INGEGERD RABOW – THE FIRST NORDIC ADVocate!

Lars Bjørnshauge

This issue of ScieCom info: Nordic-Baltic Forum for Scientific Communication will be the last and final issue. The first issue was published in Spring 2004, in the still early days of Open Access. During the years Ingegerd Rabow has been the primary driver of the journal and this is no coincidence. Ingegerd has been involved in numerous activities related to scholarly communication and was very early active in the discussions about the promises of publishing via the internet and what became the Open Access movement.

Through constant engagement Ingegerd has managed to steer ScieCom info through troubled financial waters and as well managed to engage the Nordic and Baltic countries in contributing to the editorial work for the journal, which in itself is a major accomplishment.

After she returned to Lund University and joined the Library Head Office in 2001 and became head of Scientific Communication and Bibliometrics, Ingegerd was the driving force in what became a groundbreaking series of Nordic Conferences of Scholarly Communication, where she played an important role in attracting leading scholars from all over the world for discussions about the future of scholarly communication. Her energy made a significant contribution to the importance of the Nordic conferences, which had a big impact on the developments of Open Access in the Nordic countries. She developed the idea of and became manager of the nationally funded ScieCom - Swedish Resource Centre for Scientific Communication in 2004 and the journal ScieCom info was but one of the outputs from that project.

Another tangible result of her work was the Lund University Open Access policy issued in November 2005, the first Open Access policy in the Nordic Countries.

Through her work at Lund University and in national and Nordic projects she inspired Open Access developments at other Nordic Universities and her intense advocacy eventually paved the way for the signing of the Berlin Declaration by the Swedish Association of Higher Education and the Open Access Policy adopted by the Swedish Research Council.

Her work and publications on scholarly communication and bibliometrics gained a lot of respect throughout the Nordic countries and beyond. Ingegerds is never flashing her accomplishments and competence, so therefore it is very timely to highlight the importance of the contributions she has made for the good cause of Open Access. This is what happened in 2006, when the Faculty of Humanities at Lund University decided to award Ingegerd Rabow a honorary doctorate for her work in Scholarly Communication and Open-Access. This was a great moment and probably the first time a library staff member has received an award like this.

Looking back it is a pleasure to be able to state that Ingegerds contribution to Open Access has been significant and it must as well be a pleasure for Ingegerd to see that what started as a bright idea of a few individuals has now become an irreversible movement that eventually will open up access to publicly funded research results to the benefit of students, researchers, practitioners and the societies, an idea now embraced by hundreds of universities, research funders and even governments all over the world. We are not really there yet, but surely we are much closer, not least because of Ingegerds constant devotion to this good cause.

Thank you Ingegerd!
BRINGING THE DOAJ TO A NEW LEVEL
Lars Bjørnshauge

DOAJ - From a promising project to an important community supported Open Access service.

When the 1st Nordic Conference of Scholarly Communication, was held in Lund/Copenhagen Oct 22-24th 2002 it was really in the early days of Open Access1, only a few months after the Budapest Open Access Initiative made the famous definitions of Open Access. Among the conference participants were a handful of the experts present at the Budapest meeting. At some point in the discussions the need for a list of Open Access journals was raised. A few months later Lund University Libraries Head Office received a project grant from the Open Society Institute to develop such a list. May 2003 the Directory of Open Access Journals was launched, listing 300 journals2.

In many aspects the history of DOAJ reflects the short history of Open Access. In the beginning it was relatively simple. An Open Access journal was a journal published under a business model which is not based on subscriptions, a journal where readers can access the content from day one free of charge and the user can print, download, distribute content etc. Period.

During the years the number of Open Access journals has increased dramatically, a number of high profile pure Open Access publishers have entered the scene and Open Source software like the Open Journal Systems has made the threshold for entering publishing much lower. The development of the DOAJ helped in discovering the thousands of journals published all over the world by learned societies, university departments etc.

The fact that DOAJ shortly after the launch began as well to aggregate article level metadata and of course made all data harvestable made it possible for aggregators, search engines and discovery service providers to fetch the data and integrate the records in their services, thus multiplying the visibility. There is no doubt that DOAJ has contributed significantly to the visibility and dissemination of the contents of Open Access journals, especially Non-European and Non-North American journals, helping these journals to reach new audiences.

The funding of the DOAJ in the early years was based on project grants or one time contributions from among others the National Library of Sweden3, Axiell, INASP, SPARC Europe and SPARC. As DOAJ aspired to become a continuous service there was a growing concern about being dependent on project grants. Luckily DOAJ attracted a lot of attention in the early years, and increasingly there were signs that librarians and libraries would welcome an opportunity to support projects and services that could help libraries find their way in the Open Access jungle.

Therefore a membership model was introduced allowing universities, library consortia and commercial aggregators to contribute to the operation and development of the DOAJ. The membership model proved to be promising and in the course of a couple of years it enabled the DOAJ to grow gradually both in terms of coverage and as well in terms of the staffing resources affordable.

Increasing complexity, expectation and demands.

With the advent of a new model, where publishers began offering open access to single articles published in subscription journals for a fee – the so-called hybrid model – introduced by Springer, an extra dimension of complexity was added. In the beginning there was not that much uptake of this model, but that should change due to other important developments.

As an increasing number of institutions and research funders introduced open access policies and mandates, the demands of transparency increased. Again this phenomenon took a number of years to develop, but

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1 The term Open Access and the definitions was made by the Budapest Open Access Initiative in a meeting just a few months before the Lund conference. In reality however free access to research results without embargo has been practiced since the mid-90ties in Latin America, via services such as Scielo and Redalyc.
2 The initial list was provided by Bo Christer Björk and his team.
3 The National Library of Sweden supported the DOAJ during a number of years via the OpenAccess.se programme.
slowly the expectations to a service like DOAJ became more complex and specific.

Many universities began to establish specific funds to support their researchers in paying for publishing in those Open Access journals that requested a fee for publishing the article – the so-called Article Publishing charges, or APCs. Often there were specific requirements for journals to be eligible for APC support and often the requirements would state that a journal have to be listed in DOAJ to be eligible.

Research funders began as well to be explicit about the usage rights and especially reuse rights offered by the Open Access journals. With the Welcome Trust as the forerunner several research funders are now requiring the most liberal reuse rights as expressed in the Creative Commons CC-BY license.

By the end of the last decade these and other developments and the sheer number of Open Access journals to evaluate and process made it more and more difficult for a single university to allocate sufficient attention to a service, whose importance was ever increasing.

Discussions between OASPA\(^4\) and Lund University was initiated about the future of DOAJ and late 2012 an agreement was made between Lund University and a not-for-profit community interest company based in United Kingdom, Infrastructure Services for Open Access (www.is4oa.org), whereby IS4OA took over DOAJ from January 1\(^{st}\) 2013.

**New organizational setting and taking DOAJ several steps further**

At that point in time there was a long list of expectations and more or less explicit demands from the community as to what DOAJ should or ought to accomplish in order to still have an important role in the development of Open Access.

The most important thing was that the criteria for being included and remain listed in DOAJ was in desperate need of updating reflecting the developments and increasing demands in terms of more specific information about the journals policies and practice regarding reuse rights, peer-review process, openness, archiving, persistent identifiers etc.

Simultaneously a new phenomenon had seen the day of light, namely bogus publishers, who saw a business opportunity in setting up poor quality journals profiting on the publish or perish syndrome. Questionable publishers\(^5\) were to some extent discrediting all Open Access publishers, and the community was expecting new tighter DOAJ criteria to indirectly address this problem.

Developing more detailed criteria was handled by drafting a long list of questions a journal should respond to. The list was discussed by the new DOAJ Advisory Board and as well sent out for public comment. After handling a huge amount of comments from the community a decision was made about the new criteria, or the new DOAJ Application Form as it were, late 2013.

It goes without saying that an increase in the amount of information to be handled from 6-7 questions to more than 50 questions will not be possible to manage with a team of three part time employees, and add to that, that all journals hitherto listed in the DOAJ will have to pass this new evaluation process.

In an attempt to recruit more work forces DOAJ early 2014 went out and called for individuals who would work unpaid as DOAJ Associate Editors to evaluate journals to be listed in the DOAJ. Apparently this offered an opportunity for many librarians, PhD student, researchers, retired professors etc. to contribute to Open Access in that nearly 250 individuals from all over the world responded to the call.

Implementing a new application form and developing a back office system allowing dozens of Associate Editors to handle applications has been the next major task.

After developing a new platform early 2014 our development partner Cottage Labs was commissioned to develop a system to enable the implementation of the new Application Form and the new back office system allowing the new crowdsourced editorial system with a three tier evaluation process to be functional.

Now Associate Editors, Editors and Managing Editors will evaluate the journals, and as indicated above this will not only be new applications, but all journals listed in the DOAJ will have to pass the new evaluation process.

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\(^4\) Open Access Scholarly Publishers Association (www.oaspa.org), which by the way had is founding meeting in Lund 2008.

\(^5\) My personal view is that the questionable publisher issue is a rather overrated thing.
This is as well a huge task and even here we have commissioned development work to Cottage Labs, this time to facilitate easier re-application for journals already listed in the DOAJ. Although there are thousands of publishers with 1 or 2 journals listed, a significant number of journals listed are from publishers and aggregators with hundreds of journals. In the course of the next weeks a new fast-track re-application tool will be ready for multi-journals publishers.

**Where are we now and what next?**

Since May this year the current staff has added 363 journals based on the New Application Form and 128 journals have been removed.

We are now implementing the three tier evaluation process, by activating many of the volunteers. Currently we have set-up 10 teams covering 8 languages, and shortly we will kick off another 6-8 teams covering additional languages. The editorial teams have to digest a lot of instruction and training material before the evaluation work can really take off. We are now on the brink of being able to see the output of this new process. Currently 40 volunteers are at work and probably another 50 will start during the coming weeks.

Remotely managing nearly 100 volunteers from more than 30 different countries is quite an organizational experiment and challenge, and time will show whether we actually are able to do what we want to do!

As mentioned above we will soon be able to offer multi-journal fast-track reapplication, so shortly we will have a huge amount of applications to deal with. It is our expectation that all journals have been re-evaluated by the end of 2015.

But there is still more development to do: We will be reinstating our OpenURL service, we will develop easier upload of publisher metadata and journal applications and allow services to interact and extract our metadata in a way that has never been possible before; a mobile-optimised site; a subject browser; support for ORCID IDs and more.

**Funding**

We are currently on a funding drive, partly due to the financial requirements of the technical developments but also due to the management efforts required to control and guide all the volunteers. More new institutional members are signing up and virtually all existing ones are renewing their support. Recently smaller publishers are signing up for a couple of hundred GBP’s and we continue to have a very strong support among the open access publishers and aggregators.

We take this support and enthusiasm for our work as a sign that we are doing the right things, that we are on track, but during the next year or so we will really have to prove that we have managed the upgrade to the new requirements.

The financial state of DOAJ as of October 2014 is much improved compared to the same time last year but there are challenges ahead: we are not yet done with all necessary technical developments and as the number of volunteers grows so will the associated costs for managing and controlling the editorial evaluation process.

So….

It has been quite a journey from the birth of the DOAJ coming from a discussion at a conference to the current service, which really is in an important phase right now, November 2014.

