## Researchers reject APC-based OA publishing as promoted by Plan S

Response to the Revisions Made to the Plan S Principles and Implementation Guidance by cOAlitionS

After release of the revised open access (OA) Plan S implementation guidelines (May 31, 2019) we feel compelled to react. In general, we remain unsupportive of drastic top-down measures such as Plan S that could potentially be harmful to researchers (more details below). However, we also recognize some positive changes in the revised guidelines and accompanying rationale.

What we consider positive in the revised guidelines and explanations of Plan S is that:

- (1) More time is now available to come to a suitable implementation of the plan, with the start date postponed to 2021. This is particularly important for small scale and non-commercial (society) journals.
- (2) Support (financially?) for Diamond/Platinum OA is announced.
- (3) The text about hybrid journals and Green OA is clarified. It is clear now that publication in hybrid (and pure subscription) journals is allowed, provided authors either find different funds to pay for OA costs or if they immediately deposit the final author accepted manuscript (AAM)/ version of record (VoR) version of their paper in a compliant repository under a CC-BY license and provided that the author retains the copyright. However, do note that this is beneficial only for those authors that have a broad funding portfolio and access to resources from outside cOAlition S in order to pay for the publication costs associated with following this route!
- (4) The technical requirements for repositories have been (temporarily?) softened, facilitating the Green OA route. For some research fields (e.g physics) this offers a viable and readily applicable route to OA compliance. However, for other fields (such as chemistry) this is still problematic, as the number of reputable journals that allow immediate no-embargo deposition of the AAM/VoR under a CC-BY license without the payment of some form of charges remains exceedingly limited.
- (5) cOAlition S appears to have created more room for read-and-publish deals such as Project Deal in Germany (but why only until the end of 2024?).

Reading these changes, one might conclude that different stakeholders are invited to come to a reasonable compromise and that there is more time now for such negotiations. Combined, we *hope* these changes will indeed provide an acceptable route to open access in which both journals and researchers believe, and that journals will either comply and accept the immediate Green OA route or switch to a truly desirable Diamond/Platinum OA model. Both would be acceptable OA outcomes for researchers. However, unfortunately, based on experiences with the impact of existing OA mandates on the publication landscape, the more likely outcome of the combined rules of Plan S is

still a widespread "flip" to the (in our eyes) perverse APC-based pay-to-publish OA model instead of the much more desirable Green and Diamond/Platinum OA models.

A positive and desirable outcome of these negotiations (i.e. Green/Diamond/Platinum OA) is by no means a fait accompli, especially in a global publishing market, with a diversity of OA wishes and (absence of) mandates. Most valued society journals operate on a global scale, and hence they have to think globally. They need to deal with a variety of different authors, at both extremes of the OA spectrum and everyone in between. Many (most?) authors don't want to pay APCs, and most authors who are not bound by the mandates of Plan S probably won't choose pure APC-based journals voluntarily. They may not have the funds available, have a general dislike of the publication model or would rather spend the available money on research & consumables rather than paying to publish. So authors who are not bound by the mandates of Plan S might simply prefer the subscription (or hybrid) model, as this is the cheapest option for them to publish their work. Where OA mandates do apply outside of the cOAlition S funders, they typically include the Green OA option with an embargo period and without restrictions related to copyrights and licenses. At the same time, journals will also receive submissions from authors facing Plan S OA mandates.

The fact that OA policies and mandates are not globally aligned thus constitutes a problem for journals, making it difficult (if not impossible) for them to comply. Obviously, they would like to keep all clients happy and at the same time they also need to operate in a global competition market. It is therefore not more than logical that the journals initially opt for the hybrid publication model. This is no longer a (financially) viable route for authors under the cOAlition S umbrella (as many if not most cOAlition S funded authors do not actually have the discretionary funds available to pay APC outside of their grants), and hence journals will need to either flip to a full OA model or they will need to accept the Plan S terms for Green OA. That is assuming they will chose to keep the cOAlition S clientele of authors and readers, which is not guaranteed (if they don't the scientific community will split in regions with different outlets for publishing, and eventually also reading and peer reviewing, which is utterly undesirable). One might ask, at this time, is cOAlition S large enough to enforce such a global flip? And will that ever happen, taking into account for example the explicit statement by new OSTP director Kelvin Droegemeier that effectively rules out the involvement of US federal funding agencies in Plan S? <sup>1</sup> Flipping to a full OA model seems not really an option for our valued society journals as long as most other countries (including big players such as the USA, China & Germany) don't adopt to the same mandates. Furthermore, it is questionable (on a global scale) if many authors would actually like their society journals to flip to an APC-based author pay-to-publish model. Over the past months of discussion of Plan S, we have, for example, heard many authors say "If I need to pay to publish, I also want to get paid to review". As such, one might also ask how sustainable the APC-model will turn-out to be, and whether it really is as cost-effective as cOAlition S funders seem to believe. This also means that if big players in the USA and China don't join, Plan S has clearly failed.2 If that is the case, we strongly advise funders to pull the plug, well in time, at the latest by 2024.

