs more accessible to mitigate this.

---

<sup>31</sup> The Society of Biology, 2014. [Society of Biology response to the Independent Review of the Implementation of RCUK Policy on Open Access](#)

<sup>32</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>33</sup> [Walker, E. S., Roberts, R. A., & Gill, J. H. \(2019\). Collaboration, competition and publication in toxicology: views of British Toxicology Society members. \*Toxicology research\*, 8\(4\), 480-488](#)

<sup>34</sup> The Royal Society of Biology, 2016. [The Royal Society of Biology has responded to the Review of the Research Excellence Framework \(REF\)](#)

The adoption of the principles of DORA is a positive step to indicate that the merit of the work, appropriately reviewed, published and discoverable, is the focus for authors and the community of readers. This issue is internationally relevant and broader than publication issues alone, but publication policy can play a positive role.<sup>35</sup>

Perceived associations between career progression and publication in journals with high impact factors (IF) has been corrosive and difficult to challenge. There is a great deal yet to be achieved to move the norms in UK and international research culture which tie these together on these terms – in reality, both from the perspective of aspiring researchers and review panels.

Learned Societies and Research Councils can play a role in communicating with early career researchers about desirable characteristics when choosing a journal, and how to identify and so avoid questionable ones<sup>36,37</sup> It is our understanding that many authors still only consider OA options at the point of manuscript acceptance, which is late in the process, leading to a confused and hasty interaction with the policy. We recommend that UKRI supports the national visibility of good institutional level implementation practice to guide an overall improvement in effective communication with authors. It is important to support early author choice and institutional governance<sup>38</sup> covering not only journal choice on OA grounds but also adherence to good reporting practice under ARRIVE guidelines and others.

**Q68. Do you have any further thoughts and/or case studies on costs and/or benefits of OA?**

Yes / No.

**If yes, please expand** (*2,650 characters maximum, approximately 400 words*).

As relevant context we are sharing here the results of our analysis using 2016 data collected from annual accounts, reviews and charity commission submissions over analogous reporting years, across our learned society full organisational members. The majority of societies published a journal, of the total of 94 journals published (the median per publishing society was 2) but some societies publish a suite of titles (the highest was 9) each covering a specialist area, or type of academic report in their discipline. All accommodate OA publication, either through a hybrid model or, less frequently as a full OA journal. Most of the full OA journals are relatively new journals. The societies are either self-publishers, or contract to publish with a commercial publishing partner.<sup>39</sup>

The societies derive income from a range of sources including membership fees from more than 63k memberships in total, but income from publishing is a majority source in many cases. Publishing societies often receive around 70% of their income from publishing activities, and in some cases, it is well above this level. The analysis we carried out was not for the purpose of understanding the publishing activities from a financial perspective, but it does shed light on overall investment by societies in charitable activities that support the bioscience sector. The societies collectively invested £4.3m in grants, prizes and awards; £10.8m in meetings and events; and had £5.7m expenditure on education and public affairs annually. The value of this effective £20m investment is enhanced by volunteer support, the reported total of volunteers at 2,581 is likely a significant underestimate given the data source and may represent committee members

---

<sup>35</sup> The Royal Society of Biology, 2019. Statement on publication policy from the Royal Society of Biology

<sup>36</sup> The Society of Biology, 2013. [Society of Biology response to the Open Access Publishing inquiry from the House of Lords Science and Technology Select Committee](#)

<sup>37</sup> The Society of Biology, 2014. [Society of Biology response to the Independent Review of the Implementation of RCUK Policy on Open Access](#)

<sup>38</sup> The Society of Biology, 2014. [Society of Biology response to the Independent Review of the Implementation of RCUK Policy on Open Access](#)

<sup>39</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

only in many instances. The high level of investment in activities of direct support to the bioscience community is a particular advantage for the health and standing of UK science.<sup>40</sup>

Many of these advantages accrue to the UK from publishing activity which sources and disseminates research worldwide, including earning a significant proportion of subscription and open access revenues internationally. The meetings, grants, waivers, fellowships, outreach, engagement, career development (educational support and mentoring programmes), technicians grants, and other benefits supported by learned societies are at risk if their underpinning financial sustainability declines. Many of these benefits are not available through any other route.<sup>41</sup> For societies, a thorough examination of the components of costs will be a complex exercise.

---

<sup>40</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

<sup>41</sup> The Royal Society of Biology, 2019. Comments to the UKRI Open Access review from the Royal Society of Biology

## Appendix: Member Organisations of the Royal Society of Biology

### Full Organisational Members

Agriculture and Horticulture Development Board  
 Amateur Entomologists' Society  
 Anatomical Society  
 Association for the Study of Animal Behaviour  
 Association of Applied Biologists  
 Bat Conservation Trust  
 Biochemical Society  
 British Association for Lung Research  
 British Association for Psychopharmacology  
 British Biophysical Society  
 British Ecological Society  
 British Lichen Society  
 British Microcirculation Society  
 British Mycological Society  
 British Neuroscience Association  
 British Pharmacological Society  
 British Phycological Society  
 British Society for Cell Biology  
 British Society for Developmental Biology  
 British Society for Gene and Cell Therapy  
 British Society for Immunology  
 British Society for Matrix Biology  
 British Society for Neuroendocrinology  
 British Society for Parasitology  
 British Society of Plant Breeders  
 British Society for Plant Pathology  
 British Society for Proteome Research  
 British Society for Research on Ageing  
 British Society of Animal Science  
 British Society of Soil Science  
 British Society of Toxicological Pathology  
 British Toxicology Society  
 Daphne Jackson Trust  
 Drug Metabolism Discussion Group  
 The Field Studies Council  
 Fisheries Society of the British Isles  
 Fondazione Guido Bernardini  
 GARNet  
 Gatsby Plant Science Education Programme  
 (incl. Science and Plants for Schools)  
 Genetics Society  
 Heads of University Centres of Biomedical Science  
 Institute of Animal Technology  
 Laboratory Animal Science Association  
 Linnean Society of London  
 Marine Biological Association  
 Microbiology Society

MONOGRAM – Cereal and Grasses Research  
 Community  
 Network of Researchers on the Chemical Evolution  
 of Life  
 Nutrition Society  
 Quekett Microscopical Club  
 Society for Applied Microbiology  
 Society for Experimental Biology  
 Society for Reproduction and Fertility  
 Society for the Study of Human Biology  
 SCI Horticulture Group  
 Systematics Association  
 The Physiological Society  
 The Rosaceae Network  
 Tropical Agriculture Association  
 UK Brassica Research Community  
 UK Environmental Mutagen Society  
 University Bioscience Managers' Association  
 Zoological Society of London

### Supporting Organisational Members

Affinity Water  
 Association of the British Pharmaceutical Industry  
 (ABPI)  
 AstraZeneca  
 BioIndustry Association  
 Biotechnology and Biological Sciences Research  
 Council (BBSRC)  
 British Science Association  
 CamBioScience  
 Envigo  
 Ethical Medicines Industry Group  
 Fera  
 Institute of Physics  
 Ipsen  
 Medical Research Council (MRC)  
 MedImmune  
 Northern Ireland Water  
 Porton Biopharma  
 Royal Society for Public Health  
 Syngenta  
 Understanding Animal Research  
 Unilever UK Ltd  
 United Kingdom Science Park Association  
 Wellcome Trust  
 Wessex Water  
 Wiley Blackwell