Most promising projects do not make the transition to a service, much effort and many great ideas are lost. DOAJ has managed this transition since years, but now we are coming closer to the moment of truth. Whether what had turned out to be a social, organizational and managerial experiment: a community funded, crowdsourced free service, really can meet the expectations from increasingly demanding stakeholders.

In a year’s time we will have the answer. In the meantime we are grateful for the support from the community, not least the Nordic Countries.
Lars Bjørnshauge, Managing Director, DOAJ. Director of European Library Relations, SPARC Europe. Co-Founder IS4OA
The Research Council of Norway is introducing a new, five-year funding scheme that will cover a significant share of the costs incurred by research institutions for publication in open access journals. With this scheme the Research Council hopes to facilitate a more rapid transition to open access publishing of Norwegian research.

Ensuring open access to scientific publications is an overall research policy objective in an international context. In Norway, open access has been listed as an important objective in the Government’s last white paper on research. It is also in keeping with changes in the research community in recent years with regard to technological solutions, publication patterns and reading habits.

The Research Council has had a policy on open access since 2009. This policy was revised earlier this year. While the first policy focused on “green open access”, the revised policy also incorporates support for “gold open access”. Already from 2009, the Research Council required all scientific articles resulting from research entirely or partially funded by the Research Council to be openly accessible. All articles with such funding must at least be self-archived.

The revised policy emphasises “gold open access” and the Research Council has as a consequence established a new funding scheme to boost publishing in open access journals. The funding scheme will be implemented in the period 2014-19 to cover fees incurred by Norwegian research institutions for publication in open access journals. After 2019, the Research Council expects that costs related to publication fees will be incorporated into the institutions’ indirect costs for R&D projects, as subscription fees are handled today.

Picking up the bill
Approved research institutions may now seek funding from the Research Council to cover some of the cost of publication fees incurred. To be eligible for funding, universities and university colleges must have established an internal publication fund. All universities and many university colleges already have such funds in place.

The Research Council will only cover the cost of publication fees in journals registered in the Directory of Open Access Journals and that satisfy current international open access requirements, including licenses for free use. In addition, the Research Council will only approve publication fees for journals registered at levels 1 or 2 in the registry of publication channels from the Norwegian Association of Higher Education Institutions.

The Research Council acknowledges that the institutions are in the midst of a costly transition period in which they must maintain their journal subscriptions as well as pay fees to open access journals. The new funding scheme will make this period more manageable for the institutions, and encourage the institutions to develop effective systems for financing open access publishing through dedicated publication funds.

The Research Council has calculated that the institutions currently pay about NOK 16 million annually (approx. € 2 million) in fees for publishing in open access journals. Roughly half of the published articles are based on research funded by the Research Council. The Research Council is now setting aside up to NOK 9 million (approx. € 1.1 million) per year for the new scheme, which is open to all Norwegian research institutions and not limited to articles from research funded by the Research Council. The scheme’s financial framework may be expanded if this is warranted by the volume of publications.
The funding scheme is a step in developing a viable framework for dealing with publication fees in the research system. The first funding announcement will be made in the spring 2015 and is meant to cover costs for open access publishing incurred in 2014.

**May withdraw funding**

All scientific journal articles resulting from projects entirely or partially funded by the Research Council must still be stored in an open electronic repository, either in an institutional or in an open, subject-specific archive. The deposited version of the article must be an accepted version ("post-print"), and the content must be identical to the final published version. The requirement of self-archiving also applies to articles published in open access journals.

The Research Council will permit a delay in open access to self-archived articles from the original publication date by six months for journals in medicine, health sciences, mathematics, natural sciences and technology and by 12 months for journals in the humanities and social sciences. This is in accordance with international guidelines in the field, including in the EU’s Horizon 2020 and recommendations from Science Europe.

The Research Council’s requirement that project administrators store and make copyrighted material openly accessible in institutional repositories is based on the presumption that such open access does not infringe on the rights of authors and publishers to this material.

If articles resulting from projects funded by the Research Council are not self-archived in accordance with these open access principles, the Research Council may withhold funding until the relevant articles are self-archived.

An important aspect of academic freedom is the right of researchers to choose where to publish their own scientific results. However, the Research Council also stresses that researchers have an academic duty to publish in a manner that gives their peers and the general public easy access to these results. The Research Council therefore encourages researchers who receive funding to publish their work in open access journals.
In October 2014 the Swedish Research Council published draft national guidelines for open access and invited public comments. The SRC had been assigned to develop these guidelines by the Swedish Government in 2013. The Government in its turn was responding to a recommendation from the European Commission “on access to and preservation of scientific information” in 2012.

The SRC guidelines have two main chapters, the first on open access to scientific publications and artistic works, and the second on open access to research data. I restrict my comments to the first part. It says that the following guidelines shall come in effect 2025. “All peer-reviewed articles and conference reports emanating from publicly funded research shall be published open access immediately (so called gold open access) and they shall have a CC-license.” Thereafter identical requirements are phrased for books and artistic works.

It proceeds by saying that these guidelines will come in effect on the condition that a number of consequences and problems related to the guidelines get a solution. Then follows a long list of consequences and proposals for new studies, where issues like the academic career system, licenses, open access book publishing, journal quality, costs and economic transition problems are discussed without formulating any concrete proposals or plans.

A strange combination
I find it very hard to understand why the SRC has chosen this model of combining very far-reaching mandates in a distant future with conditions concerning the solution of a range of difficult problems in the meantime.

A mandate for OA gold that is to come in effect in 2025 seems fairly meaningless and might even be counterproductive. We really can not know where the publication system has come by that year. The share of OA journals will most likely go on rising but we might still have a mixed offering of journals, including new publication models that we could not envision today. And the outcome cannot to any significant degree be influenced by Swedish OA guidelines.

Instead such guidelines can only arouse suspicions and critique from researchers that for the time being prefer the green road. OA guidelines should respect researchers free choice of where to publish, for which the green road is needed for a foreseeable future. It is far more sensible to eliminate or reduce some of the strong factors that currently restrain researchers from publishing in OA journals, for instance by adjusting the recruitment and career evaluation system and by creating a more coordinated model for paying article processing charges, when these are needed. But here the SRC guidelines have no concrete proposals or plans.

CC-licenses and books
The demand for unspecified CC-licenses further adds to the lacking realism of these guidelines. How should we know that the time has come to make them

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1 Vetenskapsrådet. Nationella riklinjer för öppen tillgång till vetenskaplig information. http://www.vr.se/omvetenskapsradet/regeringsuppdrag/regeringsup pdrag/nationellariklinjerforoppenntillgangtillvetenskapliginformati on.4.7e727b6e141e9ed702b1307e.html

mandatory within national OA guidelines in eleven years from now? We are far from a unified evaluation of the role of CC-licenses within the international OA-movement today. It has for instance been pointed out that they square poorly with green OA, and that they may be judged quite differently within say humanities as compared to biomedical sciences. The reasonable position today is that of the EU in Horizon 2020: "In all cases, the Commission encourages authors to retain their copyright and grant adequate licences to publishers. Creative Commons offers useful licensing solutions in this regard (e.g. CC-BY or CC-0 licences...)" The same can be said for the OA mandate for books in the SRC guidelines. It is too early now, it is wiser to make recommendations and support initiatives for open access to books.

Out of line with Commission requests

The SRC guidelines are not only unrealistic, they are also out of line with what the Commission has requested from the member states.

The first point in the Commission recommendations says that member states should "Define clear policies for the dissemination of and open access to scientific publications resulting from publicly funded research. These policies should provide for:
- concrete objectives and indicators to measure progress;
- implementation plans, including the allocation of responsibilities;"

The SRC writes that the Commission has asked member states (1) to develop guidelines for OA and (2) to produce a plan to implement the guidelines, including allocation of responsibilities. They regard the guidelines for OA in 2025 as the answer to the first demand and the discussion about consequences and problems as their way of fulfilling the second. But the Commission most likely asks member states for policies that are in accord with its own policy in Horizon 2020. This means open access (not only gold OA) "preferably immediately and in any case no later than six months after the date of publication, and twelve months for social sciences and humanities;" The recommendation notably stresses concrete objectives and implementation plans, and specifies a number of desired results, for instance that "the academic career system supports and rewards researchers who participate in a culture of sharing the results of their research.” The general discussion in the SRC guidelines about this and other issues is far away from what the Commission has requested in terms of concreteness.

Institutional policies and plans

The Commission recommendation also ask member states to ensure that the research funding organizations and academic institutions receiving funding implement the national guidelines by institutional policies and plans. Sweden has already come a rather long way in this respect, but having OA policies and plans at all public research funders and universities would make a great difference. Then of course it would be beneficial for the efficiency and the uptake among researchers that these policies were tightly coordinated and the adherence to them regularly evaluated. The issue of institutional policies is not even mentioned in the SRC guidelines.

A question of perspective

It is striking that almost nothing is said about the role of universities. National guidelines should be national, i.e. relate to and instruct all public institutions involved in scientific information, not only research

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6 See note 2

7 See note 5

8 See note 2
funders but also the universities. Possibly the somewhat unrealistic stance of these guidelines reveals that the research funders perspective has dominated. A research funder can set high demands; researchers that do not agree do not have to apply for funds. But on a national level we have to find workable solutions for all researchers.

**Rewriting is needed**  
National guidelines for open access could have a positive impact if they took their point of departure from the present state of open access developments in Sweden and set targets that could really be affected by Swedish public institutions.

The guidelines should formulate goals for a foreseeable future - three to five years ahead - they should specify and prioritize a number of actions to reach those goals, and specify responsibilities and terms of cooperation for the public authorities involved. The issues brought up within the discussion part of the SRC document are relevant and could possibly be developed into concrete objectives and plans. But a serious rewriting is needed.

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**Jan Hagerlid**  
Senior Executive Officer at the National Library of Sweden until retirement in 2012. Coordinator of the OpenAccess.se programme from its start in 2006 until 2012. Formerly also Chief Librarian at the Swedish University of Agricultural Sciences and Research Secretary responsible for the Library Research Programme at Forskningsrådsnämnden (now part of the Swedish Research Council). Still engaged in the open access issue as retired.
The Institutional Repository of the Lithuanian University of Educational Sciences is rapidly filled with content. We interviewed academician Antanas Buračas - one of the authors who responded to an invitation to deposit his works to the Institutional Repository. Antanas Buračas was interviewed by Emilija Banionytė - director of the University library. The interview was translated by Rasa Dovidonytė, an information manager at Kaunas University of Technology.

What do you think about Open Access?

Antanas Buračas:
It is the future of all modern scientific research, because the open access repositories contain both finished research results and those which are under development. The date to establish priority becomes fixed, which is very important because the competition between authors of innovative discoveries. In addition, all processes are going extremely fast in the web of the global mind; if you haven’t published your ideas today there is a chance that tomorrow you will find the same ideas published by others and even developed somewhere.

How did you find out about the Institutional Repository (IR) of the Lithuanian University of Educational Sciences?

Antanas Buračas:
Over the past several years the information has been disseminated by the University library and by other Lithuanian information systems.

Why did you decide to make your books available via the Institutional Repository? What advantages and disadvantages of the IR you see?

