Response to draft implementation text of Plan S

We have read the draft implementation text with interest and find some of it quite revealing. However, several aspects remain unclear and we are still surprised and disappointed by several mandates.

Still way too risky!

As described in our open letter [link1] and in our petition [link2] we feel that Plan S in its present form remains far too risky for scientist affected by cOAlition S funders. We believe there is a big risk that a large part of the world will not sign-up to cOAlition S (USA, Canada, Germany, Switzerland, Spain, large parts of Asia), and as such researchers that do have to deal with the mandates of Plan S are very likely to face severe problems with collaboration, internationalization, damage to their reputation and maybe even funding. We won't go into further detail again, as all of these concerns are described exhaustively in our previous open letter [link1] and petition [link2]. We would just like to mention here that the most important danger of Plan S, as written, is that it may effectively lead to a ban on publication in our valued (often hybrid) society journals, which is undesirable and would lead to all sorts of problems for scientists. This is for sure a big problem for chemistry & physics, but may very well lead to similar problems in various other fields of research. Currently, Plan S does not have broad support among researchers, and many prominent researchers (~1600 signatories, including Nobel Prize winners, senior members of academic leaderships, but also academics from across the career spectrum including Master's students, PhD students and postdocs) share our concerns and have signed our petition ([link2]).

Why no choice for Diamond OA?

The second point we would like to stress is that we are very disappointed by the fact that the Plan S designers did NOT opt and push for a truly fair publication model. It is very unsatisfactory that the coalition of funders did not choose providing funding for Diamond OA, and as far as we can judge they do not even plan to actively support, stimulate and sponsor our society journals to move towards a free-to-read & free-to-publish Diamond OA model. Rather, as discussed below, Plan S is very much a push for an APC-based Open Access landscape. While we believe Diamond OA is the most desirable publication model that should be stimulated, active support for Diamond OA in Plan S should NOT lead to any ban on (hybrid) society journals. This is especially relevant for valuable internationally oriented society journals (such as ACS, APC, RSC, IOP, ChemPubSoc/Wiley), in particular those based in other continents (such as the USA, where at least federal funders are in our opinion unlikely to sign-up to Plan S). For these society journals Green OA (without unrealistic rules and restrictions) should be allowed.

Illusion of Green OA compliance!

Unfortunately, the current implementation text of Plan S puts very strict rules and additional technical restrictions on Green OA publication, to the point that it becomes almost impossible to be compliant with Plan S through the Green OA route within any reasonable framework. That is, the restrictions on Green OA put forward in the Plan S implementation document are so strict that it seems very unlikely that our valued international society journals can even comply to these rules without going bankrupt (and therefore we believe it is extremely unlikely that they will ultimately choose to do so, thus creating instant divisions in the global scholarly communication landscape). As such, the implementation text only provides an illusion of Green OA compliance, and will still effectively lead to a ban on publication in our valued society journals (with all associated problems as described earlier [link1], [link2]). At the same time, the technical restrictions are unworkable for researchers and would create a huge administrative burden on them if they opt for depositing an author accepted manuscript (AAM) in a

Green OA repository. We understand that, in the long term, Green OA models might not be a sustainable business model for (society) journals either, as it has the risk that several libraries will cancel subscriptions as soon as enough papers in these journals become OA. However, society journals operate on a global scale, and flipping them to free-to read & free-to-publish Diamond OA models will simply take time. Hence, we need them to be able to work with Green OA models (or offsetting agreements) to buy time, while financially supporting non-profit high quality academic-driven publishing to transition to a Diamond OA model, and to make sure we don't lose our valued society journals in this process.

