



The Academy's views on Plan S for speeding up the transition to open access

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What is Plan S?

In September 2018, a European coalition of national research funding bodies, including NWO, presented a plan for accelerating the transition to open access. The heart of this so-called [Plan S](#) is that from 1 January 2020 onwards, all scientific publications resulting from research funded by the participating national research bodies must be published in open access journals and on open access platforms. The intention is that publication in hybrid journals that operate according to a subscription model but that do offer an option for granting open access to its articles will be permitted over a transition period, subject to certain conditions. In November 2018, a further elaboration of the plan was published in the form of a [Guidance on the implementation of Plan S](#).

Involvement of the Academy in the debate

Plan S has led to praise among researchers but also to discussion and the expression of concerns. The further elaboration in the *Guidance on the implementation of Plan S* does offer greater clarity on a number of points but does not completely eradicate the concerns shared by many scholars. The Academy sees it as its role to act as the voice of researchers in this discussion. For that reason, together with NWO, the Academy organised a public discussion meeting on 1 November 2018, during which researchers from all disciplines were able to share their thoughts on the original plan S. The Academy will also be participating in the consultation meeting jointly organised by NWO and ZonMW on 31 January 2019. Moreover, the Academy is enabling discussion among its own members of the plans and their possible consequences.

The Academy and open access

The Academy has argued for some time in favour of free access to the results of scientific research. Alongside numerous other scholarly organisations, the Academy signed the the Berlin Declaration in 2003. The Academy is also one of the parties to the Dutch National Open Science Plan announced in 2017. Progress has already been achieved, but it has also become clear that the transition to open access must be speeded up. With that in mind, in the summer of 2018, together with the Association of Universities in the Netherlands [VSNU] and the Dutch Ministry of Education, Culture and Science [OCW], the Academy expressed its support for the attempts to speed up the transition to the open access publication of scientific articles resulting from publicly funded research.

However, Plan S is an initiative of [cOALition S](#), a group of European national research funding bodies supported by the European Commission and the European Research Council. The Academy is not a research funding body and is therefore not part of cOALition S, nor is it a signatory to Plan S.

Objections to Plan S

In the course of debate on open access, the Academy has argued consistently in recent years that the transition is complex and that in any attempt to accelerate the transition to open access, account must be taken of the different publication cultures within the various scientific domains, the role of journals published by learned societies, experience gained with existing open access journals and alternative platforms, the attractiveness of the Netherlands as a country for talented foreign researchers, the position of Dutch researchers in international collaborative ventures and the acquisition of grants, and the affordability of the publication system in general. Some scholars are concerned that one or more of these



aspects will be unfavourably influenced by Plan S. The Academy shares these concerns and demands that they be taken into account. The most important of these concerns are described in more detail below.

- *Little attention for the different publication cultures within the various scientific domains*

The objective of Plan S is to pressurise a number of large commercial publishers of scientific journals to make the switch to open access. The plan appears to relate in particular to those fields in which, in addition to journals from commercial publishers, open access alternatives (open access journals or open access platforms) already exist or can be introduced in the near future. This is not the case in many scientific domains. In that sense, the plan takes no account of the major differences in publication cultures between those domains.

In many fields, the journals from the relevant learned societies are the most authoritative publications. The learned society journals operate excellent and highly valued peer review systems that are crucial for maintaining the academic standards in their field. As a rule, these learned societies operate reasonable subscription prices. Moreover, any revenue generated by the societies from their publications is put to the good of science. Plan S will effectively also apply pressure on these organisations to make the transition to open access. However, it will still be some time before the transition is completed, in addition to which not all the learned societies will have the financial capacity to make the switch. A rigorous ban on publication in these journals in the intervening period could have disastrous consequences. This is [explained](#) by Marcia McNutt, president of the American National Academy of Sciences.

Furthermore, Plan S pays insufficient attention to other forms of publication than scientific journals, such as monographs and collections. In the humanities, for example, these are of real importance. Although Plan S does propose a later introduction date for these forms of publication, the transition period is as yet uncertain and there is no clear elaboration of precisely what open access will mean for these publication forms.

- *The Netherlands will become less attractive for researchers*

At present, Plan S enjoys the support of around forty parties (of which thirteen are national research funding bodies), based mainly in Europe. Although the number of participating organisations from outside Europe is growing, there is a risk that key countries such as Germany, Switzerland, the United States, Israel and Australia will not announce membership in the near future. Global pressure on journals based on paid subscriptions is therefore unlikely, and it is unrealistic to expect all the leading journals to make the switch to open access, in the short term. This raises fears that the scientific community will be split into two separate systems: cOAlition S versus the rest of the world. This in turn will worsen the position of researchers in the Netherlands. For example, it would make us less attractive as an establishment location for talented (foreign) researchers, or as an international cooperation partner. In this regard, the debate about Plan S is already casting a forward shadow. Certain Dutch researchers are already noticing reticence among foreign PhD candidates and postdocs to come to the Netherlands, out of fear of not being able to publish in the leading journals, in the future.

- *Effects on careers still unclear*

At present, the career of scientific researchers depends on the value attached to publications in leading journals, for example on the basis of impact factors. These leading journals often generate their income from subscriptions. It is unclear how CVs and publications of researchers will be assessed in the future, for example when applying for an NWO Veni grant. In particular during the transition period – when new assessment criteria have not yet been put in place – an obligation to exclusively publish on research funded by NWO in open access channels could have negative consequences for young scientists and scholars. Plan S is irrevocably linked with a different view on scoring research and researchers. There is already an international movement that favours a review of the evaluation criteria, as expressed in the San Francisco Declaration on Research Assessment (DORA). Open access policy and the review of assessment criteria must be implemented as part of a single process. It is also important to remember that the appreciation reflected in the established leading journals is not only



relevant to young scientists and scholars. For many researchers, a position as editor or editorial board member of a leading scientific journal with an established status is an important mark of recognition.

