# Activities at Knowledge Exchange – Partners to improve services for HER

By Serge Bauin (DIST-CNRS) and Jean-François Nominé (Inist-CNRS)

24 september 2020

# What is Knowledge Exchange?

<u>Knowledge Exchange</u> brings together six organisations that are representative of research activity in their countries. Their aim is to examine common problems in supporting research and developing infrastructure and services to enable the use of digital technologies, to share solutions, to seek perspectives on emerging issues that will have a concrete influence on their activities, and to foster exchanges between members of their different national higher education research communities.

For several years now, Knowledge Exchange has been appropriating open science by calling it "open scholarship" to highlight the inclusion of Humanities. In a context where open scholarship, or open science, is high on the agenda of various networks, initiatives, and consortia, Knowledge Exchange's effort is to drill down into common topics of interest and sometimes come up with complementary considerations to the other valuable and widely known work done by dedicated stakeholders with a perspective from organizations involved in research support.

Knowledge Exchange (KE) has a forward-looking vocation for the benefit of its members, as well as the public interested in its core subjects. Its work and its results are reflected in the organization of surveys, prospective seminars and reports. These outputs often contain potential instruments such as roadmaps and recommendations designed to help actors in their own policy development. These actions are carried out by working groups bringing together experts from institutions in the six member countries and beyond. This association also organizes thematic information meetings on topics inspired by current events, in particular in line with the agendas that international organizations set around themes of interest to those involved in research and higher education.

The members of this partnership are:

- CNRS (France),
- CSC (Finland),
- <u>DEIC</u> (Denmark),
- <u>DFG</u> (Germany),
- <u>JISC</u> (United Kingdom),
- SURF (Netherlands).

# Recent Achievements

### Open access monographs

Having identified early on that monographs were likely to be the poor cousins of the move towards open access, KE launched an exploratory action as early as 2016. This resulted in graduated analyses of the situation of this sector from the point of view of its own economy, the key points for its evolution, its uses and the policy factors that could foster its development.

The actions of the working group were punctuated by the following results:

- October 2017 - An assessment of the situation in the six member countries as well as Norway and Austria. Policies, funding and operational models were systematically identified. The report also shows the disparities between countries, the first breakthroughs, and the grey areas that require more knowledge on this sector and its challenges:

A landscape study on open access and monographs - DOI: 10.5281/zenodo.815932

- October 2018 - A summary of a questionnaire that identifies areas of concern in the field to ensure the viability of this type of open access publication. The costs of publication, BPCs (equivalent of APCs for books), the need for quality dissemination platforms, the interest of authors, the importance of learned societies and university presses, etc. were highlighted:

Knowledge Exchange Survey on Open Access Monographs - DOI: 10.5281/zenodo.1475446

- November 2018: A Workshop bringing together all categories of stakeholders involved in the production of open access monographs and their support, where the means by which monographs could take firm root in an open format for the dissemination of scientific knowledge was discussed.
- June 2019 Publication of a report on the presentations and discussions of the above workshop with a presentation of elements for a roadmap for open access monographs:

Towards a Roadmap for Open Access Monographs - DOI: 10.5281/zenodo.3238545

This series of actions pioneered an international awareness of the issues surrounding open access scholarly monographs. It has enriched national and international deliberations and aroused the interest of the European Commission. It has also stimulated the thinking of groups and projects with a view to setting up international infrastructural collaborations in this particular field and to foreshadowing policies of this scale such as Plan S.

### **Preprints**

Preprints are becoming an important element in the publishing practices of some communities. They may have had an important role to play during the current coronavirus crisis and which has required a faster flow of information than conventional publication.

- September 2019 - Once again, this is a study that has made it possible to review the state of affairs around an object of communication that is still widely debated while attracting enormous attention. It is the subject of numerous experiments and is becoming an object of value that could profoundly modify the publication ecosystem and transform publishing. It is still controversial and will remain a subject of observation of practices in the times to come.

Accelerating scholarly communication - The transformative role of preprints - <u>DOI:</u> 10.5281/zenodo.3357727

# The open science economy

Openness is not necessarily easily compatible with a market economy. Such compatibility may not even be desirable because of the cost of the revenue on which it operates. Nevertheless, how can we move towards sustainability without trying to better delineate the necessary economics?

KE has taken two lines of study in hand:

1. June 2019: A field study investigating the services offered by initiatives with very different backgrounds on their initial assumptions, their operating modes, their economic models. How did the pioneers imagine openness up and how do they anticipate a sustainable evolution?