So what about the Green OA model? Is that an achievable and sustainable OA model? Will Plan S create enough critical mass to get the trains moving in this direction? Perhaps. We really hope so, as we think this is a much more acceptable OA publication model (for authors) than any APC-based pay-to-publish model. cOAlition S made clear that they do not want to consider any embargo period (however short) and that they are not satisfied with the preprint version of papers as a compliant

<sup>&</sup>lt;sup>1</sup> https://www.aip.org/fvi/2019/interview-ostp-director-kelvin-droegemeier

<sup>&</sup>lt;sup>2</sup> https://www.scienceguide.nl/2019/05/nwo-coalitie-achter-plan-s-moet-groeien-om-te-slagen/

route to achieving OA. That, in their view, "is not full and immediate OA". Of course, cOAlition S is entitled to their opinion. We just note here that this position creates both cost- and sustainability barriers to OA publishing that are not easy to overcome (effectively strongly steering towards a pay-to-publish APC-based model).

Even if the number of funders joining does grow (as expected by COAlition S), it may still not be easy to convince international journals to accept the conditions for Green OA as defined in Plan S. The envisioned Green OA route in which the AAM/VoR version is made immediately accessible under a CC-BY license constitutes a risk for journals, and in general, Green OA is only viable if supported by subscription revenue, while a stated goal of cOAlition S is actually to *abolish* subscription journals. Furthermore, one might ask if this version of green OA is really a long-term sustainable business model for any journal, as libraries might decide to start canceling subscriptions to those journals in which the (Green) OA content exceeds a certain threshold. This is not an unrealistic scenario if more countries start to adopt the same mandates as defined in Plan S.

That probably means that (society) journals have only one real choice on the long term: Switch to a full OA model in which the journals are paid/compensated for the (real) costs associated with publishing. This is in itself not a bad idea, and this is obviously the idea behind Plan S. However, unfortunately the simplest solution for journals to solve all issues is also the worst possible outcome of Plan S: They might all flip to an (in our opinion perverse) APC-based author pay-to-publish OA model. The APC-based publication models are arguably also the most profitable (for publishers) and hence the least cost-effective (for libraries/funders/authors) OA publication model thinkable, especially now that the cap on APCs has been removed from Plan S. Here, researchers will pay a heavy price, and the current undesirable reading paywalls will be merely replaced by even more insurmountable publication paywalls, thus doing a great disservice to the scholarly communication landscape.

Many (most?) researchers don't like to work with APC pay-to-publish models at all. Writing a paper is a creative process, and hence it feels totally wrong to pay to publish (invoking also negative associations with "vanity publishing"). More importantly, the pay-to-publish model has inherent quality problems due to its perverse financial incentives. It will either lead to accepting as many 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). The APC pay-to-publish model thus puts the peer review system and scientific quality of papers at risk, and sustaining quality in such a landscape may become financially very costly. In our opinion, accepting and rejecting papers should remain 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.

That leaves Diamond/Platinum OA as the only desirable OA model for researchers. The announced support for Diamond/Platinum OA in Plan S is therefore positive, although we feel that the implementation text lacks any details about how exactly coAlition S plans to support and stimulate (society) journals to transition to Diamond/Platinum OA, and what funds (if any) will be provided to facilitate such a transition. We actually consider read-and-publish deals (such as project Deal in Germany) to be a logical choice to enable society journals to transition from the current (hybrid) subscription model to such desirable Diamond/Platinum OA models, wherein eventually funders and libraries sponsor the journals to provide them with a long-term sustainable OA business model (which we consider to be the most desirable outcome). We therefore think it is disappointing that

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<sup>&</sup>lt;sup>3</sup> From the cOAlition S website: "There is no longer any justification for this state of affairs to prevail and the subscription-based model of scientific publishing, including its so-called 'hybrid' variants, should therefore be terminated." <a href="https://www.coalition-s.org/why-plan-s/">https://www.coalition-s.org/why-plan-s/</a>

cOAlition S provides no details about supporting Diamond/Platinum OA and at the same time considers the read-and-publish deals as merely temporality compliant, only until the end of 2024.

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## Disclaimer and further explanations:

Of course, our interpretations of Plan S are colored by our experiences and our reading is that from the perspective of chemists. A fear for the loss of our valued society journals and our aversion for APC-based OA publishing were our main drivers to protest strongly against Plan S at an early stage. When Plan S was introduced last summer it looked very much like a full ban on hybrid journals, and hence an attempt to replace our valued (hybrid) society journals (ACS, RSC, Wiley/ChemPubSoc) by commercial APC OA journals with perverse financial incentives to accept as many papers as possible with lax quality control mechanisms. Hence, if we would be forbidden to publish in the journals considered to be most valuable and reputable, this could have severe consequences for international collaboration, reputation, exchange of researchers (students, postdocs & staff) and the peer review process, especially if the market share represented by cAOlition S remains a small fraction of the global publishing market. Furthermore, in general, we consider the APC model of OA publishing to be highly problematic (as explained above). Of course, one might argue that our arguments are based on fear. Fear of what might happen assuming that publishers won't change their policies. True, we are not fortune tellers. Our predictions are based on logical expectations, but we cannot look into the future and predict with any certainty what will happen. But... neither can cOAlition S or any proponent of Plan S. Hence, we think the discussion remains valid, and the cOAlition S should listen to our worries and warnings. The opinion of researchers simply cannot (and should not) be ignored.