

## Position of EYAE on Plan S

*Founded in 2018, the Eindhoven Young Academy of Engineering (EYAE) is a network of enthusiastic, talented early-career scientists, designers and engineers from all departments within Eindhoven University of Technology with a broad interest and view on science and engineering in general. The goals of the EYAE include promulgating fundamental research and high quality engineering, stimulating interdisciplinary research and engineering, contributing to outreach to the general public and providing advice on academic policy.*

The Eindhoven Young Academy of Engineering is a strong supporter of Open Science, and therefore promotes Open Access to all scientific publications and designs. EYAE feels the scientific community also has a strong responsibility to communicate and should not only be locked behind paywalls that withhold research results from a large fraction of the scientific community, and from society as a whole. Plan S is an attempt to break through the current dilemma that restricts progress in open access publishing. EYAE is happy to see that the coalition is growing, especially internationally. This is vital for Plan S to succeed. However, the EYAE also has questions and serious concerns about the current time path, the rules connected to the plan stated, the way careers of young and early-career researchers could be affected, and the ability of poorer countries to publish their results. For this reason, the EYAE herewith provides suggestions for the transition period in a collective aim to further the goal of open science.

### Questions

1. Many high-impact journals such as Science, Nature and Cell currently are not open access. If scientists - in particular early-career scientists - can no longer publish in these journals, this has a detrimental effect on their career. Since they are for now mostly judged on their publications in these types of journals. National and European funding agencies are looking into finding alternative quality indicators ([DORA](#)), which we support. However, if these indicators are only adopted in Europe, the Netherlands may become less interesting for talented scientists to work in, as they face restrictions that they will not face in other countries. Also, researchers that did their PhD in the Netherlands could have a hard time obtaining post-doc or other research positions in for example the US. How can we protect our researchers from these unwanted side-effects of Plan S?
2. Although Plan S will contribute greatly to the availability of results, the publishing cost will deprive scientists in poorer countries from publishing as they may not be able to pay publishing costs. How could this unwanted effect be prevented?

### Advice

1. Scientists and their science are the most important stakeholders in this discussion. Let them decide how to reach open access. Make a vision of how research will be performed in 10-20 years, taking Plan S, DORA and all foreseen changes into account. Formulate this statement together with early-career researchers. They are the future!
2. Make sure that the coalition grows. Plan S will not work out when only a few countries participate.
3. Do not rush in implementation of open access rules. Please do this via evolution and not via revolution. Revolution will cause victims.
4. Allowing publication of papers in hybrid journals would contribute to reaching open access goals on a short time-scale. Additionally, allow an embargo period for sharing in repositories, and/or allow the open access sharing of the author (pre-publication) version as viable ways of open access publishing.
5. Support the set-up of open access archives. Well-reputed open access archives (e.g. ArXiv.org and biorxiv.org/) may function as an inspiration for how to set up this kind of journals.

ArXiv.org is a great initiative, especially seen in combination with the excellence provided by "quality certificates" associated with excellent journals at the moment.

6. Alternatives to Gold Open Access (as suggested by Plan S) should be looked into. Platinum Open Access (funding agencies subsidizing journals for the service they provide; scientists deciding which journals to subsidize; no fee for researchers, no fee for readers) is such an alternative. Or try to force journals to make all content freely available sometime after an article has been published.
7. It seems that the preferred copyright license according Plan S is CC-BY, and thus allows for commercial re-use. CC BY-NC would be far more preferable.
8. Take care that the learned society journals will not be lost. Plan S now seems to be a one-size-fits-all solution for all disciplines of science and engineering, however this is not the case.
9. First elaborate a new model of assessment of researchers. Implementing Plan S without such a new model will cause casualties. So do not change the rules while playing the game.
10. Take care of international alignment of open access and research assessment. Also take care that the administrative pressure will stay minimal.

### **Finalizing remarks**

We advise to first develop a vision on research in 2030. Important factors are a change in habits for example in how we judge researchers. Make it possible to publish open access via repositories.