

How to make Plan S more likely to succeed

IOP Publishing – input to consultation on implementation guidelines

Introduction

IOP Publishing has been a pioneer in expanding open access in physics. As a company it has embraced a range of routes to achieve open access, including

- 20 years' experience of publishing fully gold APC based journals (*New Journal of Physics* was the first, launched in 1998, and the portfolio now covers seven journals and will grow further in 2019)
- Encouraging use of the arXiv preprint server ahead of publication in its journals
- Supporting green open access (including participating in CHORUS and developing a model agreement to provide article metadata and copies of Accepted Manuscripts to university repositories)
- Publishing diamond open access journals on behalf of partners in Japan and Vietnam
- Introducing hybrid gold open access options in nearly all journals since 2011 with a transparent process to avoid double-dipping
- Participating in the SCOAP³ project to transform high energy physics to open access
- Pioneering offsetting and read-and-publish agreements in the UK, Austria, Germany, Norway and Sweden, achieving close to 100% open access in Austria, working with the Austrian Science Fund (FWF) and the Austrian Academic Consortium (KEMO).

We have seen some routes work very effectively while other approaches struggle to deliver change at a sufficiently rapid rate or on a sufficiently sustainable basis. Drawing on this direct and practical experience, we would like to offer some comments on the proposals in Plan S. These comments are intended to help Plan S fulfil its vision more rapidly and remove some of the barriers to uptake that have, inadvertently, been written into the over-riding principles and the implementation guidelines.

Transformative agreements

In our experience, these agreements are the most effective way to achieve wholesale and rapid transition to open access. They work best when funders convene partnerships between themselves, the universities and research institutions, and publishers. They should set targets for achieving transition to open access based on achieving close to 100% open access within that specific country rather than aiming to force journals to flip globally. They can then work collaboratively with publishers to remove barriers to compliance for researchers, ideally by automatically identifying qualifying articles and ensuring publishing costs are met centrally and not by authors.

Once enough countries have successfully transitioned their own outputs, the flip will follow naturally. It is reasonable to expect that transformative agreements will be revenue neutral on a global scale but funders and institutions must acknowledge that some countries and institutions are more research-intensive than others and they will likely have to pay more

than under the current subscription-based system, while others will pay less; costs will be distributed differently.

The most effective route to much wider open access is to avoid putting barriers in place for researchers. Researchers want to publish in the journals or on the platforms which they believe are the best conduits for the communication of their research. The key is ensuring they can do this on an open access basis without requiring them to do any additional work beyond the normal submission process. A bottom-up flip, driven by transformative agreements in multiple countries which, taken together, make the majority of a journal's articles open access, is more likely to succeed than a top-down flip driven by agreements in one or more European countries. Publishers cannot commit to make a journal wholly open access on the basis of an agreement in just a few countries, representing only a small proportion of the journal's authors.

Promoting these national transformative agreements will make it easier for the coalition to broaden participation to more countries. Furthermore, having practical examples of successful agreements will encourage the kind of alignment of policies and processes foreseen in Principle 6 of Plan S.

Green open access

Plan S must choose between (a) supporting green open access and (b) aiming to end subscription publishing. This is an either/or decision as the two objectives are incompatible. Green open access is wholly reliant on the continuation of subscription publishing. If Coalition S chooses to pursue a green route to open access, the approaches taken by NIH and OSTP in the USA have demonstrated two different but successful models for green open access.

Identifying the responsible researcher

From our experience, good data and processes and clarity of rules are vital in achieving good uptake of open access options. In particular, all stakeholders need clear rules about where the responsibility for compliance lies. Does it lie with the PI or named grant recipient? Does it lie with the corresponding author of the resulting research output? Does it lie with the researcher's institution? How do we disambiguate research funded from multiple sources? Standardisation is essential here. Use of ORCIDs and other persistent identifiers should be a requirement for researchers, funders, institutions and publishers to make it easier to track compliance.¹

Studies

Plan S envisages a number of studies – gap analysis, new models for learned society publishers, costs of publishing – which will inform future development of the plan and its implementation. We would recommend completing these studies before formally launching the plan. That need not delay funders and institutions from entering transformative

¹ See the report and recommendations of the Universities UK Open Access Efficiencies Forum (<https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/open-access-efficiencies-report-and-recommendations.pdf>).

agreements with publishers (this is already happening), nor from ensuring researchers have sufficient access to funding to allow them to choose a fully gold publishing option.

Journal registration

The guidelines indicate that journals must be registered in DOAJ or be in the process of being registered. This is not possible for hybrid journals in transformative agreements, which we believe are vital for rapid transition to open access.

Peer review

The guidelines require that *“The journal must have a “solid” review system according to the standards within the discipline and according with COPE standards.”* We would have expected some higher aspiration for the quality of peer review and a more specific definition of how this might be measured. High quality of peer review is vital in science and it varies significantly between different journals and different publishers. Researchers value the high-quality feedback they get from journals with professional peer review operations. The best journals have expert editorial teams identifying the most suitable peers to review a paper and ensuring there are no conflicts of interest or bias in the peer review system. In many cases, authors recognise that their research outputs are improved by high quality peer review processes.

APC waivers

The journal must provide automatic APC waivers for authors from low-income countries and discounts for middle-income countries. This is an important consideration for switching to an APC-based model. The financial consequences of this need to be studied and budgeted for. Importantly, clear qualification rules are needed to identify which countries will qualify for discounts and waivers. Guidelines will also be needed for waivers granted to unfunded researchers. Every author needs to be supported, in one way or another, by the new system.

Conclusion

The success of Plan S is dependent on taking into account the needs of all the stakeholders. The plan needs to support researchers rather than alienating them and to make compliance easy rather than difficult. We have good evidence of how that can be achieved through funders, institutions, publishers and researchers working together in transformative agreements.

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