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# **Open Science**

Strategy and Policies by the Swiss National Science Foundation (SNSF)

### Open Science in Switzerland

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Abstract: The results of research financed by public funds are regarded as a public good and should be published electronically so that they are immediately and publicly available without charge and can be reused by third parties. The SNSF supports the principle of free accessibility: it has adopted the aim that all publications resulting from its funding will be openly accessible as of 2020.

The article is a summary of information provided by the SNSF More information are available on the SNSF website.

Keywords: Open Science · Open Access · Repository

Numerous studies have shown that Open Access (OA) publishing helps boost the visibility of research among researchers, the media and the general public. It promotes research efficiency, the transfer of knowledge and the efficient use of resources, while accelerating scientific progress. Increasingly, OA is regarded as a new international standard of excellence for scientific research, offering new opportunities for partnerships, quality control and funding.

Within the framework of the SNSF's OA policy, grantees are required to publish the results of their research in the form of Open Access publications. There are two main approaches to meeting the SNSF OA commitment: the "Gold Road" or direct publication in an Open Access journal as an Open Access book or book chapter; and the "Green Road" or self-archiving in an institutional or disciplinary repository after publication by a publisher.

### Context

"OA initiatives started mainly as a reaction of scientific communities to the unsustainable and cost-increasing developments in scientific publishing. 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 works. 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)."

#### **Definition**

Open Access has been defined in a number of ways. The most widely-used definition stems from the Budapest Open Access Initiative:

"The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited."

Source: Budapest Open Access Initiative

### Why Open Access?

- The results of research financed wholly or partially by public funds – such as SNSF grants – are public property, which should be immediately accessible by electronic means at no charge, so that they can be reused by third parties. A large majority of researchers in Switzerland backs this principle.
- Open Access publications are globally accessible and considerably increase the transfer of knowledge and the visibility of research results, not only within the scientific community but also as regards industry and the general public. OA may help shorten the publication lag and can improve the learning and teaching processes as well as increasing the participation of citizens in the research process ("citizen science").
- OA also helps reinforce the democratisation of research by making access independent of income and funding opportunities. Furthermore, OA can dramatically boost access to information in developing countries.
- Open Access to research results improves research efficiency and transparency because it may reduce the duplication of research, thus reducing the funding required.
- Political decision-makers also benefit from Open Access because they always have access to the latest scientific insights.
- Open Innovation: access to cutting-edge research encourages knowledge-based innovation in science, industry and society
- Text and data mining promotes more efficient access to ever growing data flows.
- Open Access can help reduce subscription costs in the long term, or at least keep them at a stable level.
- Smaller disciplines, in particular, will gain simpler and less costly market access.

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### **Versions of Open Access**

Essentially, there are two main ways of ensuring Open Access to scientific publications. They may be defined as follows:

The "Gold Road": researchers publish directly in an Open Access scientific journal, as an OA book or book chapter. Articles, books and chapters are openly, freely and immediately accessible in the internet. Publication costs, which are known as "processing charges", are usually paid by the author, their institution or another funding partner.

The "Green Road": researchers self-archive their scientific articles, contributions or books in an institutional or disciplinary repository, usually after an embargo period.

Please note that the "hybrid" approach is an alternative form of OA where researchers publish in a subscription journal but pay an additional APC to release their publication for Open Access. Access to the scientific results is paid for twice (known as "double dipping") in this system. For this reason, the SNSF does not offer grants for publications in the hybrid mode.

The SNSF prioritises Gold Open Access because it is the only standard which ensures immediate access, it favours new and sustainable publication models and underlines the many advantages of Open Access.

### OA 2020 Policy

#### Overview

The National Open Access Strategy approved in spring 2017 and the Action Plan of February 2018 represent important steps in establishing Open Access in Switzerland. They aim to ensure that all publications financed with public money are openly accessible by 2024.

The SNSF has decided to implement Open Access for all publications emanating from SNSF-funded research already as of 2020. To facilitate this policy, it has defined a range of measures and issued new regulations, which entered into force on 1 April 2018.

### The most important changes at a glance

### Changes to OA policy

- Gold OA for books as book processing charge (BPC)
- Gold OA for book chapters as book chapter processing charge (BCPC)
- Embargo of 12 months instead of 24 months for books in green OA

### Incentives and support

- The upper limit for article processing charges (APCs) of CHF 3000 is not applicable for the time being
- New platform for processing OA grants that is separate from ongoing projects

#### Compliance and controlling

- Systematic monitoring of OA compliance
- Automated feedback on OA compliance to grant holders
- No more exceptions from the OA commitment for articles

#### Communication

- Active communication of the OA policy to researchers, in mySNF and on the SNSF website
- Further, regular communication measures until 2020

## The changes in detail

### Since 1 April 2018:

- Articles in journals: The SNSF will continue to cover article processing charges (APCs) in the case of direct publication in OA journals. It is lifting the existing upper limit of CHF 3000 for the time being. Unreasonably high APCs might be cut.
- Books: The SNSF will cover book processing charges (BPCs) for book publications that are immediately made available in

- OA mode. BPCs are also available for OA book publications that are not based on an SNSF-funded research project.
- Applying for BPCs: applicants no longer need to enter publication grants as eligible costs in their applications. They can apply for BPCs directly via an OA platform that is part of mySNF. They will be able to do so even after the end of the project.
- Green Road: As until now, journal articles need to be archived in an institutional or disciplinary repository after six months at the latest. For books, there is a new deadline of 12 instead of 24 months. In terms of content, the works archived in the repository must correspond to the publisher's version (mostly called post-print or accepted manuscript).
- No exceptions for articles: The OA commitment applies to all articles. Grantees should only consider publishing houses that respect the OA rules of the SNSF. For books, exceptions may be granted if the costs for image rights are very high.
- Co-financing: Publications that are the result of co-financed research are subject to the OA commitment if at least 50% of the total funding amount was contributed by the SNSF.