Antanas Buračas:
My advice for everyone who seeks to find partners for their ideas is their presentation in the Institutional Repository. I think that copyright protection promised by LATGA (a collective copyright management association) is not a proper way sometimes to benefit at the expense of authors. There are few buyers of scientific books (even written in English), only major international book stores successfully disseminates these books (usually functioning online - Amazon.com, eBay etc.). New research results should be open and used for the prestige of the University. Previously, the main source of incomes for authors was honorarium; however, in science (except some cases of particular success), the author’s or his school’s prestige is more significant. A minor part of scientific works, such as the studies on Aestians written by professor Eugenijus Jovaiša, is a profound breakthrough in itself, it can ensure both things (popularity and demand) even in Lithuania with a small number of readers.

Is it complicated to put your works into the Institutional Repository? How would you suggest improving this procedure?

Antanas Buračas:
The procedure is rather simple, in case of difficulties University librarians effectively assist. By the way, the procedures to transfer into the Institutional Repositories are standardised in international practice. I was surprised that a complex 20 GB pdf book was uploaded to ResearchGate in just a moment.

Do you need help of the librarian, or you would prefer to deposit your works individually into the Institutional Repository?

Antanas Buračas:
I need the help of librarians sometimes since some of
my donated works are large volumes (20 or more GB), and they cannot be sent by e-mail. Over the last five years I have edited 5-6 such books, and in my opinion it was appropriate to donate these books for the readers of University library.

6. Will you encourage your colleagues to make their works available via the Institutional Repository?

Antanas Buračas:
Certainly, I always mention the advantages of this option - it is an intellectual donation.

Do you plan to make your newest books available via the Institutional Repository?

Antanas Buračas:
Yes; it appears that some international contracts with foreign publishers do not restrict from distributing of your publication for teaching or research purposes on the intranet. However, it is worth asking the publishing house whether they would agree with your decision; sometimes there are restrictions that prevent any publication of your research work elsewhere for three years. This is parallel to the restrictions applied to the publication of the results obtained in international research programs.

What do you think about embargo periods?

Antanas Buračas:
Embargo usually refers to international trade restriction, mostly due to political reasons. In the context of copyright after signing the contract on royalties, the author might be committed to not disseminating the published results, or sometimes the copyright may be transferred to the institution according to the contract conditions. In these cases there is no possibility for open access, as it is agreed in the contract not to disseminate results or not to publish the work.

Your other thoughts about Open Access, Institutional Repository, usage of information.

Antanas Buračas:
The open access is a fast developing infornt for fundamental research, and the usage of this system varies in different fields. I see how more and more representatives from HS and applied research project are joining this system. Moreover, the alternative academical open access systems functioning online rapidly progress. I already had a chance to add my works in LinkedIn, Google+, ResearchGate and other open access systems. These systems enable the convenient communication with partners chosen worldwide. Obviously, it is possible mostly if works are provided in international language. Researches in Lithuanian have their advantages as ensuring more in time closer communication in our ethnic circle. It is necessary to keep in mind that the open access systems are gateway to the collective mind creation online. These systems help create miracles. For instance, Linux developers successfully overcome such a global software giant as Microsoft with tens of thousands of programmers. Every day the open source project Linux is supplemented and specified much more that a very experienced programmer can write within a year. In such a way, majority of the most promising very large scientific projects are managed – such as the systems of genetic code decoding, creation of Allen Brain Atlas, and knowledge about Sloan Digital Sky Survey and Galaxy Zoo Digital Sky are accumulated. Only this information and photography database contains approximately 1/100 bn. of observed Universe which is formed of spiral constellations consisting of billions of stars. As a result, major enthusiasm of the world’s population is required for discussion and investigation. This can be accomplished by open access, and not only by the recognized scientists but also by just starting young enthusiasts.
Professor **Antanas Buračas**, Lithuanian University of Educational Sciences, is author and co-author of books on multicriterial evaluation, intellectual resources, regional forecasting, metaeconomics, social infrastructure and others.

**Emilija Banionytė** The Director of Lithuanian University of Educational Sciences

**Rasa Dovidonytė**, Senior Information manager, the Library of Kaunas University of Technology
OPEN ACCESS IN ESTONIA
Elena Sipria-Mironov

Open Access principles and regulations in Estonia

In Estonia there have been different discussions involving researchers, university representatives, publishers, funders and policy makers, not on the question whether or not Estonia should have an open access policy, but what the policy should be like.

In 2010, Estonia started to implement the Research Infrastructures Roadmap1 (p. 59) project, which included two OA-related topics: the Estonian E-Repository and Conservation of Collections and the Natural History Archives and Information Network (NATARC). Since 2012 the Estonian Research Council requires that articles, produced from publicly funded research, shall be available for everyone via the Estonian Research Information System (ETIS)2 a national register that aggregates information on R&D institutions, researchers, projects and research results. This mean that there has been a clear change in the principles for giving out research grants. Nevertheless, a clear national open access policy has not been developed yet.

The main strategy document for Estonia’s RD&I policy is “Knowledge-based Estonia 2014–2020”3 approved by the Riiikogu (Estonia’s parliament) in the autumn of 2013 and Open Access principles has been added there as an underlying standpoint. The strategy document see Estonia as an active and visible international cooperation partner in the field of R&D and innovation and outlines the aspiration of developing Estonia’s research institutions to a higher quality, versatility and visibility.

Initiating discussions on the importance of having a national open access policy in Estonia is one of the main needs that the Open Access activities address. Up to now there are 24 Open Access journals in Estonia indexed in Directory of Open Access Journals (DOAJ), most of them have been operating for more than five years. In addition to the journals, there are also 5 repositories listed in Directory of Open Access Repositories (OpenDOAR) that include open access materials.

Open Access activities supported by University of Tartu Library

Since 2009 one of the main supporters of Open Access initiatives in Estonia has been The University of Tartu Library (UTL). The UTL Open Access activities in 2010-2012 have clearly initiated important discussions on the necessity of open access publishing in Estonia. These activities lead the UTL to participate in the Estonian Ministry of Education and Research’ Research and Innovation Monitoring Program4 in 2012, where the UTL created a report about the OA principles, and the respective copyright issues and business models. The UTL has become an important centre of expertise for questions related to open access publishing in Estonia.

In October 2010 the UTL opened the Open Access web gate5 that provides information

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5 Open Data web gate [viewed 7 October 2014]. Available from: http://www.utlib.ee/openaccess/eng
about OA and links to the largest OA repositories and journals. This website is one of the main sources for OA information in Estonia. UT Digital Archive in DSpace is an institutional repository for e-theses and e-publications, digitized theses and books, manuscripts and images etc. During the year 2011, UTL contributed to the development of a positive brand for the UT digital archive. The strategy involved technical developments and the use of promotional materials such as brochures, posters and web sites to describe the general benefits of an institutional repository. To encourage authors to deposit their works in the repository, UTL presented a video, demonstrating best practice. As a result, the repository has grown significantly. In 2010 it registered over 13,000 deposited items, in 2012 more than 25,000 and it has shown that it is a good way to expose research to a wider audience. During the years 2011-2012 the number of visits and hits have also increased greatly up to 3 million hits per year. The Library also offers the Open Journal Systems platform for publishing to both university members and members of other research institutions (the total number is now 12 OA journals).

In 2012 UTL started a successful collaboration with the University of Tartu Press to promote and implement OA publishing in the university. As a result University of Tartu Press has actively started to develop open access to research information. Some of the monographs and collections of articles published by University of Tartu Press are now available on the open access platform OAPEN (Open Access Publishing in European Networks) and indexed in DOAB (Directory of Open Access Books).

In 2013, the University of Tartu Library opened the Open Data web gate. The website presents information about Open Data principles and the opportunities of preserving and making research information accessible.

In 2014, UTL joined the Knowledge Unlatched Pilot project. During the Pilot, Knowledge Unlatched is working to secure pledges from nearly 300 libraries (incl UTL) in order to unlatch a collection of 28 front-list titles from recognised scholarly publishers.

To support the OA movement in Estonia, UTL participates in the European Commission (EC) funded OpenAIRE and OpenAIREplus projects. UTL cooperate with the Estonian Research Council providing researchers with the opportunity to comply with the EC OA pilot and make their EC funded research output OA in UTL’s institutional repository.

In the beginning of 2014, the University of Tartu joined the DataCite organisation, becoming the only organisation in Estonia with the right to assign unique DOI numbers to single objects and data collections. The DataCite Estonia project will develop a web-based platform for the registration of research data and establish a consortium that can be joined by all Estonian universities and research and development institutions. The DataCite Estonia, jointly coordinated by the UT Library and the UT Natural History Museum, is unique in Estonia and also in Eastern Europe. It will significantly contribute to make the Estonian research data visible and accessible to the international scientific community. The new platform could become available (offering DOIs as well as offering expertise in publishing data sets) to other scientists in Baltic States. This will

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6 DSpace at University of Tartu, 2011 [viewed 7 October 2014]. Available from: http://dspace.utlib.ee/dspace/
7 EIFL OA Case Study „Open access and open data support services at Tartu University“ [viewed 7 October 2014]. Available from: http://www.eifl.net/eifl-oa-case-studies
8 OAPEN (Open Access Publishing in European Networks) [viewed 12 October 2014]. Available from http://www.oapen.org/
10 OpenAIRE project [viewed 7 October 2014]. Available from: https://www.openaire.eu/
11 DataCite [viewed 15 October 2014]. Available from: http://www.datacite.org/
12 Preparations for and the creation of the DataCite Estonia platform were financed according to the agreement on the use of state budget support no 1.4-6/14/2 between the Estonian Research Council and the University of Tartu.
further enhance cooperation among the Baltic States centres of excellence.

References


DSpace at University of Tartu, 2011. [viewed 7 October 2014]. Available from: http://dspace.utlib.ee/dspace/

OAPEN (Open Access Publishing in European Networks) [viewed 12 October 2014]. Available from http://www.oapen.org/

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OPEN ACCESS MOVEMENT IN LATVIA
Iveta Gudakovska, Gita Rozenberga, Evija Lapsa

Open Access movement development in Latvia – introduction

Although an Open Access Policy on a regional or institutional level has not yet been adopted, active work on Open Access implementation is carried out. The University of Latvia Library (UL Library) take part in supporting the Open Access principles and creates and shares knowledge about Open Access in the academic and scientific environment. The Open Access movement in Latvia is being promoted through information materials, organization of different events and implementation and development of technological solutions. Institutions like the Centre for Culture Information Systems and Riga Technical University also work with Open Access promotion in Latvia.

In 2011 the Cabinet of Ministers of the Republic of Latvia approved the National Reform Program for Latvia as part of the Implementation of the “Europe 2020” strategy.

The Open Access activities of the UL Library

Since year 2009 the UL Library has started a wide Open Access promotion. During the Open Access week the UL Library organizes different events: international seminars, workshops and discussions. The participants are introduced to Open Access theoretical approaches, the publishing options in institutional repositories and Open Access journals, copyright issues and the creation of institutional repositories. Seminars and discussions have lead to initiatives to set up institutional repositories in the UL, Riga Technical University, and the National library of Latvia. Guests from Great Britain, Lithuania, Estonia, Ukraine and Macedonia have participated and shared their experiences in the events organized by the UL Library.

