

Swiss National Strategy on Open Access

Preamble

In a letter dated 4 December 2015, the State Secretariat for Education, Research and Innovation (hereinafter SERI) commissioned swissuniversities to elaborate, with the support of the Swiss National Science Foundation (SNSF), a national strategy for Open Access to publications (hereinafter OA). In particular, the SERI insisted on the need for:

- Promotion of OA as an overriding goal
- Cost transparency for public funds
- Coordination among stakeholders, especially higher education institutions and their libraries

This national OA strategy was formulated by a representative working group led by swissuniversities and was adopted by the plenary assembly of swissuniversities on 31 January 2017.

1. Why Open Access to publications?

Revolutionary developments in information technology have made it possible to share knowledge easily. A scientific culture characterised by its openness and by “the way researchers work, collaborate, interact, share resources and disseminate results”¹ is called Open Science. It implies a transformation of the publication culture and opening up of science and research. Open Science practices, in particular OA, are increasingly being adopted worldwide, reflecting the fact that publicly funded research results are a public good which can only be fully exploited if everyone has free access without any restrictions.

OA initiatives started mainly as a reaction of scientific communities to the unsustainable and cost-increasing developments in the scientific publishing landscape. Over the last few decades, subscription costs have soared and profit-oriented publishing houses have played a dominant role in the publication and dissemination of scientific works². Their position is based on the fact that researchers appreciate their content, work for them as authors, reviewers and editors and often feel obliged to publish their works with them - all based on the current evaluation and reputation mechanisms - in order to maintain optimal career chances. As a consequence, most of the publicly funded research is locked behind a paywall.

All over the world, OA initiatives offer a chance of providing broad-based open access to research results, bringing research back to the scientists and to the public that funds it. They also represent an opportunity to point out flaws and consequences of the current evaluation and reputation mechanisms in science. Research funding organisations and academic institutions are supporting these initiatives by implementing the corresponding OA policies and by providing the necessary financial resources and infrastructure (e.g. repositories, OA Policies).

Studies have emphasised that OA is associated with higher visibility of research results, knowledge transfer, research efficiency, good scientific practice, media attention, potential collaborations, new job and funding

¹ Amsterdam Call for Action on Open Science, p. 4:

<http://www.eu2016.nl/binaries/eu2016/documenten/rapporten/2016/04/04/amsterdam-call-for-action-on-open-science/amsterdam-call-for-action-on-open-science.PDF>.

² However, in several research disciplines small and medium-size publishers with much lower profit rates play an important role.

opportunities, more efficiency and accelerated scientific progress, as well as support for movements such as citizen science. Thus OA also offers advantages in today's world of rankings and efforts to achieve excellence³.

A full transition to OA has **the potential to positively contribute to Switzerland's prosperity**, which is mainly built on high-quality education, research and innovation. It has a big impact not only on knowledge-intensive professions such as medicine, teaching, and journalism, but also on small and medium-sized enterprises (SMEs).

2. Current situation

OA has become a key topic in academia and is fast emerging as a new standard for high-level research. European academic and political leaders have emphasised the importance of implementing Open Access⁴ and defined ambitious goals in this context. It is important to note that the publication landscape as a whole is highly diversified, reflecting a wide variety of different research areas. But all in all, high-level publications (prestigious, well-known, arbiters of quality, etc.) are generally controlled by only a few publishing houses.

OA can be implemented in different ways. The most common are:

Green OA: archiving research results in freely accessible repositories: pre-prints, post-prints or publisher versions

Gold OA: the original and first publication is OA, for instance in an OA journal or as an OA book or other OA work. Either the publisher charges *Article Processing Charges* (APCs) and the author pays (Gold OA) or the APCs are entirely financed by non-profit organisations such as research funders, societies or universities (Platinum or Diamond OA).

Hybrid OA: publishing in subscription-based journals allowing OA to individual articles in exchange for additional payment of an APC.

There are many other OA models. The present unsatisfactory situation has in fact encouraged new and innovative forms of publishing supported by professional organisations or interested funders.

All over the world, frontrunner countries have adopted or are adopting different OA strategies. For example, the US Office of Science and Technology mandated that the results of all federally funded scientific research be published OA already in 2013. The green road has been chosen, e.g., in Portugal and Denmark. In contrast, under the Netherlands' presidency the EU has made OA mandatory for publicly funded research carried out under the Horizon 2020 programme. UK and NL have adopted a gold road. Many countries have opted to establish strategies without imposing any particular OA model.

3. Guiding principles

1. Powerful and unified approach

Given the small size of Switzerland and a very decentralised education and research system, all stakeholders, politicians, higher education institutions (and their libraries) and funders have to join forces to pursue common goals. Any transition will require a strong political will to promote OA from the heads of research institutions, from

³ An example are universities in the US with large medical faculties that usually receive substantial funding from the National Institutes of Health (NIH). Since all publications elaborated with NIH-funding unconditionally must be openly visible after no more than 12 months in the NIH's repository PubMed Central, these universities have a competitive visibility advantage. This ultimately will offer a better basis for optimal ranking than in Switzerland, where no such implementation of Open Access exists.

