

# ERCIM Goes to Open Access

by Jos Baeten (CWI) and Claude Kirchner (Inria)

*At its October 2014 meeting, the EEIG ERCIM board installed a task group Boost Open Access Mastering (BOM), chaired by us, with the goal of facilitating the sharing of information and the strategies of ERCIM participants in regard to open access. The ensuing report [L1], a plea for author control, which was adopted by the board in October 2015, recommends an open-access strategy and identified tools shared or to be shared by several ERCIM members.*

## We need change

The current digital revolution is impacting the way science develops and the way we conduct research. The seminal vision of Jim Gray about big data as the fourth paradigm of science [L2] is an excellent entry point to understanding these phenomena, where the initial paradigms of theory building and experimentation are now completed or even replaced by digital simulation and data exploration.

In this profoundly renewed context, the role of scientific data is fundamental. Scientists of all disciplines are completely dependent on the data that allow them to understand, model, experiment, reproduce and communicate.

In the digital world, everything can be seen as source data: a text describing the results of a study, a computer program, a video, a picture, a sound, a MOOC, a lab book, a protocol, a data set captured by an instrument or generated by a computer, and so on. Secondary data or data generated from other data, like discussions, social network information or peer reviews are also crucial sources that may be relevant for further research.

Being in control of data is a matter of scientific sovereignty, and any restriction or hindrance in this respect will be to the detriment of science. Note that control is more than ownership, because ownership is transferable, and if something is sold you can no longer control it. 'Control' is used here in terms of ability to read, re-use, quote, analyse a common good. From this point of view, maintaining the sovereignty of scientific academic research is a crucial issue, which we need to preserve in the short as well as the long run.

The services that allow scientific data to be used are crucial. They include data mining, analysis and synthesis for scientific purposes as well as for societal, economic or industrial purposes. In particular they require access to the full texts of scientists' contributions. Ideally, researchers would be able to make the most of the available data; this is an important goal that either scientists themselves, or public or private entities, should aim towards.

## Recommendations

As a consequence, the BOM task group, consisting of J. Baeten, L. Candela, I. Fava, C. Kirchner, W. Mettrop, L. Romary, L. Schultze, makes the following recommendations

which could be adapted to the best practices of each discipline as well as to local legislation, with the aim of making scientific sovereignty an unalterable reality before 2020.

## Main principles

1. Scientists should maintain control over all their scientific products (i.e., all the outcomes of their research activities ranging from their publications — actually the full texts to the datasets they curated/contributed to);
2. The services that value scientific data should be open to competition.

## Organisation principles

1. All research institutions should formulate and implement a strategic policy about the proper management of their scholarly outputs. Such policies should mandate scientists to deposit every scholarly product in a suitable open access repository as soon as the product is produced. Such policy should also mention the repositories trusted by the institution;
2. All research institutions should support the development of suitable publishing platforms for their research products. Such publishing platforms should be maintained as public infrastructure;
3. Scientists deserve proper credit for their scholarly products. Research institutions should promote and support the development of a comprehensive, scientific community recognised and innovative set of scholarly products evaluation/assessment criteria.

## ERCIM specifics

1. A network of repository and scientific information managers should be set up in order to share experience as well as to develop better services related to the various institutions' open-access strategies;
2. ERCIM should be able to access reliable output figures from all institutions, which could then be shared between institutions;
3. A joint dashboard should be set up for sharing article processing charges (APC) across all ERCIM entities: the model suggested by University of Bielefeld could be used;
4. In the name of ERCIM and of each national research institution, address the recommendations of the BOM Report to the highest political level of the EU and of each country;
5. ERCIM should favour the re-use of publication facilities available among its members, such as repositories or overlay journals;
6. The involvement of ERCIM members into the emergence of open-access publication including overlay journals dedicated to data and software should be encouraged.

ERCIM has adopted these recommendations and is working further towards our goals.

## Links:

[L1] <http://oai.cwi.nl/oai/asset/23589/23589B.pdf>

[L2] <http://kwz.me/VI>

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