Insights into the Economy of Open Scholarship: A Collection of Interviews - <u>DOI:</u> 10.5281/zenodo.2840171

2. October 2019: A conceptual reflection on what the open science economy should be to take communities out of the lock-in of dominant market players while perpetuating quality and value for reliable and honest scientific information. In other words: how to move from a market economy to one of collective action?

Open Scholarship and the need for collective action - DOI: 10.5281/zenodo.3454688

A French translation of these two reports is to be published in the last quarter of 2020.

# Current activities

# Small Publishers and the Transition to Open Access

One observation emerges: small publishers have an important role to play and if we don't protect them, they will die, because all efforts and attention go to the large publishers, all solutions and (transitional) requirements tend to be oriented towards them, making it increasingly difficult for small entities to exist or survive.

This new working group begins its exploration with the following questioning as a backdrop: what are the needs and challenges of small publishers, what are the differences between disciplines, languages, etc. and, more fundamentally, why do they matter for the opening up of science and how? What kind of vacuum would they leave if they were left out?

The study will be based on a study of the situation in each country and will attempt to identify common general lines of approach that will provide mechanisms for sustainable transition.

# Openness profile and evaluation

The research activity is evaluated according to long-established procedures. The changes that digital technology brings about in research practice are not, or to a very large extent insufficiently, taken into account. How to change evaluation arrangements and reporting practices to allow for fair and equitable recognition? What new behaviours and roles can be adopted by the various actors such as researchers themselves, institutions, funders?

All these different avenues are explored, starting with the technological solutions that are emerging and that offer better possibilities for attributing merit to researchers in the production of new knowledge.

### Publication of reproducible research outcomes

The launch of Plan S for the implementation of open access has prompted a debate on the methods and speed of moving to a full open access system, as many European countries have committed to do in 2020. The aim of this working group is to monitor the strategies and implementation plans in the six partner countries, highlighting good practices and lessons learned to help increase uptake. New publication models, which challenge current practices and economic models, also require a broader vision. Follow-up work on new developments and exploration need to be carried out.

The overall objective of the working group is therefore to investigate current practices and barriers to the publication of reproducible research results, and to determine how infrastructure (both technical and social) can help to secure the viability of mechanisms supporting them.

# **Future** activities

From the end of 2020 and in the course of 2021, the following topics should be the subject of new working groups.

## Permanent identifiers (PIDs)

This emerging activity is in the process of defining its scope in order to highlight PIDs and their crucial value and stake in the development of new ecosystems for research and scientific communication. The need to address risks is recognized (commercial actors are increasing their control, funding mechanisms for suppliers of critical identifiers are unstable, etc.) and the trust-building measures they imply when trying to build (and use) a well-functioning PID infrastructure. For this project, KE is considering a survey of the situation among KE's partners. KE will conduct PID case studies for each of its six member countries, which involves documenting the identifier systems and use cases, as well as the ambitions and priorities within each country.

# FAIR principles and software for research replicability

Publications, data and software (code) are the key to digital research and are not independent of one another, they are rather dichotomous. KE wishes to explore discipline-specific needs so that research results can be reproducible through the use of research data and software. Mechanisms supporting the replicability of research such as the potential and challenge of applying FAIR principles to data and software in all phases of the research life cycle will be explored.

# Relevance of actions

Whether it is in relation to issues of scientific communication, research practice or the tangible or intangible infrastructure underpinning research, KE's activities not only reflect the interests of its members. They reflect the debates and expectations of the research community as a whole. The echoes generated by its production, particularly in its writings, in other collective or institutional reflections demonstrate the relevance of this collective approach, which highlights issues and solutions for all.

The intercultural approach also makes it possible to maintain and share a tangible culture of international mediation.

# French representation

CNRS is the French partner of Knowledge Exchange. Our country's HER institutions are currently represented by Sylvie Rousset, Director of Scientific and Technical Information of the CNRS (DIST-CNRS) in the governance of KE, as well as by Serge Bauin (DIST-CNRS), Jean-François Nominé (Inist-CNRS), Emmanuelle Morlock (HiSoMA-CNRS), Pascal Aventurier (IRD), Pierre-Carl Langlais (Sciences Po), Jean-François Lutz (Université de Lorraine), Didier Torny (CSI-CNRS).

They take part in KE as experts in its various working groups with colleagues from other countries or as representatives of the CNRS in this association participating in its functioning and the conduct of its activities.