⁴ See for example the conclusions of the EU Competitiveness Council of 26 and 27 May:
<http://www.consilium.europa.eu/en/meetings/compet/2016/05/26-27/>.

high-level political actors and from funding organisations. Options for international collaboration should also be considered.

2. Support and commitment from research communities

Strong collaboration of this kind demands a high sense of responsibility from all stakeholders, who must play their part to ensure the success of the strategy. The OA commitment and awareness of research communities are essential for a transition.

3. Cost transparency and cost neutrality

OA should not lead to higher publication costs (cost neutrality) in the medium and long-term for Switzerland as a whole, although there will be additional costs in the transition phase. A prerequisite for implementing OA is a comprehensive and transparent overview of costs from research and funding organisations. As long as the scientific communities continue to allow large profit-oriented publishers to dominate scholarly publishing, the economic advantages of Open Access will be undermined by high publication prices – no longer for licences, but for OA publication fees.

4. Ascertaining control and diversity of the scientific production process

The present market concentration and price increases are a major obstacle to fair, open, efficient and financially sustainable publishing activities. This situation calls for a multi-pronged strategy. New and promising forms of publishing must be encouraged, including those involving stakeholders.

5. Revision of quality assessment system

Many current academic assessment systems, which depend heavily on a few journals, are largely considered to be inaccurate and limited (cf. [DORA declaration](#)) and should be reconsidered. In fact, as already mentioned, evaluation processes and reputation gain determine where scientists publish their works. And the criteria on which they are based should include Open Access and Open Science. However, any new assessment system can only be effective if it is supported by the research community.

4. Vision

Taking account of the principles expressed above, the Swiss National Strategy on OA aims to achieve the following objective, in accordance with international benchmarks: by 2024, all scholarly publication activity in Switzerland should be OA, all scholarly publications funded by public money must be freely accessible on the internet. The OA landscape will consist of a mix of OA models.

5. Action items

To achieve this vision, Swiss universities and higher education institutions, research institutions, research funders and science policy-makers agree on the following action items.

1. Adopting and aligning OA policies

An OA policy expresses the position and requirements of an institution or scientific community in relation to OA, thereby demonstrating its commitment; this represents an important step in any OA strategy. To be effective, it should also address monitoring and compliance issues. In addition, discipline-specific publishing practices need to be taken into account. From a national and international perspective, an alignment of existing OA policies is necessary.

2. Negotiations with publishers

Negotiations should comprise a variety of models such as Green OA clauses in licences, memberships with Open Access publishers and offsetting agreements including big deals with OA components. An exit option should be in place in case the negotiations fail. Although offsetting agreements strengthen the position of existing large publishers by extending their role into the world of OA, the agreements are deemed a necessary transitional measure.

To lead these negotiations an existing and experienced body such as the CSAL (Consortium of Swiss Academic Libraries) has to be complemented by leaders from higher education institutions provided with the necessary resources and political support.

3. Coordinating and pooling resources

In order to rationalise efforts and spending, stakeholders need to pool their resources. Most research-intensive institutions have already implemented infrastructure such as repositories and introduced maintenance and support services. Numerous small-scale institutional initiatives have also emerged. However, these successful solutions need to be coordinated and interconnected at the national and international level. Special attention has to be paid to quality management, peer review, control and shared infrastructures.

4. Alternative forms of publishing

While offsetting agreements are a good transitional solution that makes it possible to move away from subscription models, they still have some flaws: there is no cost transparency and the lack of independence of the scientific community remains problematic. Forging ahead with OA implies promoting high-quality publication models that make science more independent from oligopoly systems. Based on the idea of pooling already existing resources, non-profit organisations or public agencies could fund alternative OA publishing models (pilot projects). Alternative financial resources should be considered.

5. Communicating and raising awareness

OA represents an important move for the research community, and can only be achieved if it is supported by researchers. Therefore its challenges as well as its opportunities have to be communicated appropriately. Furthermore, society as a whole should be made more aware of these issues. Academics should be encouraged to engage in dialogue with the general public. This will lead to greater visibility of research results, citizen science and rapid dissemination of knowledge. Moreover, Switzerland will play a more active role in international debate.

6. Supportive regulatory framework

In order to ensure sustainability of the OA transition, the regulatory framework should be adapted in a way that not only allows but fosters OA practices and reuse. The current revision of the Swiss Copyright Act should ensure that text and data mining (TDM) is secured in a researcher-friendly way (e.g. at no extra charge) and that an unconditional right of second publication is granted, as was requested by the research community during the consultation.

7. National monitoring

All institutions conducting research shall ensure that their research articles are deposited in a suitable repository independent of the publication channel. The implementation of Open Access is to be monitored at a national level to ensure that all parties make a maximum effort to develop and disseminate free accessibility to Swiss research results.

6. Implementation

In order to put the vision into practice, strategy implementation begins without delay. By summer 2017, an Action Plan will describe appropriate solutions for publications funded by both private and public money. The plan is based on the action items specified above.