

Set your research free: An open Access status report

An article by the Royal Danish Library

Free and equal access to research has been an important agenda in scientific publishing for many years now. During the Covid pandemic, when many [scientific publishers made articles about COVID-19 freely available](#), the global Open Access movement really took off. The pandemic demonstrated beyond a doubt that the value of research is only realised when it is shared with the research community, practitioners and decision-makers – and that sharing research without long delays drives development and innovation.

In Denmark, the level of ambition around Open Access reached a new high in 2018 with the adoption of a national strategy for Open Access by the Ministry of Higher Education and Science. The strategy set a target of making all publicly funded research freely accessible by 2025. Since then a variety of initiatives and collaborations have been launched to reach this target, involving the universities, research institutions and other important stakeholders, including the Royal Danish Library. Funders are also increasingly committed to Open Access, which means that many grants are awarded on condition that the resulting research is published Open Access.

But what is the situation on the ground with Open Access in Denmark? And how close are we to the target of 100% Open Access?

Status report on Open Access

In May 2024, the Danish Agency for Science and Higher Education published an [evaluation](#) of the national Open Access strategy. The evaluation concludes that the strategy has been effective over all. Open Access guidelines have been introduced by all Danish universities, and generally, there is broad support for Open access among researchers and other employees. At the same time, however, the report shows that we are still quite a long way from the target of 100% Open Access; according to the Open Access Indicator 2024, the national average for Open Access publication is 75%, which means achieving the target by 2025 will be difficult, if not impossible. There are still significant barriers and challenges to be overcome.

Along with the other Danish universities, AU has endorsed the national effort, and major efforts are being made to advocate for this agenda in collaboration with the Royal Danish Library. And some progress has been made, the Open Access Indicator shows. With an overall realisation rate of 68% (which represents an increase of 42 percentage points over the indicator's first progress measurement in 2018), Aarhus University now ranks fifth, not last, among Danish universities in regard to Open Access realisation. However, there is still plenty of room for improvement, and it's worth focusing on AU's considerable unrealised potential, which is 21%.

Barriers to Open Access

Article processing charges (APCs) are among the major barrier to Open Access. APCs are particularly associated with the 'Gold Open Access' business model. Gold OA means that the final published version of an article is permanently and freely available online for anyone anywhere. Authors are normally charged an APC to publish Gold OA. The problem with this model is that it doesn't really represent a break with paywalls – it simply moves the paywall. Whereas previously readers were charged for access, in this case the author must pay to contribute. This barrier may cause less affluent institutions and researchers, perhaps early-career researchers in particular, to opt out of Open Access publishing in these journals.

Another model for OA offered by some journals is Green Open access, for which no APCs are charged. According to this model, the article is published both in a scientific journal and in a digital repository which is open to all. Some publishers allow immediate OA access, while others require an 'embargo period' before

the article can be accessed via the digital repository. According to the national evaluation, journals with long embargo periods present a challenge to the Open Access agenda, because they block full realisation.

Other challenges are related to researchers' publication patterns and behaviour. If the national Open Access strategy is to succeed, researchers must actively choose Open Access journals, which is more complicated than it might sound. Researchers' choices are informed by a variety of other factors in addition to Open Access. According to the national evaluation, target audience and prestige are particularly central factors in researchers' choice of outlet. This means that the Open Access agenda must compete with the massive focus on high-impact journals and high citation rates that dominate the world of research.

Finally, another significant challenge is the high number of publications with unutilised Open Access rights. This is particularly pronounced in the health sciences: the [Open Access Indicator success measurement](#) from 2024 revealed an unutilised potential of about 20% in this domain. This has a major impact on overall realisation figures, because health sciences is the domain with the largest number of publications overall. There are several possible reasons that this potential remains untapped. The national evaluation suggests that a lack of awareness of the national strategy among health sciences researchers may be a factor. In addition, parallel publication requires all authors to consent to the upload of the accepted manuscript to a digital repository. Obtaining consent from all co-authors can be a big job. At the same time, some contributors may find it less attractive to upload the accepted manuscript, which may differ from the final version. If we are to meet the national Open Access target in the coming years, efforts must focus on the health sciences, which is also the domain that contributes the most publications overall. It is thought-provoking that if the health sciences had realised their unutilised potential, the target for Open Access realisation in 2024 would have been met, broadly speaking.

So if we are to achieve full transparency around publicly funded research in Denmark, an even more ambitious effort will be required on the part of researchers and the universities.

The evaluation of the nation strategy calls for a revision of the strategy when it expires in 2025. It will be interesting to see whether a new strategy will lead to more ambitious efforts to remove the barriers that block full realisation.