From 2009 to 2014 the UL Library participated in the European Commission Seventh Framework Programme project „OpenAIRE” (Open Access Infrastructure for Research in Europe) and OpenAIREplus (2nd Generation of Open Access Infrastructure for Research in Europe: 2012-2014).

In 2009 a seminar named “Open Access: research quality and impact maximization” was held.
In 2010 a seminar named “Open Access and OpenAIRE- challenge and opportunity for Latvian scientific progress” was held.

In 2011 the UL Library managed an OA project funded by the Eifl organization “Information about the Open Access movement and resources at the University of Latvia”. A seminar named “Institutional repository for research development and scientific information availability” was held also.

In March 2012 the institutional repository development week was organized, a workshop named “Open Access publishing: possibilities and development” and discussion in the Scientific café “How to Google smart or how to distinguish good open access resources”.

In 2013 the Scientific council of the UL held a session and a discussion “Copyright issues in Open Access: a burden or an opportunity?” which also took place in the Scientific café. A video devoted to the 5-year anniversary of Open Access in Latvia, and electronic booklets where the main questions about copyright issues in Open Access where answered was produced.

Practical achievements in Open Access

One of the main achievements in the Open Access promotion in Latvia is the e-resource repository establishment. In Latvia there are established two e-resource repositories – UL e-resource repository which provides full access to the full texts and the RTU institutional repository which provides a limited access to the full texts. The UL e-resource repository (https://dspace.lu.lv/dspace) was established in 2011 with the aim to provide free access, promote and
distribute the scientific achievements of the UL and contribute to science and research development. The e-resource repository contain publications by the staff members of the UL – published articles, doctoral thesis and abstracts, conference proceedings, administrative, scientific and project reports and other electronic documents.

The RTU e-resource repository provides RTU with the collecting, archiving and dissemination of scientific publications. In the repository there are collected the journal «RTU Zinātniskie raksti» papers, RTU teaching staff and researchers publications, which are archived in the repository.

In Latvia there are two Open access journals indexed in DOAJ – „Latvian Journal of Physics and Technical Sciences” and „Proceedings of the Latvian Academy of Sciences. Section B: Natural, Exact and Applied Sciences”. The scientists also publish their works in institutional and subject repositories - BioMed Central, ArXiv, Cogprints etc. Open Access to scientific publications is also provided in “UL written and presented dissertations database”

**Future objectives**

The opportunity to publish publications and preprints in the UL e-resource repository is still not sufficiently appreciated by the authors of scientific publications in Latvia. It means that we have to increase their motivation and continue the work of informing them about the self-archiving possibilities in the UL e-resource repository.

Currently a OA policy development is taking place in the UL, that will be followed by implementation. It may serve as a pilot project for the development of a national policy.

**References:**

GUDAKOVSKA, Iveta, RAMPĀNE, Ilga, RANKA, Sandra. Open Access iniciatīvas Latvijas Universitātē un Latvijā = Open Access initiative in the University of Latvia and Republic of Latvia. Bibliotēka kā universitātes informācijas un mācību telpa [online], 2014 [viewed 10 October 2014]. Available from: https://dspace.lu.lv/dspace/handle/7/2355


RANKA, Sandra. Brīvipiejas informācijas (Open Access) resursu nozīme zinātnes attīstībā = The role of Open Access information resources in the scientific development. Informācija un sabiedrība: Informācijas un bibliotēku studiju nodalījus rakst. [online], Nr.3, 2014 [viewed 7 October 2014]. Available from: https://dspace.lu.lv/dspace/handle/7/2343
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OPEN ACCESS IN LITHUANIA
Gintare Tautkevičienė, Rūta Petrauskaitė, Brigita Serafinavičiūtė

Open Access principles and regulations in Lithuania

The main outline for the policy concerning Open Access (OA) is set up in the Law on Higher Education and Research adopted on 30 April 2009\(^1\). One of the articles from this document states “in order to ensure the quality of research conducted with funds of the state budget, the transparency of the use of funds of the state budget, to enhance the scientific progress, the results of all research works carried out in state higher education and research institutions must be communicated to the public (in the Internet or in any other way), to the extent this kind of communication is in compliance with the legal acts regulating the protection of intellectual property, commercial or state and official secrets”. However, a coherent policy with clearly stated concrete objectives and plans for their implementation still does not exist and there is no OA mandate in Lithuania.

The Ministry of Education and Science is seeking to speed up these processes. It was suggested that the Research Council of Lithuania (RCL) should become a coordinating body concerning OA issues. The RCL agreed to take on this mission at the end of 2013. Concrete policies and implementation plans are expected to be developed in the coming few years. An important input for this issue is expected from the FP7 project PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) that aims to support the European Commission’s Recommendation to Member States of July 2012 that they develop and implement policies to ensure OA to all outputs from publicly-funded research. This PASTEUR4OA project started in February 2014, and the RCL is a project partner.

In 2012 the RCL started to support Lithuanian researchers in their efforts to publish their research papers in high-level research magazines or research books. Payments for OA are eligible, but the main criteria for the publications is high quality. By allocating this support the RCL seeks to promote the development of Lithuanian science and its global visibility. Furthermore, this support will ensure Lithuanian researchers that the financial capacities of the researcher or of the institution at which she or he is working will not affect the dissemination of the achievements in the area of research. However, this is not the main funding activity of the RCL. Since 2012 the total financial allocation for this activity is below 50 thous. Eur. Nevertheless, the payments for OA publications produced during the project duration are eligible costs in the research projects funded by the RCL.

One of the main supporters of Open Access initiatives in Lithuania has been the Lithuanian Research Library Consortium (LMBA) which represents 52 academic and research libraries. Since 2005 LMBA has organized various OA related activities. Most of these events,\(^2\) together with video promotional material on OA,\(^3\) were organized with the support of EIFL (Electronic Information for Libraries)\(^4\). LMBA organized the international conference “Opening the Scientific Knowledge” in 2011. LMBA and its partners the Kaunas University of Technology, the Vilnius University, the Lithuanian Society of Young Researchers and the Association of Lithuanian Serials implemented a number of projects supported by EIFL.

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\(^{4}\) EIFL [viewed 24 October 2014]. Available from: http://www.eifl.net/

An important role in the stakeholder dialogues is played by the Lithuanian National Commission for UNESCO which invited stakeholders to focus on this area of expertise. The first meeting of various institutions linked to the OA to scientific information representatives was held in January 2013. The participants expressed a need to form a working group constituted from various authorities and stakeholders that could summarize the situation in Lithuania and provide suggestions for further development. This kind of group was formed by the Lithuanian National Commission for UNESCO in February 2013. The group was composed of the representatives of LMBA, the RCL, the Ministry of Education and Science, the Lithuanian Academy of Sciences, the Vilnius University library, the Lithuanian Society of Young Researchers, the Research and Higher Education Monitoring and Analysis Centre (MOSTA), and the Agency for Science, Innovation and Technology (MITA). The aim of the group was to mobilise the interested parties, to analyse the situation of OA in the country and to provide possible solutions for the authorities. The group had two meetings in 2013 and shared information throughout the year. Based on the situation summarised by this group, the Lithuanian National Commission for UNESCO approached the Ministry of Education and Science suggesting to appoint a coordinating institution for the OA issues.

**Open Access infrastructure in Lithuania**

The Lithuanian thesis and dissertation (ETD) database was started on the initiative of the joint activities of the Lithuanian higher education institutions. An agreement for this project between the Kaunas University of Technology and UNESCO was signed in 2003. The project was implemented by Kaunas University of Technology together with 13 Lithuanian state universities and Riga Technical University. Database development regulations were approved by the Ministry of Education and Science in 2004. The Lithuanian ETD Information System became a part of the national repository of the Lithuanian Academic e-Library (eLABa) in 2006.

The Electronic Academic Library of Lithuania (eLABa) as the national OA repository of the Ministry of Education and Science and all academic institutions was launched in 2006. Since 2010 eLABa was maintained and developed, the Consortium of the Lithuanian Academic Libraries for the Maintenance and Development of an Information Infrastructure for Scientific and Studies. eLABa stores 42,7 thousands documents of all types (more than 33 000 ETD documents, 300 books, 8 100 journal articles and others) from 6 collections.

Since 2006 the RCL in cooperation with Lithuanian educational institutions and libraries manages the database *Lituanistika*\(^8\) which aims to accumulate and disseminate certified, high-quality information about research in Lithuanian studies in Lithuania and in the world. The *Lituanistika* database is created according to the projects supported by the European Structural Funds. This database is planned to be used and developed in the period 2015–2020.

6 institutional repositories which serve the needs of specific institutions are registered in the OpenDOAR catalogue:

- ISM Science Box, [http://archive.ism.lt/](http://archive.ism.lt/)
- Kauno Kolegija Repository, [https://dspace.kauko.lt/](https://dspace.kauko.lt/)
- KAUNO KOLEGIJA INSTITUTIONAL REPOSITORY, [https://dspace.kauko.lt/](https://dspace.kauko.lt/)

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In addition, 33 journals published in Lithuania were registered in the DOAJ catalogue in 2014.

Open Access to research data

The Lithuanian Data Archive for the Humanities and Social Sciences (HSS) LiDA9 was established in 2006 by the Policy and Public Administration Institute at Kaunas University of Technology in partnership with Vilnius University, the Institute for Social Research, the Ministry of Education and Science. LiDA is a social science data service that allows users to search, browse, analyse, and download social science survey data. LiDA catalogues contain social survey data, historical statistics and data about the Lithuanian political system. All metadata are bilingually documented in English and Lithuanian. LiDA is a national member of ICPSR. LiDA coordinates international data collection initiatives in Lithuania, e.g. the European Social Survey (ESS), the European Election Study (EES) and the International Social Survey Programme (ISSP).

The project National Open Access Research Data Archive MIDAS funded by EU Structural Funds was launched in 2012. The purpose of this project is to establish the infrastructure of national research data archives that enables collection and storage of research and empirical data and ensures free, easy and convenient access to the data. 13 institutions of research and higher education and medical institutions participate in this project together with Vilnius University as the leading institution and Vilnius University Hospital Santariskiu Klinikos as project partner. According to the legal acts of the Republic of Lithuania MIDAS should be created as an information system for research data. Regulations of MIDAS information system have been approved and it has begun to purchase technical equipment and software development.

Future objectives

Lithuanian authors still lack the motivation to publish their research results – publications and data – in an OA manner. Therefore, more attention should be given to the OA information campaigns both at individual and institutional levels including national policy makers. A positive impact on the development of OA in Lithuania is expected next year with the start of an updated national repository of scientific publications eLABa and with the realisation of the MIDAS project dedicated to the storage of research data.

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References


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Brigita Serafinavičiūtė Scientific secretary and Board member at the Research Council of Lithuania. Since 2014 she acts as one of the Lithuanian representative in the group of the National Points of Reference set by the European Commission in order to coordinate OA policies. She also works for the FP7 project PASTEUR4OA.
As in a lot of countries the Open Access debate has raged in Denmark over the last eight to ten years. The paths followed by the debate have been more or less the same as in other countries, with the main protagonists being administrators, librarians, the occasional squeak from the politicians - and far fewer squeaks from scientists themselves.