- *Exclusive focus on the 'gold' route to open access*

There are a number of different open access publication approaches; the best-known are 'gold', 'green' and 'hybrid'. Plan S upholds the most restrictive definition of open access, and insists on the gold open access route. This focus could have unintended and undesirable side effects for the accessibility and quality of review procedures (see below). According to the alternative green route, following publication in a journal and following a possible embargo period, the author makes his or her work public by depositing the manuscript in a free-access university database. This route is also an option for ensuring open access. However, in the current implementation guidelines, this route is closed to the majority of scientists and scholars by the obligatory CC-BY licence that specifies that the publication may be published by anyone. A great deal has also been achieved in the Netherlands via the hybrid route to open access. According to this route, the author can buy off the open access publication rights to his or her article, in a paid subscription journal. The VSNU has already entered into agreements with publishers on this route. Plan S demands that such agreements be transformed to full (gold) open access. In the Academy's view, however, a model that offers space for multiple routes to open access is more likely to succeed, since it would be less disruptive and more easily reconciled with different publication cultures.

- *Lack of clarity on the consequences of changing funding models*

According to the gold route to open access, the costs will be shifted from costs for reading publications to costs for their publication. This will have consequences for the Netherlands as a whole and for individual research groups and scholars. The precise nature of those consequences is not yet clear. There are clear concerns that only 'wealthy' research groups will be able to publish in any volume. On a global scale this could even result in shifts in the academic success of individual countries. Some scholars are concerned that institutions will deploy their entire publication budget with a view to funding as many open access publications as possible, and as a result will no longer invest in subscriptions to commercial journals. This in turn will make it extremely difficult to gain legal access to these journals, in which scientists and scholars from countries that are not yet members of cOAlition S will continue to publish. It is also not beyond the realms of possibility that if budgets are transferred from university libraries to university departments, those departments will spend part of their publication budget on meeting other urgent needs.

- *Potential loss of high-quality review procedures*

In the current publication model, a smoothly functioning system of peer reviews is essential for maintaining scientific quality. Today's leading journals with their paid subscriptions derive their status from precisely that system. Open access journals, on the other hand, are funded for each publication on the basis of author processing charges. In other words, more publications generate more revenue. As a result, large numbers of journals have been established that accept as many manuscripts as possible for publication, while attaching less value to sound peer review procedures. A number are in fact 'predator journals' that employ no review procedures whatsoever. A publication culture of that kind represents a threat to the quality of academic research.

- *Risk of improper use or manipulation of texts*

To satisfy the requirements of Plan S, articles must be published according to a Creative Commons licence CC BY 4.0. This licence allows all forms of reuse of material by others, including the processing, alteration and further elaboration of the material. Reuse for commercial purposes is also permitted, subject to the acknowledgement of the original author. There are clear objections to this far-reaching form of licencing. The first is a general objection. Why should scholars allow the *commercial* use of their material by others? Secondly, in certain domains such as the humanities, the form and content of a publication are often closely intertwined. As a result, it is not desirable to allow sections of text or argumentation to be manipulated and adjusted, even if the original source is acknowledged. This can



easily deteriorate into a form of falsification, which is in contravention of Dutch and international codes of conduct.

Call for reconsideration

The concerns about Plan S are not only shared by Dutch scientists and scholars. In a thorough [analysis](#), the president of the American National Academy of Sciences referred to Plan S as ‘devastating ... for the very organizations that support researchers and their disciplines’. The European Federation of Academies of Sciences and Humanities (ALLEA), of which the Academy is member, argued in its [Response](#) to Plan S: *‘ALLEA supports open access as a major step towards realising the universality of science and welcomes the ambition of Plan S in this regard. Implementation will however require extensive consultation and dialogue with all parties, in particular the research performing communities represented through ALLEA and other scientific stakeholders.’*

The Academy supports this call for extensive consultation and urgent reconsideration. Accelerating the transition to open access is a complex process that demands thorough preparation together with the entire scientific field. If Plan S is imposed without careful preparation, the transition will be accompanied by undesirable effects that could harm the scientific position of the Netherlands. That would be tantamount to throwing the baby out with the bathwater.

In a number of respects, the *Guidance on the implementation of Plan S* published by the coalition in November 2018 helps alleviate some of these concerns. Nonetheless, many implications of Plan S remain unclear, and the potential undesirable consequences are too great. The Academy therefore calls for a phased and differentiated approach, a side effect of which will be to boost support among scientists and scholars. With regard to this issue, quality and thoroughness must outweigh speed.

Recommendations to NWO

Finally, the Academy wishes to make a number of proposals to NWO:

- Plan S has resulted in huge interest and increased awareness of open access. However there are still many uncertainties. A sound accelerated transition to open access will require management and leadership over the coming years. Have this project headed up by a heavyweight who is thoroughly versed in the academic field, who understands the differences between domains, who represents a binding force and can count on support among scholars. At present, such support is still lacking.
- At present, the focus is exclusively on the gold route to open access. Remain open to other routes and other types of platform. Encourage initiatives for sharing best practices. *eLife* is an excellent example of a bottom-up open access initiative that satisfies all review standards.
- Uphold the role of the Netherlands as a pioneer and fulfil the ambitions by supporting innovative open access initiatives such as *SciPost*.
- Investigate the possibility of a national archive along the lines of arXiv, in which *all* Dutch scholars place their preprints or publications. Allow that to be the way in which they satisfy the open access criteria outlined in Plan S. With backing from NWO and the government, this will not only enable the Netherlands to take an important and visible step towards open access, but will also contribute to increased support and involvement by the scientific community.