### As of 1 October 2018:

- Book chapters: The SNSF will cover book chapter processing charges (BCPCs) in the case of the direct publication of book chapters.
- Applying for APCs and BCPCs: Applicants will now be able to apply for APCs and BCPCs on the OA platform itself, even after the end of the project.

### Transitional provisions

During the transition phase from 1 April 2018 to 1 October 2018, researchers will have various options for obtaining grants for articles and books. The SNSF strives to make the transition as seamless and simple as possible for researchers. Grant holders can benefit from the advantages that the new rules offer immediately, even if the grants were approved before 1 April 2018. For details please go to the website.

### Policy and rules of the SNSF relating to Open Access

### The Open Access commitment (principle)

SNSF grantees are in principle required to publish the results of their research in Open Access publications. The SNSF finances a Gold-Road publication in a journal that is 100% Open Access, as an OA book or an OA book chapter. But articles may also be published following the Green Road, no later than six months after publication by a publisher. On this path, books or book chapters need to be made freely accessible no later than 12 months after their initial publication by the publisher.

As the SNSF has significantly expanded its Gold Open Access funding and simplified the application process for publication grants via the OA platform (*my*SNF), it now no longer grants any exemptions from the OA commitment for articles. If books or book chapters should incur disproportionately high costs for image rights, the commitment may be waived on request.

### Articles in scientific journals

The Gold Road of Open Access publishing consists in the publication of scientific articles resulting from an SNSF grant in an OA journal. The "Directory of Open Access Journals", DOAJ, gives an overview of quality, peer-reviewed OA journals. The SNSF supports researchers in making their articles freely available via the Gold Road. A grant for covering the publication charges (APC) can be applied for via the OA platform.

OA publishing along the Green Road consists in the self-archiving of scientific articles resulting from an SNSF grant in an 344 CHIMIA **2018**, 72, No. 5 COLUMNS

institutional or disciplinary repository no later than six months after its publication by a publisher.

Please note that the SNSF does not support the "hybrid" publication model because researchers who publish in a subscription journal have to pay an additional APC to release their publication for Open Access. The SNSF does not cover this type of publication cost because access to the scientific results is paid for twice ("double dipping"). However, the SNSF's Open Access requirement is met by adopting this approach.

### Scientific books and book chapters

The SNSF provides financing for the publication of scientific books via the Gold Road, regardless of whether the underlying research results were obtained in an SNSF-funded project or not. The publication fees are covered by book processing charges (BPCs), which can be applied for via the OA platform in *my*SNF.

For individual book chapters from an SNSF-funded project that are published in a peer-reviewed anthology, the publishing fees can be covered by book chapter processing charges (BCPCs), applied for on the OA platform of the SNSF.

If the SNSF OA commitment is fulfilled via the Green Road, the books and book chapters must be archived in an institutional or disciplinary repository no later than 12 months after their initial publication by the publisher.

### OA monitoring by the SNSF

Evidence of the fulfilment of the OA commitment must be provided in the scientific reporting.

Researchers are obliged to enter in mySNF all publications produced under an SNSF grant and to indicate whether they are freely accessible or not. The SNSF will use this information to assess to what extent the OA requirements have been met. Researchers will be informed about the OA status of the publications they have entered and will have the opportunity to correct and update these data. Subsequently, the OA status will be displayed in the SNSF's P3 database.

### Regulations and guidelines

On the website of the SNSF a directory with all relevant, national and international regulations, guidelines and add-ons is available.

- General implementation regulations for the Funding Regulations (PDF)
- And the Regulations on the funding of Open Access publications of the SNSF
- Regulations on the funding of Open Access publications of 7 November 2017
- Open Access guidelines for researchers (PDF)
- Swiss National Strategy on Open Access (PDF)
- Zenodo: Financial Flows in Swiss Publishing Final Report
- Zenodo: Bibliometric study of the Swiss Publication System, 2016
- Monitoring report of the SNSF, October 2013 August 2015 (PDF)
- Amsterdam Call for Action on Open Science
- Science Europe Principles on Open Access to Research Publications (PDF)
- Initiative OA2020
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities
- Budapest Open Access Initiative
- Directory of Open Access Journals (DOAJ)
- Directory of Open Access Books (DOAB)
- Directory of Open Access Repositories (OpenDOAR)
- Sherpa-RoMEO colours
- OpenAire
- Quality Open Access Market (QOAM)
- OAPEN-CH
- Unpaywall

#### Web links

http://www.snf.ch/en/theSNSF/research-policies/open-access http://www.snf.ch/en/theSNSF/research-policies/open\_research\_data