The debate started with a very idealistic goal and tone: the existing publishing models and habits were working contrary to the spread of science for the good of society. On top of this, the economics were vulgar, where we first paid for science through research funding carried out for public money and then had to pay again to read all about it and learn from it. OA publishing would remedy all this by ensuring free and unhindered access to published results.

University libraries in Denmark have championed the cause, while at the same time being bound hand and foot to having to provide access to the core, peer-reviewed scientific literature available from commercial publishers, no matter the cost. Quite obviously no real attempts have been made at a boycott of the commercial publishers, as this would have to be a tactic from several fronts, and certainly not feasible. And one of the main reasons for this being, that without the very active support of scientists, this tactic would be nothing short of suicidal.

Steps along the way

Denmark’s Electronic Research Library (DEFF) organization has been active in support of the OA movement. It has initiated studies and hosted working groups and committees to support the issues. In 2009 the economic aspects of OA publishing were studied by John Houghton in a report for DEFF1 and this was followed up by a three-country comparison (United Kingdom, Holland and Denmark).2 It is difficult to assess the impact of this study on the economic aspects of OA in Denmark, if there has been any at all in a concrete sense: that the results did not indicate any adverse effects is probably just as important. It would be interesting to read an updated economic report as the OA landscape has changed since 2009 and mandates are more prevalent and national demands are in place. More about this later in this article.

In 2010 an Open Access Committee was established, with the participation of DEFF, universities and research libraries and government agencies. Their report was published in 2011 with 16 recommendations3, with points also covering basic steps to be taken in preparing the ground.

The first recommendation stated that a national policy should be based on “green Open Access” and that “there should be Open Access to the results of publicly funded research to as great an extent as possible”. This phrasing has luckily been tightened considerably in the new national policy. Other recommendations include the formulation of Open Access policies by funders, universities and government, issues regarding national and institutional repositories, dissemination of OA information, international cooperation, OA and consortium licenses, long-term preservation, the national bibliometric research indicator, research data, publishers, effect on scientific journals etc. Not all issues have been systematically followed up on, some are continuing debates, for example research data, while others are not as relevant as at the time they were formulated, for example that universities should formulate OA policies: the need for policies has been superseded by the need for plans of action to ensure compliance with OA policies, not least in tackling the issues connected with changing ways of financing research publishing.

An important milestone stemming from the report was the commitment by government to establish a national OA policy which was recommended by the report and did arise. All were very clear that unless a political commitment was made the hope of getting anywhere at all would be tough going.

OPEN ACCESS IN DENMARK
Adrian Price
The “OA infrastructure”

While a political commitment was waited upon other actors were active in looking into various aspects of the “OA infrastructure”. The Danish Open Access Network (DOAN), which arose out of a DEFF project, linked mainly university libraries in preparing university libraries for giving support to researchers and university administrators, mainly in the areas of knowledge building on how best to achieve OA publishing and on how to comply with publishers’ conditions.

An extremely important, and still missing, brick in this “infrastructure” is the lack of easy access to information regarding the restraints and possibilities individual publishing channels present. This data should be in a form easily available to researchers. The Sherpa/Romeo database is widely used, but is not aimed specifically at OA conditions, is not always easy to interpret – and researchers find it difficult to use. Its aim is not to facilitate the choice of publishing channel using a faceted approach, which would take into account such factors as conditions for self-archiving as well as various forms of OA, the price of buying OA, as well as how to assess the quality and impact of individual publishing channels. A DEFF project “SOAP” – Support for Open Access Publishing - investigated the possibilities of establishing a database which would embrace all these aspects which are involved in deciding where to publish. The SOAP project is described in an article in a previous issue of this journal.4 The ideas of the SOAP project have as yet not been taken up, but easily accessible data regarding publishing channels, which can be used to facilitate the most relevant choice of publishing channel, is still a need. Especially data which can combine the issues of impact, quality as well as OA.

The “Open Access Barometer” was another DEFF project which investigated how to measure the ongoing status of OA publishing in Denmark. It has also been described in a previous article in this journal.5 How to always keep an eye on what the status of OA is at research institutions in Denmark at any point in time, is an extremely important issue. The difficulty is in defining the objective metrics and data sources needed to enable a valid measurement of OA publishing. The issues of the necessary metadata has not yet been solved and neither has the issue regarding the source of this data. But as we move towards OA compliance, these issues will have to be solved.

In June 2012 another important milestone took place. The Danish public research councils and foundations together adopted an OA policy for all publications resulting from projects which were financed, in whole or in part, by these funders.6 This was a decisive policy formulation as, together with for example funding from the EU and others, it affects a large part of research in Denmark. It is now no longer a question of choice but of demand, whether to publish OA. Researchers are now confronted, for the first time, with having to actually take an active role in what OA publishing requires, what it means, where to get help, what is the relationship between impact, quality – and OA, and where to get the data needed to make the relevant decisions. Up until now researchers have chosen to be, broadly speaking, happily ignorant of OA issues. It has largely been business as usual. Even though sanctions as such are not part of the research climate in Denmark, if funders actually mean what they say in their OA policies, some degree of sanction-giving will be necessary to enforce the policies. This will also have to become a part of EU policies.

A national OA strategy

Finally, in June 2014 the government announced its national strategy for OA with clear (and somewhat ambitious) goals for OA scientific publishing in Denmark.7 At the same time a national steering committee has been established, to oversee the national OA strategy. Apart from the usual formulations of why OA will be good for everyone, the cardinal points in the national strategy are: green OA and golden OA, focus on impact and quality, and a set of concrete goals.

To take the latter first: The two concrete goals are, that by 2017 80% of all peer-reviewed research articles produced by Danish research institutions and published in 2016 must be available OA from repositories, and that from 2022 100% of all peer-reviewed research articles produced by Danish research institutions and published in 2021 must be available OA from repositories. These are (probably) ambitious goals, taking into account what has actually been achieved in the previous three years.
In its own words, “focus” in the policy is on green OA and golden OA. Both models are recommended, but golden OA should only be used if it doesn’t result in an increase in publishing fees in relation to research – which must be a statement as seen from the view of the public funders. The only other address to where government can send the bill would be research institutions and researchers. In connection with this constraint is also the intention that, together with the “relevant parties”, the solution in the long run will be golden OA but in a “cost effective” fashion. What this precisely means is not formulated, but hopefully means that publishers will not necessarily be seen laughing all the way to their banks, twice – to also collect money once intended for research. Hope is probably not a relevant emotion to rely on in this regard, but results in consortia license agreements must soon begin to bear fruit.

Written into the document which governs the working of the national steering committee for OA, it is explicitly stated that the sum of all public expenditure for OA must not increase and that OA demands must not infiltrate on the publishing freedom of researchers, i.e. the right of researchers to decide where to publish. Repositories are in several sources named as the place where OA articles are to be made available, also for documentation purposes. All Danish universities have a repository where OA articles can be made freely available. For many years there has existed a national research database, in its latest incarnation built upon the repositories of individual universities. This national database has never captured the imagination, and new, radical ways of dissemination research publications emanating from Danish universities in this database would be a good idea. At the same time universities should investigate ways of improving their own dissemination, as a counter-measure to the traditional publisher portals and channels, especially as we move towards the goals of the national strategy of complete OA.

An important issue connected to the national OA strategy is how progress towards “2022” goals can be monitored. The repositories of Danish universities are not yet capable of adequately measuring OA progress. There is a need for metadata as a part of repositories which will enable universities to document their “OA compliance”.

Conclusion
The OA movement has seemingly been successful in getting an OA agenda adopted, if one judges this by the fact that for example the EU, ERC, all Danish funders of public research, have adopted OA policies, and there has been adopted a national OA policy to cover all public financed research. Unfortunately, absolutely nothing has been achieved in remedying the situation which was in place prior to the adoption of the national OA policy: It seems like publishers will be enjoying additional payments for OA publishing, through what will largely be wide adoption of golden Open Access publishing, unless something is actually done to remedy this.

But the balances between the various stakeholders of funders, researchers, universities/research institutions, publishers, research libraries and government, have changed. If nothing drastic is achieved on the subscription front, it seems that financing for OA will be covered by universities and research institutions - and thereby by researchers through their funding.

Some might call this due payment for a rather lackadaisical interest in the machinations of publishing and working with publishers, shown during the OA debate, but this might be a bit harsh. It would be good, and would probably help, if researchers took a more active interest in these factors, which influence their publishing activities.

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Sciecom Info 2 (2014) Price
OPEN ACCESS IN FINLAND 2014
Turid Hedlund

Introduction

The present article on the open access situation in Finland is partly a follow-up on the country report for Finland presented in the study Open access in the Nordic countries from 2007 (Hedlund and Rabow 2007). In this study the focus will be on the present situation regarding the following sectors: national journal publishing, open access repositories, and ongoing projects and policy issues regarding open science and research data.

Journal publishing and impact

A researcher’s choice of which journal to publish in, is naturally a decision made by the author or authors in the first place. The decision, however, might be influenced by the publishing practices of the scientific field in question. Also the policy of the university might have a strong impact on publishing pattern as university funding principles and research assessments affect how quality in publishing is perceived.

University funding in Finland was changed as a new funding model was introduced in 2013. In the funding model 13% of the public funding (Ministry of Education and Culture) to universities is distributed on the bases of research publications, number as well as quality (Ilva 2014a). At the same time there was a need to rate and list varying publication channels to match the publishing practices in different scientific fields. A new “JUFO classification”¹ was introduced following the Norwegian model, see also Auranen and Pölönen (2012). Panels consisting of leading scholars did the rating of the publication channels in each scientific field. The publications were listed in three categories, levels 1-3 where level 3 includes top journals in each scientific field. Most journals included in the publication forum are international publications published abroad. For national publishing an important lobbying result is that about 20 key Finnish language journals were included and classified as level 2 and more than 100 at least on level 1 (Ilva 2014a). In the publication forum the open access aspect was not taken into account.

In Table 2 we can see the growth in number of peer review journals published in Finland comparing the years 2007 and 2014. The language in many of the journals is however English. A notable fact is that the number of journals published in Finland and present in the National JUFO classification is considerably higher that those present in Journal Citation Report (JCR).

<table>
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<tr>
<th>Source: Ulrich’s</th>
<th>Year</th>
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<td>2014</td>
<td>156</td>
<td>76</td>
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Table 2. Number of scientific peer review journals published in Finland, classified according to type (Source: Ulrich’s Periodicals Directory and DOAJ)

The JUFO classification will be used as a component in the decisions and negotiations on university funding from the year 2015. As we can see, the important thing for journal publishing in Finland is that the national journals also are included and classified as important in the publication forum.

¹ http://www.tsv.fi/julkaisufoorumi/english.htm?lang=en
Business models for scholarly journal publishing in Finland

A special case is that most scientific journals published in Finland are published by learned societies within each respective research field. The journals vary a lot in size and budgets but usually they struggle with very small resources for their publishing. In many cases journal subscription is connected to a membership fee. Public funding from the government, distributed by the Federation of Learned Societies on a yearly base, is a central source of income for many of the journals. It is also important to note that the public funding is usually only allowed in order to cover budget deficiencies, so other sources of income are needed.

Comparing the facts above to the country report by Hedlund and Rabow from 2007 very little has changed. It appears that small publishers, especially those that publish in other languages than English, have not been convinced to change their publishing model towards more open access. National learned publishing is seen as important, so the means to ensure sustainable business models for these journals has been discussed in many seminars during the years.