Decouple accepting/rejecting papers from the perverse financial incentives of APC-models

The combined rules of Plan S and the lack of direct support for journals to flip to a Diamond OA model will leave publishers with only one real choice: APC pay-to-publish. We researchers don't like to work with APC pay-to-publish models! It feels totally wrong for authors to pay to publish. Writing a paper is a creative process, and paying to get your paper published feels like slavery. Yet, the combined rules of Plan S leave little room for other models. More importantly, the pay-to-publish model also has inherent quality problems due to its perverse financial incentives. It will either lead to accepting as may papers as possible (high volume journals with a low scientific quality), or maximizing the APCs to the limit (low volume journals with a high scientific quality). In our opinion, accepting and rejecting papers should therefore be fully decoupled from financial aspects/incentives of publishing, as otherwise it will put us on a slippery road to mediocrity or may even lead to a majority of low quality publications.

What is quality?

The word quality perhaps requires some clarifications. The implementation text couples quality to technical aspects such as machine readability, XML, etc. We have a very different understanding of quality. With scientific quality we mean scientific rigor, novelty, importance, true scientific insights, a level of (scientific) impact or applicability, proof of a novel concept, etc., etc. If we talk about high quality journals we mean journals with a trusted rigorous peer review system, preferably performed by society journals that are run by trusted scientific societies of researchers, by researchers and for researchers (such as ACS, APC, RSC, IOP, ChemPubSoc/Wiley). These society journals work with competent editors, who know what they are doing and have years of experience working with researchers, thus building-up a trusted network of reviewers (and also blacklists of non-competent reviewers). So by quality we do NOT mean journal impact factors. However, we also don't couple quality to any technical aspects such as machine readability, as is done in the Plan S implementation text.

Who will pay the bill?

We don't like APC-based pay-to-publish models, but we fear that Plan S, if broadly implemented, will nonetheless lead to a situation where all journals will switch to APC-models. Assuming that will happen, Plan S remains far too unclear on how APCs will be paid and who will pay the bill. Rule 4 of the 10 plan S rules states that researchers won't pay the APCs themselves. However, this leaves the possibility that they will need to pay the APCs directly from their grants. Competing/conflicting interests between research and publication should be prevented at all times. If researchers need to pay APCs from their grants, it may lead to all kinds of problems and several researchers may run into financial problems if they publish more than anticipated. In addition, irrespectively of whether it is researchers paying through their grants or the funder paying APC to publishers directly, this still leads to a redirection of funds away from the generation of research to paying for the publication of existing

research, at a time when many free routes (*via* the Green OA model) already exist to making knowledge free. This situation should be prevented and clarified.

Recommendations

Lastly, combining all issues, we remain with our previous statements ([link1], [link2]) that Plan S (as written) is still much too risky. We therefore recommend the following modifications of Plan S, which are much-needed for a broad support:

- (1) Make sure that our valued society journals can survive, and are not banned!
- (2) Actively support and sponsor society journals to enable them to move towards a desirable fully free-to-read & free-to-publish Diamond OA model.
- (3) Make sure that accepting/rejecting papers is fully decoupled from any perverse financial incentives that either compromise scientific quality or increase costs.
- (4) Allow Green OA models without all the unrealistic rules and restrictions: Don't demand unrealistic technical requirements related to machine readability, XML, etc. Don't be strict on banning copyright transfer and demanding a CC-BY license. Consider even allowing a short embargo period (6 months seems quite reasonable for many fields, and many publishers have shown they are willing to accept this). This will make it much easier for authors (and society journals) to comply with open access mandates and will open up the scholarly literature without unnecessarily increasing total costs in the system, unlike APC-based models.
- (5) Support offsetting agreements in hybrid society journals for a much longer period. These solutions (such as the VSNU agreements in the Netherlands) are very similar to Diamond OA and work fine to make many papers OA. Allow these as long-term solutions, not just as temporary solutions in a transition period. This will facilitate society journals to move towards a truly desirable free-to-read & free-to-publish Diamond OA model.
- (6) If APCs can't be avoided, be fully clear about who pays the bill. Make sure researchers don't pay at all, neither themselves as individuals, nor from their grants.
- (7) Focus on evolution instead of revolution. Don't stare blindly at 100% OA in 2020, but allow a longer time frame for a more natural transition with broad support.

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