



Statement of The Optical Society (OSA) on Plan S

Since 1916, OSA has been a champion for optics and photonics, uniting and educating scientists, engineers, educators, technicians, and business leaders worldwide to foster technical and professional development. Our mission, in large part, is to promote the generation, application and archiving of knowledge in our field and to disseminate that knowledge worldwide. We therefore embrace the desire of cOAlition S to expand access to and reuse of the results of scientific research so that they can be tested, scrutinized, and built upon. To that end, our journals publish high quality, peer-reviewed scientific content, and we are continuously innovating so we can launch new digital technologies that ensure our content is both accessible and discoverable by the widest audience possible.

OSA was an early and strong supporter of Open Access. Our first Gold Open Access journal, *Optics Express*, launched in 1997 and is now the 14th largest journal according to the 2017 Journal Citation Reports® (Clarivate Analytics, 2018). Now, more than twenty years after the launch of *Optics Express*, over half of the journals that we publish are Gold Open Access. As a member-led and volunteer-run organization, our first priority is to meet the needs of the global, diverse community that we represent and serve; therefore, as the publishing landscape has changed, so have we. We have, for example, created a wide range of new journals and developed new copyright and licensing options for our authors.

OSA appreciates the steps that cOAlition S is taking with the Society Publishers Accelerating Open Access and Plan S (SPA-OPS) initiative to support professional and scholarly societies as they explore how to sustainably transition their current publishing programs to Open Access. As Plan S guidelines are being finalized, we urge cOAlition S to continue to solicit input from all stakeholders—in particular the researchers who generate the content, and the professional and scholarly societies that represent and support them in advancing the scientific enterprise. We welcome this opportunity to provide feedback and proposed clarifications on the implementation of Plan S, and we offer the following comments to help ensure that the guidelines support scientific progress and do not impede the ability of the optics and photonics community to communicate their research results in the way the researchers deem appropriate.

- **Longer-Term Approach to Enable a More Holistic Transition to Open Access**

OSA firmly believes that researchers must have the flexibility to publish in the journals that best meet their needs, whether that need is to address a specific audience, or to advance or solidify their reputation in a particular technical area to further their career. While we are supportive of cOAlition S' goal to increase the current level of Open Access content and to foster the adoption of potential new criteria for tenure and promotion, the benefits currently realized by researchers when they publish in established, reputable, and prestigious subscription-based journals are unlikely to change in the short timeframe specified in Plan S.

In addition, many scholarly and professional societies may not have the resources, expertise, or economies of scale to quickly adapt to the wide range of complex conditions outlined in Plan S, such

as developing and migrating to new sustainable business models, implementing technical requirements and repository deposit mandates, or negotiating new contracts and transformative agreements with existing consortia customers. Ultimately Plan S could mean that many learned societies will cease to be able to offer the publishing venues that have long been trusted and relied upon by their communities, or they may cease to exist at all.

We therefore recommend that cOAlition S allow for a longer-term approach that includes concrete steps to implement alternative incentives and rewards for researchers, time to incorporate recommendations from the SPA-OPS pilot, and more flexible conditions to help researchers and society publishers transition gradually, since this will enable the successful adoption of Open Science by a larger portion of the global scientific community.

- **Flexibility in Open Access Models**

While cOAlition S has stated a clear willingness to fund Gold Open Access publication charges, it is not currently evident how the careers of researchers not funded by cOAlition S, especially those in the Global South or who are early in their career, would be affected by the principles outlined in Plan S. Just as OSA provides a wide range of publication options for our community, we feel it is important for cOAlition S to enable researchers to make their results openly available in a variety of ways.

In our field, which is a branch of physics, the preprint server, arXiv, has long provided early and wide dissemination of research results, whether they are publicly funded or not. arXiv operates in harmony with Open Access and subscription-based journals and is well-accepted by the research community and many of the key stakeholders, including society publishers. With the growth in preprint servers in other fields, and rapidly developing standards for interoperability and integrity, this mode of communication of results could quickly advance the availability of research outputs.

Hybrid journals and Green Open Access can also offer a viable alternative to the Gold route. While Plan S does include Green Open Access, the restrictions it places on embargos, specific licenses, and platforms make it unlikely to be a sustainable option for publishers, especially society publishers, to offer. Furthermore, Plan S currently excludes hybrid journals. While OSA publishes very few hybrid journal articles, we feel that it is important to be able to provide this alternative for those in our community who request it.

We therefore recommend that cOAlitions S consider preprint servers as a potentially compliant route for authors and that they reconsider how the role of hybrid journals and Green Open Access in Plan S could complement its goals.

- **Ensuring Publication Opportunities for Authors Around the Globe**

While the goals that cOAlition S has laid out are laudable, OSA is concerned that Plan S could unintentionally initiate a change from one inequitable system—where not everyone can read—to another—where not everyone can publish.

Currently OSA publishes on behalf of approximately 40,000 authors per year. Our global community, however, is 370,000 strong and growing, and includes individuals from 177 countries

who are engaged across academia, government, and industry. Shifting publication costs to authors as detailed in Plan S could therefore create an imbalance and require those who publish to shoulder a greater financial burden compared to when costs are distributed over a larger pool of readers. It also potentially limits publication to only those authors who have grants or who can personally afford to pay the fees. Such a shift will accentuate differences in funding, both geographically and topically.

As already mentioned, ensuring that our entire community has the ability to publish their work, regardless of funding, is core to OSA's mission, so we feel it is critical to maintain a wide range of business models and licensing options to help address these potential inequities. There is also a danger that placing restrictions on cOAlition-S-funded researchers could affect their ability to collaborate with non-cOAlition-S-funded authors, and therefore curtail the advancement of science itself.

- **Unintended Consequences of APC Caps**

While OSA appreciates that cOAlition S must responsibly manage the public funds that the signatories have been entrusted with, we believe that capping APCs could lead to several unexpected and undesirable outcomes. For example, capping APCs will limit the ability of publishers to provide publication fee waivers to authors who need them.

In addition, capping APCs could lead to a flattening of the range of service levels and quality standards presently available across the scholarly journal market. These journal distinctions are important to the career advancement of authors and will likely remain so in the near-term despite the community's best efforts to change them.

Moreover, forcing costs down will limit the ability of publishers like OSA who regularly innovate, invest in new technologies, and continually develop new solutions to improve the accessibility and discoverability of our content for the benefit of the research community. It may even provide predatory publishers with a stronger foothold in the market.

In summary, OSA's view is that developing a longer-term approach to Open Access and maintaining flexibility in the way in which authors may communicate and publish their work will more quickly lead to higher volumes of openly available research than mandating more restrictive methods. As a society publisher charged with serving the views and needs of our community, we have already demonstrated that, where there is demand and sufficient support, we are committed to evolving our publishing program to accommodate those demands by providing appropriate and sustainable publishing venues.

We feel that it is critical that we continue to be inclusive and to serve the wide variety of needs requested by our community. This inclusive approach is in line with our goal to enable the furtherance of science and is also central to our mission. Key to our ability to achieve these objectives is an ecosystem that similarly prioritizes the needs of the research community and provides them with the opportunities and flexibility to disseminate their work as widely and efficiently as possible.

We appreciate the invitation to provide input at this formative stage of Plan S' development, and we welcome the chance to be part of ongoing conversations as the implementation guidelines evolve.