In 2013, as a result of the recommendation of the “Tiedon saatavuus” (Access to Knowledge) project, a small working team was appointed, consisting of Jyrki Ilva from the National library and Johanna Lilja from the Federation of Learned Societies. The task for the team was to prepare a report on the national open access publishing channels and possible business models that could be used.

In their recommendations the working team focus on openness and access. The goal should be to increase the percentage of open access journals from 30% to 50% of the journals that are receiving public funding. As a mean to reach the goal, technical solutions and services should be developed. In practice national journal publishing should be connected to the infrastructure of international publications, for example using DOI identifiers. Visibility of and access to journal articles and long time accessibility should be secured as well as the future of ways to link research data. (Ilva 2014a)

As a basis for a sustainable model for the financing of domestic journals the working team suggests broad national collaboration between the publishing parties and those utilizing the products and services. This means a consortium model where resources that compensate subscription fees are distributed to open access journals that publish without an embargo period. The financing parties in the consortium would be the Ministry of Education and Culture, universities, research institutions and research funders. A three-year pilot period (2015-2017) to test the practices and effects of the proposed consortium solution is recommended.

The freedom to choose which way to go for open access should be granted for the domestic journal publishers. Publishers that aim for an international public could also for example choose the alternative of author-financed article processing charges. The journals are encouraged to allow parallel deposit of articles and to include their copyright policies in the international Sherpa/Romeo database.

Open access repositories

At present there is no comprehensive study on the content of OA repositories in Finland. However, the trend is that self-archiving of articles in repositories is not very popular (Ilva 2014a) even though the repositories have been quite successful in collecting other types of publications as for example masters and doctoral thesis. The mandates that a few universities started to apply have thus not been able to solve the situation. Also the research funders have only recently started to recommend open access publishing in their funding decisions. For example the Academy of Finland strongly recommends open access publishing channels when possible and advise on “green” open access to increase availability. ²

Interestingly a recent study by Holopainen, Koskinen & Pipponen (2014) shows that about 50% of the scientific journals published in Finland do not allow self-archiving of articles. The same study also reveals that most of the journals apply an embargo period of

about 12 months. There is also a lack of policy or policy declaration in many scientific journals published in Finland.

The recommendations on how to develop scientific journal publishing in Finland by the working team Ilva and Lilja, might have an impact also on open access repositories as there might be a possibility to connect funding to those journals allowing green open access of their journal articles. The important thing is to inform and discuss with publishers about different alternatives to allow for open access, as there is still a lot of unawareness in the editorial boards and learned societies on what would be the sustainable way to move forward.

An interesting factor for the future is also the integration and relationship of CRIS systems and repositories that is ongoing in the universities in Finland (Ilva 2014b).

**Open science projects**

Compared to the country report in 2007 the focus in recent years has been on how to open up science, including research data as well as publications.

The “Open Science and Research” project 2014-2017 established by the Ministry of Education and Culture has the ambitious goal “that Finland becomes the leading country in openness of science and research by the year 2017”³. The “Open Science and Research” initiative is focused on three different sections complementing each other: 1) Scientific publications (storage, metadata service and accessibility services of publications) 2) Research data (storage, metadata service and accessibility of data) 3) Research methods (storage, metadata services and accessibility of methods) ⁴.

As the project is ongoing we can expect results in the form of new and developed services during the project as well as final outcomes.

Also the universities and especially the university libraries are actively engaged in promoting practical open access solutions for researchers. The university libraries are involved in ongoing European projects such as OpenAire 2020 and Pasteur4OA. During the Open Access week an international event was arranged at the University of Helsinki Meilahiti Campus targeted towards researchers. (Siipilehto 2014)

As concluding remarks I find that there has been several improvements to the situation of open access in Finland since the report in 2007. The enthusiastic spirit from 2007 has been realized into building infrastructure and into practical work in embedding open access principles into the practices of researchers and universities. However, even though the knowledge of open access has increased there is still much to be improved in how researchers acknowledge open access principles in their everyday work. The research funders have made recommendations to the researchers to apply open access in opening up their research publications and results. However, the awareness among researchers of the funders’ recommendation was found to be weak Siipilehto (2014).

In putting into practice the task to collect and reuse research data, the Finnish Social Science Data Archive in The University of Tampere is a forerunner in implementing the OECD recommendations and guidelines for opening up publicly funded research data, see also Kuula and Borg (2008).

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³ The initiative and the project is to be carried out with partners such as CSC – IT center for Science, the National library and the Open knowledge Finland program funded by the Ministry of Finance.

⁴ [http://openscience.fi/](http://openscience.fi/)
References:


Siipilehto (2014): Open access situation in Finland 2014 and earlier. [https://wiki.helsinki.fi/display/oasituation/Open+access+situation+in+Finland+2014+and+earlier]

Turid Hedlund, Associate Professor at Hanken School of Economics, Helsinki Finland
Open access is of great importance to libraries and students as well as the general public. The benefits from it are great for everyone, however the main advantage must be said to be to universities and the academic research community. Since the open access movement gained momentum in the nineties, many Western universities have implemented an open access policy for their academic staff. Funding agencies have done the same. The European Union has also adopted an open access policy since 2008.

Iceland has been comparatively slow in moving towards an acceptance of open access in comparison with the other Nordic countries. During the last couple of years open access has however become more widely known and accepted within the research community. The Council for Science and Technology, which formulates public policy on science and technology in Iceland under the auspices of the Prime Minister’s Office, included the following sentence in its policy statement for 2010-2012: „Research results are of limited benefit if they are not accessible to others involved in research or innovation.“ The Council also called for the adoption of a public open access policy. Rannis, the Icelandic Centre for Research, adopted mandatory open access publishing for those receiving grants in January 2013. In October 2012 The National and University Library signed the Berlin declaration.

Two articles on open access publishing

A recent article by open access advocates Ian Watson and Guðmund Á. Pórisson, The Icelandic Open Access Barometer 2013, was published in Samtíð (Contemporary Society): An Icelandic Journal of society and culture in December 2013. The article contains a survey of journals published in Iceland, an estimate of how many could be classified as publishing quality-controlled research that aims to contribute to general knowledge and how many were open access. The authors said that the result, showing a relatively large percentage of open access in Iceland, came as a welcome surprise. Of the 51 journals classified as scholarly, „16 were completely open, with articles available for digital download from the moment of publication, 20 were completely behind toll barriers (published only on paper and sold to libraries and subscribers), and the remaining 15 released their articles openly in digital form after an embargo period of varying length”.

Solveig Þorsteinsdóttir published an article in Sciecom Info 1 (2014) on open access to research articles published in Iceland in 2013. She found that a total of 305 scientific articles, (30%), had been published in open access that year, 118 articles in golden or hybrid OA and 187 articles in green OA. Þorsteinsdóttir’s article was based on a measurement of articles found in Web of Science (WOS) but it should be noted that most of the Icelandic journals surveyed in Watson’s and Pórisson’s article do not have a digital object identifier (DOI) and are therefore not to be found in WOS.

Open access mandates in Iceland

Only two of the seven universities in Iceland have adopted open access mandates. In January 2012 Bifröst University adopted an open access mandate, becoming the first Icelandic university to do so. (The policy was published on the university website in May the same year.) In November 2011 the University of Iceland formed a working group with representatives from each of the five schools as well as a representative from the National and University Library. The working group was to draft an open access policy for discussion and eventual acceptance within the academic community and submit the draft to the University administration before April 1st 2012. This article will discuss the work involved in drafting the mandate and the ensuing debate among the academic staff.

The University of Iceland

The University of Iceland is by far the largest university in Iceland. In 2013-2014 there were in total more than 14,000 students enrolled, 3,500 masters students and 500 doctoral candidates. There were over
a 1000 foreign students, from approximately 80
different countries. Tenured academic staff numbered
660 but there were also more than 2500 part-time
teachers.

Open access mandate for the University of Iceland:
Preliminary work

The working group met frequently during the first
two years of 2012, collecting and studying
mandates already accepted by other universities, both
in Scandinavia and the US. A decision was taken to
model the university's mandate on Harvard's policies.
By the end of March the group was ready with the first
draft and submitted it to the Division of Science and
Innovation whose main role is to allocate research-
related funds, evaluate performance of academic staff
and oversee the work of evaluation committees.
However, almost two years were to pass before the
final draft was accepted by the University Council on
February 6th, 2014, effective from July 1st.
The working group agreed on all major issues and the
first draft was quickly agreed on and completed. The
draft was based on Harvard’s open access policies. The
working group wanted not only to encourage members
of the academic staff to publish their scholarly output
in open access journals or repositories but to require
them to do so. In the final draft, however, the wording
was changed: „The University of Iceland is committed
to disseminating the results of all research carried out
within the University. The University encourages the
members of its academic staff to publish their scientific
articles in open access journals, open archives, preprint
databases or otherwise.” Academic staff were, however,
required to make their articles available in green OA.

University of Iceland mandate on open access to
research (abbreviated version)
Accepted by the University Council February 6th 2014.

The University of Iceland is committed
to disseminating the results of all scholarly research
carried out within the University. The University
courages the members of its academic staff to
publish their scientific articles in open access journals,
open archives, preprint databases or otherwise. This
policy on open access does not include books or book
chapters.

Members of the academic staff shall provide the
Division of Science and Innovation electronic access
free of charge to the final version of their scientific
papers no later than the date of publication. This can
be done by submitting an article to the division in an
appropriate format (such as PDF), sending a link to
the open access publication of the article, or in some
other appropriate manner. The University of Iceland
may save the articles and make them available in an
open electronic repository. The policy applies to all
scholarly articles authored or co-authored while the
author is employed by the University except for any
articles completed before the adoption of this policy
and any articles for which the Faculty member entered
into an incompatible licensing or assignment
agreement before the adoption of this policy. The
Division of Science and Innovation may also exempt
individual papers or delay publication for a specified
period should the author submit a written request to
that effect, stating his reasons.

The policy also applies to students’ final theses, at both
undergraduate and graduate levels. On February 21,
2008 The University of Iceland Senate approved a
motion for electronic submission of all theses to the
University’s open access repository.

The Division of Science and Innovation is responsible
for interpreting this policy, resolving disputes
concerning its interpretation and application, and
recommending changes to the Faculty. The policy
will be reviewed after three years and a report
presented to the University Senate.

The working group also submitted various proposals
and suggestions on a number of issues which the group
considered necessary to take into account, such as
unavoidable costs and guaranteed funding. It was also
pointed out that copyright issues were often complex
and negotiations with publishers difficult and the
university would have to ensure that members of the
academic staff had access to proper advice on
publishing agreements. Special rules would have to be
made concerning students’ theses. The necessity of
introducing the policy to the academic staff and
listening to their views on it was also emphasized.
Unfortunately there was at first next to no
introduction and the first draft was not circulated until
the start of the autumn semester 2012 when various
authorities were asked to comment on it: each of the
two schools of the University, the National and
University Library, The Student Council, The
Committee for Quality Research, the Council for
Science and Technology etc. At that time the draft
was not made generally available to all academic staff.

