

Feedback on the Guidance for the Implementation of Plan S

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Overview

The aim of Plan S to change up a gear and bring about open access quickly is to be applauded. Through better access to research results we can provide a foundation for innovative research that will be of benefit to society in terms of solving the grand challenges of our times and being a driving force for growth and employment. But in general, we believe that unless the fundamental problems associated with the communication of research results are addressed, the transformations that are needed for the digital age will not be achievable in an optimal manner or time-frame. Some of the aspects of Plan S, in particular those that could negatively impact platinum/diamond open access and smaller publishers, need to be rethought.

Involving the Community

Firstly, it is correct that in principle, academics have had enough time to sort out how the future of scientific communication (publishing) should look. In practice, this is not an easy task. There is no real forum for researchers in various faculties to discuss these types of issues. There is no defined scientific community, even in individual disciplines, that has a voice on issues of importance. Obviously, there are societies and the like that to an extent represent the interests of scientists. However, many of these societies often rely on income from publishing to support their existence and have business models that are similar to the commercial publishers. In such cases, there will be often little motivation to change things significantly.

Representation of all disciplines and seniorities is often insufficient in boards and commissions. They are often made up of senior academics who are doing just fine in the current situation and potentially not motivated for changes, or they simply do not cover all areas of academia, for example, as in the case of various EU expert groups on publishing and open science. Early career scientists are often in a sandwich position, being subjected to the publish-or-perish paradigm on the one hand but supporting open science ideas on the other hand; they need to be heard and to be involved in the implementation processes.

Whilst the opportunity to comment on the implementation of Plan S is welcomed, having followed discussions over the last months, it seems that a more formal and transparent way forward should be considered. One suggestion would be to set up a researchers' assembly. Drawing on a broad range of people, from the middle of academia, covering all views from those supporting open access and open data mandates to those not wishing to change the current system. This assembly should advise the

cOAlition S group on the implementation. This will have implications for the envisaged time-frame, which appears to be very sporting in any case.

Open Data and Open Science

It is not clear how Plan S fits in with the initiatives that progress towards open data and open science. Having a goal that research should be assessed on its own merits rather than the venue in which it is published is very laudable, but citing DORA in this regard is too little. For example, neither Plan S nor DORA addresses the issue of the amount that is being published, or making data open. The publish or perish paradigm is causing inflation in the numbers of articles published, and is therefore diluting the scientific record, making peer-review a more time consuming task than it need be – resulting in reduced quality. In the end this simply increases the profits of publishers. If Plan S is not set up carefully, it could make this situation worse.

Scholarly Publishing in Overload

One main problem is that the system is in overload. We are producing more data (articles and data) than we can effectively process. Peer-review is under severe strain and often not really working as it should be. Quality is already being compromised, and unless this is dealt with in a systematic manner, projects such as OpenAire and EOSC are in danger of becoming unwieldy haystacks. The current publishing system seeks endless growth, and is controlled by an oligopoly of 3-5 publishers. Here funders, but also employers (universities, research institutes etc.) need to address the situation and change their evaluation criteria.

Financial Aspects

That Plan S will support OA publishing in less wealthy institutions and countries is a positive idea. However, this shows that the basic model of APCs is discriminatory on financial strength, and it is difficult to believe that an equitable solution would be found. The current thoughts appear to favor the large incumbent publishers that are able to make use of economics of scale and spread costs through their system. It is particularly important that academic publishing does not drift further into an oligopoly, and that enough checks and balances are in place to enable small publishers and societies to continue. The current thoughts also do not sufficiently support platinum/diamond publishers that fund the publishing of articles completely themselves.

Technical Aspects

Some of the technical restrictions need to be reconsidered, or seen as the currently most fitting example of how Plan S should be implemented. These will not be commented on here as they are generally of minor importance.

Academic Freedom

Clearly the researchers should take control much more of the way that they can publish. This is an interesting theme that is often discussed under the term 'academic freedom'. Most of the issues that are currently really reducing academic freedom are also linked to the misuse of publishing and metrics to control science and scientists. Here there are many misnomers, principally in the choice of journal. One must not forget that nowadays academics can publish their results on their own websites and make them available for the whole world. That is freedom. But academics also need the freedom to enquire; this is why scientific knowledge must be open for all.

Long Term Strategy

If researchers are once more going to be sheltered from the cost of publishing as part of university-wide deals for OA, this will probably serve to strengthen the current oligopoly. This means that smaller publishers will have more problems than they have now and that trustworthy new publishers/journals will find it very difficult to break into the market. This will stifle innovation. To bring about technical advances by dispersing new technologies also requires action by the state. Leaving it to the market will not work.

We need more clarification about the mid- to long-term strategy of funders, universities and researchers regarding how they would like academic publishing to develop. Sure, open access can be brought about by mandates, but since making scientific information available is the provision of a public good, the state must play a role in its provision.

Beilstein-Institut

The Beilstein-Institut is a non-profit foundation based in Frankfurt, Germany. The Beilstein-Institut supports open science and makes the results of its projects freely available to the scientific community as open access publications. This is an essential contribution to the foundation's mission to advance the chemical and related sciences. All journal articles, conference proceedings and videos are open access to allow the worldwide, unhindered sharing and exchange of ideas. This allows scientists, students, educators and the public the opportunity to inform themselves of the latest developments in research and to build on these ideas to further advance scientific knowledge.

The Beilstein-Institut publishes two platinum open access journals: Beilstein Journal of Organic Chemistry and Beilstein Journal of Nanotechnology. Both journals are completely supported financially by the Beilstein-Institut, are fully peer-reviewed, have an international editorial board and have been awarded the Directory of Open Access Journals Seal.