

The Research Council's Principles for Open Access to Scientific Publications

1) Objective

An important research policy objective is to ensure that the results of publicly funded research are available to the public. Scientific publications based on R&D projects funded wholly or partially by the Research Council must be made openly accessible to all interested parties. To achieve this objective, the Research Council will work to take full advantage of the potential found in digital media and infrastructure to disseminate and quality assure research results.

Open access publishing – that is, open access to published scientific articles – aims to secure an open, quality assured source of knowledge. In recent years, open access publishing has taken on increased relevance because certain international publishers of scientific journals have gained a monopoly on the market, resulting in a dramatic rise in subscription costs which has in turn put new pressure on institutional library budgets. However, open access publishing meets other key research policy needs as well by a) enhancing scientific quality, as many more researchers may easily comment and expand on published research results, b) providing trade and industry and other interested parties with easy access to published research results, c) informing government authorities and public administration of research results relevant to their activities, d) storing an unlimited number of electronic copies of articles, which ensures future access to today's published research results, and e) providing researchers at institutions that have limited funding, not least in developing countries, with access to the latest findings.

There are two main methods of providing open access to scientific publications:

1. Self-archiving of previously published articles in institutional or subject-specific digital archives with unrestricted public access.
2. Peer-reviewed electronic journals that are free of charge and publicly accessible, known as open access journals. The costs of publishing open access journals are covered by means other than subscriptions, usually by the author bearing the costs of publication.

These two methods of open access publishing represent two different business models for scientific journal publishing. Self-archiving does not entail any substantial drawbacks for the current subscription-based system, but is expected to put downward pressure on the prices charged by the publishing houses since articles become available at no charge after a certain period of time (usually up to six months). Open access journals, on the other hand, constitute competition for the established subscription model, and may have structural impacts which today are difficult to predict. It is unclear, for instance, how payments from authors to cover publishing costs could be organised and financed in a sustainable manner.

Open access publishing is not limited to articles in scientific journals. Articles in anthologies and monographs are examples of other peer-reviewed publications that may be viewed in the context of open access.

However, as journal articles are the primary form of publication both internationally and across subject areas, it will be most constructive at this time to restrict the Research Council's open access principles to this type of publication.

For many years Norwegian researchers have been able to contribute to open access by storing their own scientific articles in institutional or subject-specific electronic archives. Although they have been actively encouraged to implement self-archiving, very few researchers have taken advantage of this capability. International experience also shows that recommendations regarding self-archiving have had little effect, whereas requirements to do so have produced a better response. If open access publishing is to flourish, the most important user group – the researchers – must take the initiative to self-archive.

2) The Research Council's requirements for open access to scientific publications

Open access to scientific publications entails substantial benefits for society. The Research Council will therefore require that peer-reviewed scientific articles based on research funded wholly or partially by the Research Council are self-archived in appropriate repositories whenever these are available. The requirement to self-archive must not, however, conflict with the author's academic or legal rights.

An important aspect of academic freedom is the right of researchers to choose the channel by which to publish their own scientific results, but researchers also have an academic duty to publish in a manner that gives their peers and the general public adequate access to these results. There are two ways in which the open access requirement may pose obstacles in relation to the principle allowing individual researchers to choose their own publication channels:

1. The requirement to self-archive may limit the opportunity to publish in journals that do not permit this. However, most Norwegian and international scientific journals currently permit self-archiving. It is a matter of time before this becomes common practice, as a growing number of research institutions and funders are requiring researchers to self-archive. In cases when self-archiving is not permitted, the Research Council should be able to make an exception to this requirement.
2. Open access publishing funded by authors may give rise to new restrictions of a financial and administrative nature. For instance, it would be unfortunate if research communities gained the authority to decide who receives funding to publish and thus who actually gets published. The Research Council should therefore exercise caution when establishing incentives that may change basic publishing patterns before there is sufficient knowledge about the consequences of publishing funded by authors.

When the Research Council requires researchers to store copyrighted material in institutional archives, it must be certain that this form of archiving does not infringe on the author's or publisher's copyright on this material. This applies to, for example, secondary use of published material such as digital compendiums for use in teaching. The Norwegian Association of Higher Education Institutions (UHR) and relevant organisations on intellectual property rights have begun negotiations on the use of digital material at the institutions. A future agreement will likely clarify the legal aspects of secondary use of material from digital archives, and the Research Council must give due consideration to such an agreement when formulating its requirements for self-archiving.

3) Self-archiving: Infrastructure and user perspectives

Scientific journal articles that meet the requirements described in point 2 must be stored in an open electronic repository, either at the institution with which the researcher is affiliated or in a subject-specific archive. In most cases a post-print version of the article is stored. If the author has published in a journal that does not permit self-archiving and has not obtained permission from the publisher to do so after having made such a request, the author may be exempted from the self-archiving requirement.

The technical and administrative infrastructure for self-archiving is largely in place at Norwegian educational and research institutions through, for example, the digital publishing project DUO at the University of Oslo and BIBSYS's Brage system. The regional health authorities have also established an open electronic archive known as HeRA, whereas the independent research institutes utilise open access publishing to varying degrees. There are also open international, subject-specific archives for individual research fields, such as UK PubMed Central. The Research Council should encourage researchers to use those archives which increase the visibility of their publications or which other funders of research specify as the required archive.

It is important to ensure that the self-archiving process is user-friendly so that researchers do not perceive it as an added burden. A working group appointed by the Ministry of Education and Research has recently submitted its recommendations on a shared database for scientific publications under a national system for research information. The working group's recommendations are found in a report on the Norwegian science index (NIFU STEP report 33/2008). This effort emerged from the need to incorporate publication data from the regional health authorities, the university and university college sector and the independent research institute sector into a single register. It is possible to expand the index to also allow uploading of full-text articles to institutional archives, which will greatly simplify the work involved with self-archiving. Whether or not this will be the case depends on how the ministry follows up on the recommendations in the report.

An expansion of the index should also provide researchers with information about their intellectual property rights and about which version of an article they may upload. The Research Council and other institutions that require self-archiving must nonetheless be expected to give advice on authors' rights in connection with self-archiving.

4) Cooperation and advice

Open access publishing is under continual development, and in the long run may lead to major changes in publication patterns and practices in research and academia. It is crucial that the Research Council's principles reflect this development and are open to adaptation should circumstances call for it. To ensure that the principles promote the objective of open access to scientific publications at all times, the Research Council must engage in productive dialogue about the principles with relevant institutions and partners.

The Research Council is responsible for providing research policy input to government authorities. In a letter dated 2 June 2008, the Ministry of Education and Research asked the Research Council and UHR to recommend measures to promote self-archiving and other forms of open access publishing. In particular, the ministry has requested an assessment of whether self-archiving of publicly funded research should be made mandatory and what the ramifications (e.g. legal, technological, communication-related, financial, administrative and other) may be. The Research

Council's response to the ministry has been formulated in accordance with the principles for open access to scientific publications.