Comments made on the draft
In March 2013 the working group was at long last sent
a summary of the comments submitted by the above-
mentioned authorities. There was general agreement
on the main content of the draft. But most also voiced concerns. There was some anxiety as to the freedom of research and the possibility to choose one’s publisher, that is whether it would be possible to publish in closed access journals with a high impact factor. Some comments touched on book publishing even though the policy stated explicitly that books and book chapters were not included. Other comments referred to the future of Icelandic journal publishing and concerns about peer review and whether open access meant less quality. But most comments were concerned with funding and whether money designated for research would be used to pay for open access. There was also general agreement that more information should be made available on the concept of open access and that more discussion needed to take place before the policy was accepted.

**Discussion on the academic staff postlist**

In April the draft was introduced and discussed at a meeting of the University Forum. The discussion was mainly positive but emphasis was on a better general introduction.

In May a spontaneous discussion on open access took place on the university postlist. The main focus of the discussion was on copyright issues, that is whether the University had the right to require their employees to provide the Division of Science and Innovation with electronic access to their scientific papers.

A teacher at the Faculty of Law began the discussion by doubting that the policy was legal according to Icelandic law. A professor at the Faculty of Medicine answered by saying that most scientific journals claimed copyright for articles they published anyway. He added that he felt an obligation to share his research results since they were paid for by the University and through public funding. In his opinion the Icelandic copyright law was outdated and needed to be amended. National and University librarian Ingibjörg Sverrisdóttir took part in the discussion, reminding the academic community of Skemman, the university repository and compared open access to legal deposit saying that the thought behind them was the same, that is to preserve knowledge and ensure access to it for everyone, open access being the modern equivalent to legal deposit. The debate ended with the following words from a professor of physics: “Wise men have said that in science no-one owns anything before it is made accessible through open publication. Those who keep their work in a drawer cannot claim to have been the work’s author.”

This year on February 6th the policy was accepted by the University Council and was to take effect on July 1st.

Áslaug Agnarsdóttir, National and University Library of Iceland, Landsbókasafn Íslands- Háskólabókasafn
OPEN ACCESS THE LAST TEN YEARS – HOW FAR HAVE WE COME?
Jan Erik Frantsvåg

The 10th anniversary of ScieCom Info is a good point in time to stop up and think of the past (and the future). What have we accomplished during these years? Everything? Something? Anything? Nothing?

I’ve been following what later became OA since about 1995, but didn’t start working in OA until 2006. And when you start looking back, you realize you never take the time to document and make a systematic overview of recent history. So when you need to write about it, you have to rely on an increasingly frailer and more distant memory …

Ten years ago, OA journals had started up, but not in large numbers. At the start in 2003, DOAJ listed 350 journals, now it lists more than 10,000. Many humanities and social sciences journals started the transition to publishing free on the internet before the term Open Access was coined. These were either start-ups, or older paper-based journals converted to e-publishing, but they were generally scientist/scholar initiated, led, edited and owned. The commercial OA publishing started at the beginning of this millennium, with BMC being established in 2000, commencing APC-based publishing in 2002. PLOS started operations in 2003. Today, we can safely say, in general, that new journals being established are Open Access, and that it is within Open Access publishing growth comes. Commercial OA publishing now publishes a majority of the articles being published OA, and it is my belief that their share of the market will increase, even if the processes of converting existing, subscription-based HSS journals to OA only have started. There is still much to be done about the financing of HSS journals under an OA regime, and there is still much resistance to converting to a commercial model among both editors and authors. In Norway, the OA journals are mainly those who never had a chance as commercial ventures but have been heavily subsidized by their owners, and OA has been a – good! – combination of cost savings and increased distribution and readership. Only recently have publisher-based journals started dipping their toes in the apparently hostile-seeming waters of OA, strongly urged on by Research Council policy statements and financing systems. During the next ten years – I believe – nearly all journals that intend to survive, will have converted to some OA model, though not necessarily all based on APCs. Every journal is different and needs a different approach. Paper-based journals will be nearly extinct, but being electronic will not necessarily mean being Open Access. The big question is not whether HSS journals will be OA, but whether the OA journals will be the existing ones, having converted to a new model, or new OA ones that have out-performed the older TA ones.

Repositories ten years ago mainly meant ArXive and some other subject-specific repositories to most of us, while institutional repositories were something the more fore-sighted institutions were thinking about. In Norway, the processes of establishing IRs started among the universities (there were only four, at that time) around 2004/2005, and they started operating 2005/2006. Munin, our repository, started operating in September 2006, but we had a ETD repository operating before then, probably from 1999. IRs have a broader scope than ETD repositories, so I think we can safely say that IRs started in Norway 10 years ago. Today, we have a magnificent infrastructure with nearly 60 repositories. Nearly all government Higher Education (HE) institutions have them; only 3 institutions do not have one. And they are all on the list of institutions that will disappear soon, if the ministry gets it will regards consolidation in the HE sector. The lack of an IR is, however, not the main reason for their disappearance …

What we don’t have in Norway, however, is content.
We are not alone, there are few IRs in the world that are impressively full of content, and none are overflowing. A recent report (Archambault et al. 2014) has a table on page 20 that suggests Norway is an outlier when it comes to average content per repository. (And the numbers look to me like the content number is overestimated, while the number of repositories is lower than the correct number.) We have less content per repository than the average country. And the average country is not that successful when it comes to filling repositories, either. So there is work to be done! Another problem is that much of what fills the repositories is “grey matter” – master’s and doctoral theses, reports etc. – not green, self-archived articles. Not that grey matter is uninteresting, but the real sought-after scientific and scholarly value lies in the self-archiving of peer-reviewed content, like journal articles. While we find in the literature numbers indicating that 20% of all peer-reviewed content was available as gold or green OA in 2009 (Björk et al. 2010), Norway reached 8% for the year 2013. Not impressive, to say the least. Some of the dismal numbers is due to how the numbers themselves are collected, but the reality behind them isn’t all that much better.

Financing APCs is an important part of making OA feasible, this has always been a problem with the APC-based journals. Gradually, funders have started making funds available for funding APC, but it has taken some time to get this functioning well, and more work – and money – is still needed. Institutional publication funds, set up to create a “level playing field” between OA and TA for the institution’s own authors, saw the day of light about 2005.

In the Nordic countries, as far as I can tell, Lund university were first with their fund set up in 2008. The first Norwegian ones, at the University of Agder and the University college of Telemark, started in 2010. “My” own fund at UiT The Arctic University of Norway started in early 2011 and quickly became the larger Norwegian fund – until the University of Bergen started a fund, one even funding hybrid publishing, in 2013. All the larger HE institutions and most small and medium-sized now have a fund – and the rest will soon have ones. The Research Council announced in June this year that all HE institutions having a publication fund were eligible to ask for a 50% refund of what they have spent, irrespective of whether the Research Council had funded the research or not. And no fund, no refund – so a clear message to get oneself a fund, if one hadn’t already done so. Except for, possibly, the UK, Norway is probably the country in the world that is best covered by publication funds.

A small summing-up: Norway has an impressive IR infrastructure with a nearly as impressive lack of content, we have processes that will move TA journals (or their content) to OA during the next 10 years, and we have a very good system for financing APC for the coming years. The work that has to be done for the coming years, is green OA advocacy and following-up. So, we’ll just have roll up our shirtsleeves and start the hard work!

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Introduction

During 2013 we performed a study on the state of Open Access (OA) in Sweden. The project was funded by the National Library of Sweden and its wider purpose was to produce a picture of the state of OA in Sweden today, to facilitate well-grounded decisions on how the share of OA can be increased.

The specific purpose of the project was to measure the share of OA at Swedish universities. What share of refereed research articles from Swedish universities was published OA in the year 2011? We studied the total OA uptake, both green and gold, for Sweden as a whole and per university. The year 2011 was chosen, so that embargoed articles would have been opened up. We also examined potential green OA, i.e. to what extent the articles could have been self-archived according to information in SHERPA/RoMEO. A further aim of our study was to develop a method that could be used for continuous measurement of OA in Sweden.

Definitions

The first definition on OA was set in the Budapest Open Access Initiative (BOAI) in 2002. This was when the gold and green roads were outlined (although not named as such). This was followed by the equally influential Berlin Declaration in 2003.1 Peter Suber has supplied the following summarized definition: “Open access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions.”2

Since then a number of varieties of OA have been named, such as hybrid and delayed for example. In our study we use the following definitions:

Green OA – a copy of an otherwise published article that is deposited and openly available in an institutional or subject based repository. It could be the submitted, accepted or published version of the article.

Gold OA – an article is openly available, immediately upon publication, on a publisher’s website. All articles in the journal must be OA.

Hybrid OA – articles that for a fee are made openly available on a publisher’s website, but the journal itself maintains the traditional subscription way of publishing.

Delayed OA – a traditional subscription based publishing of an article, that is, after a certain time embargo, openly available on the publisher’s website. The embargo time may vary from a couple of months up to a couple of years.

Other OA – all other kinds of making articles freely available on the internet. That could include websites like social media, personal websites etc.

The different forms of publishing can be illustrated as in Figure 3.

Previous studies

Previous research was studied, in particular with focus on research made by Bo-Christer Björk and Mikael Laakso et al, based at Hanken School of Economics.3 Other important studies include the work made at Université du Quebec à Montréal, led by Stevan Harnad. These studies deal mainly with the global

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1 BOAI: http://www.budapestopenaccessinitiative.org/read . Berlin Declaration: http://openaccess.mp.de/286432/Berlin-Declaration


uptake of OA, by studying refereed journal articles. Although they use different methods and sometimes different indexes for the material, the overall results show a steady increase in global OA uptake ranging from 19.4 percent for publication year 2007 (Björk group) to 23.1 percent for 2011 (Harnad group). See 5 for an overview of OA studies.

A 2013 study from Science-Metrix produced for the European Commission DG Research & Innovation showed a much larger percent of OA share, both globally and on country level. The global OA share in 2011 was found to be 44 percent, and reaching 50 percent after computing an adjusted OA availability curve. By 50 percent, we would have reached a “tipping point” of openly available refereed journal literature.

The difference between these results may have several explanations and one is the various definitions and classifications (or lack thereof) of OA used in the studies. This involves what is possible to measure, but also what we define as actual OA. For example, is any article, found to be freely available at the time of the study, to be classified as OA, regardless of how and where it is available, and in what version? This was something our project also felt the need to address.

A project that was performed during the same period in Denmark was followed closely, the Danish Open Access Barometer, previously reported on in SciCom Info.7

Method

Main study:
The primary source for article data used was the Swedish national publication database SwePub.6 SwePub includes all publications registered at Swedish universities and covers more of Swedish publications than for example Scopus or Web of Science, especially in the Humanities and Social sciences.7 It also presents a link to articles that are parallel published in any of the universities’ own repository.

Another reason for using SwePub data was to examine how reliable it is as a source for future monitoring of OA in Sweden.

The SwePub data (limited to refereed research articles and review articles, a total of 23 905 articles) was analysed for green OA, i.e. links to full text in Swedish university repositories. For the study of gold OA the data was matched by ISSN against DOAJ (Directory of Open Access Journals).8 For numbers on delayed OA SwePub data was matched against a list of 492 journals compiled by Laakso and Björk. It is to our knowledge the most accurate list to cover delayed OA.9 Overlaps between the different OA categories were noted and is presented.

The amount of hybrid OA is difficult to measure with accuracy (and potentially very labour intensive), since there are no easily available and reliable data.10 Therefore we were not able to measure this in our main study.

Complementary study:
Since the main study obviously had its limitations (by only capturing green OA in Swedish repositories), the decision was made to supplement it with a manual study of 1,000 randomly selected articles from the total data volume. This was to get some idea of how large a part of articles from Swedish universities is openly available elsewhere on the web.

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7 At the time of the analysis two universities, Karolinska Institute and Swedish University of Agricultural Sciences, did not deliver records to SwePub. Only Web of Science records were included for these universities.
8 http://www.doaj.org/
9 Laakso & Björk (2013). The authors wish to thank Mikael Laakso and Bo-Christer Björk for kindly sharing the data.
10 See Björk (2012).
The articles were searched for by title in Google and Google Scholar, and the first ten results were examined. The searches were conducted outside campus so that no full text would be accessed through subscription. This method is not without flaws, but it gives a hint of the variety of OA availability globally. The articles we found this way were named “Other OA” and then further categorized.

Potential OA:

We used the Sherpa/RoMEO-database to retrieve the information about what conditions publishers have on parallel publishing. This information is not very precise but nonetheless provides an estimate as to what extent articles are possible to self-archive.\textsuperscript{11}

For a fuller description of the method, we refer to the final project report.\textsuperscript{12}

Results

Main study:

Slightly more than 10 percent of the articles from Swedish universities published in 2011 were published in OA journals. The number for green OA is close, just below 10 percent. For both gold and green OA the amount rises to 17 percent (subtracting the overlap). With articles from delayed OA journals added, we reach a total of 25 percent.\textsuperscript{13} See table 1 and figure 1.

<table>
<thead>
<tr>
<th>OA-category</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>2495</td>
<td>10.4%</td>
</tr>
<tr>
<td>Green</td>
<td>2289</td>
<td>9.6%</td>
</tr>
<tr>
<td>Delayed</td>
<td>2088</td>
<td>8.7%</td>
</tr>
<tr>
<td>Overlap - gold/green</td>
<td>-715</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Overlap - green/delayed</td>
<td>-96</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Not OA</td>
<td>17844</td>
<td>74.6%</td>
</tr>
<tr>
<td>Total</td>
<td>23905</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 1. The amount of journal articles, published in 2011 at Swedish universities, and split in gold, green and delayed OA respectively. The table also shows the overlap between categories.

Complementary study:

Almost 25 percent of the random sample articles (247 out of 1,000) were found openly available on the web, so called “Other OA”. They were to a large extent found in subject repositories, institutional repositories outside Sweden or on publisher’s websites. But a large number of the articles were found on other websites like the researcher’s or department’s website or on social media sites, among them ResearchGate.\textsuperscript{14} Articles that were found on publisher’s websites appeared for the most part to be hybrid OA but could also be delayed OA or “temporary OA”.\textsuperscript{15} (Table 2.)

<table>
<thead>
<tr>
<th>OA-category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject repository</td>
<td>68</td>
</tr>
<tr>
<td>Institutional repository outside Sweden</td>
<td>53</td>
</tr>
<tr>
<td>Publisher’s website</td>
<td>84</td>
</tr>
<tr>
<td>Other website</td>
<td>143</td>
</tr>
<tr>
<td>Overlap</td>
<td>-101</td>
</tr>
<tr>
<td>Total</td>
<td>247</td>
</tr>
</tbody>
</table>

Table 2. The share of different kinds of “other OA”, based on the manual study.

Taking into account the amount of articles from the random sample that were gold, delayed or green (in Sweden) OA, the share of OA reaches just over 50 percent (Figure 2 and Table 3). This result is in line with the Science-Metrix study by Archambault et al.

\textsuperscript{11} http://www.sherpa.ac.uk/romeo/
\textsuperscript{12} Fathli et al (2014). Available in Swedish only.
\textsuperscript{13} In the full project report numbers are also broken down per university and for subject areas. We also present in which OA and delayed OA journals Swedish authors most frequently published.
\textsuperscript{14} http://www.researchgate.net/
\textsuperscript{15} By temporary OA we mean an article that is freely available on the publisher’s website for a period of time, presumably for marketing purposes, for example a “free sample article”. Laakso (2014b) uses the term “promotional OA”. No detailed categorization of articles on publisher sites were made, however, due to limitations in time in the project.
The conditions for parallel publishing may vary, not only between publishers, but also between journals within the same publisher. For a survey on this we used the Sherpa/RoMEO database. It does not cover 100 percent of the world’s publishers and journals, but more than 22,000 journals are registered therein. Of the articles in our survey, the conditions for 85 percent were found in Sherpa/RoMEO.

One severe difficulty for measuring the conditions in Sherpa/RoMEO is that the listed conditions are not machine-readable. They are complex and not standardized. It is however possible to divide the conditions into four categories: 1. those who allow parallel publishing, 2. those who do not allow parallel publishing, 3. those who allow parallel publishing under certain conditions, and 4. those with status unclear. This division is not without defects but it supplies an estimate on the possibilities of parallel publishing.

Another complication is that the publishers differ between article versions: submitted, accepted or published for example.

The result shows that it is possible to parallel publish a much larger amount of articles than actually is being done currently. Only 12.4% of articles where it is unambiguously allowed have actually been parallel published. Even if we estimate that some articles are parallel published in repositories outside Sweden this figure would only reach about 24 percent (based on our manual study).

Discussion

Our study has showed, not surprisingly, that the ways that research articles are made openly available vary significantly. The same article can be made OA in several ways, and a key problem in measuring OA is to define what we actually mean by it. It may seem surprising that there should still be a need to discuss the definition of OA, but clearly there is, because it affects how we measure it as a phenomenon and what the result is. Largely absent from OA definition discussions are the implications revealed in this and other studies on OA share and growth, that is the locus of availability of and infrastructure surrounding publications taken to be OA.
Some of the most significant variables of OA articles are:

- Sustainability and integrity of the published fulltext file (incl. long term availability)
- Infrastructure surrounding the availability (searchability, findability etc)
- The point of time that the article is made available
- Version of the article

For the various forms of OA these variables differ (and are in some cases substandard), and this is one reason for the transient nature of OA, as noted by Archambault et al. To try and get a grip on this problem, we use the definition of OA in the Berlin Declaration, and take a closer look on our categories of OA. For it to be an OA contribution, the Declaration states that:

> A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, interoperability, and long-term archiving.

In general terms, we can see that gold OA publishing fits these criteria, as does delayed OA. The same goes for green OA through institutional repositories and well established subject repositories, such as arXiv and PubMed Central. Articles made available through a publisher’s website will fit, if they are genuine hybrid OA, but not if they are so called “temporary” OA, for marketing reasons or the like.

As regards articles made available through authors’ personal websites and social media sites, we conclude that they do not fit the criteria, either since they are not in a repository and/or not made available through a well-established organization. This would also apply to departmental web pages. These categories are simply lacking in sustainability and/or infrastructural context.

The category of delayed OA has been proposed by Laakso & Björk to qualify as a subset of OA journals in the DOAJ database. These journals are subscription journals, with a free online archive. And it could be argued, that since we accept embargoes (i.e. time delay) for green OA, why not the same for delayed OA via the journals’ own web sites? An obvious advantage for delayed over green would be that a delayed OA article gives access to the published version of record, while an embargoed green OA article in most cases gives access to the author version (which has disadvantages when it comes to citability).

So could the OA concept include subscription journals? OA is not a business model in itself, it has been said, and could potentially include several different models. However, including subscription journals within OA does seem like a contradiction in terms. It could be possible to differentiate between article level and journal level, so that the articles are considered OA, but the journal itself is not (this distinction is the case with hybrid OA). The discussion in any case points to the highly differentiated, and increasingly complex, forms and models that the dissemination of (open) scientific literature is subject to.

The Science-Metrix study by Archambault et al. states that OA has reached a “tipping point” with a share of 50 percent globally. We suggest that this statement should be taken with caution. A growing number of freely available research articles does not automatically...
mean that the shift from traditional subscription based publishing to OA publishing on a global level is imminent. The metaphor of a tipping point suggests a linear process where one form of publishing simply supersedes another. Most forms of OA, it should be noted, are still made available within the framework of traditional publishing (see Figure 3). Only gold OA publishing is a real alternative to traditional publishing.

The variety of the OA phenomenon is complex and appears in some respects dispersed and fragmented. It is highly desirable that the monitoring and measuring of OA becomes more standardized, with regard to definitions and categories. A standard vocabulary on OA is one way of achieving this. Another, perhaps harder to accomplish, is that a general understanding of what constitutes real OA should be agreed upon. In our recommendations for future OA monitoring in Sweden we conclude that SwePub should be the prominent tool and index for that purpose. With the ongoing national project to further develop SwePub for statistics and bibliometric analysis, this is already under way. Another recommendation, which is more generally applicable, is that articles made freely available outside of established infrastructure should not be counted as OA. This will exclude articles on personal and departmental websites and on social media sites. This would also be in line with OA mandates by funders and universities, which typically refer only to OA in repositories and/or journals.

Figure 3. A schematic picture of the OA landscape, showing the overlap of different kinds of publishing.

22 See the recent doctoral thesis by Laakso (2014a), especially discussion in section 6.5. Also Laakso (2014b).
23 The National Library of Sweden has received an assignment by the Swedish government to further develop SwePub to make possible bibliometric analysis and statistics on a national level. The project is ongoing and to be finalized during 2015. http://www.kb.se/aktuellt/nyheter/2014/SwePub-blir-ett-kuggjul-i-forskningens-infrastruktur/.
Table 5. An overview of studies showing the amount of Open Access. The numbers indicate percentage of articles included in the index. Modified after Björk et al (2014).

<table>
<thead>
<tr>
<th>Study</th>
<th>Publication year for journal articles in the study</th>
<th>Year of survey</th>
<th>Article index</th>
<th>Articles in OA-journals</th>
<th>Articles with delayed OA</th>
<th>Hybrid OA articles</th>
<th>Other freely available articles</th>
<th>Green OA articles in subject repositories</th>
<th>Green OA articles in institutional repositories</th>
<th>Total OA internationally</th>
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<tr>
<td>Björk et al 2009</td>
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<td>2007</td>
<td>Ulrich’s</td>
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<td>3.5</td>
<td></td>
<td>3.0</td>
<td>3.3</td>
<td>5.0</td>
<td>19.4</td>
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<tr>
<td>Gargouri et al 2012</td>
<td>2006</td>
<td>2009</td>
<td>WoK</td>
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<td>2008</td>
<td>2009</td>
<td>Scopus</td>
<td>5.3</td>
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<td>Scopus</td>
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<td>2012 (gold), 2011-2013 (green, hybrid, delayed)</td>
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<td>Scopus</td>
<td>9.7</td>
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<td>0.5</td>
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<td>48.0</td>
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<td><strong>Year of survey</strong></td>
<td><strong>Article index</strong></td>
<td><strong>Articles in OA journals</strong></td>
<td><strong>Articles with delayed OA</strong></td>
<td><strong>Hybrid OA articles</strong></td>
<td><strong>Other freely available articles</strong></td>
<td><strong>Green OA articles in subject databases</strong></td>
<td><strong>Total OA Sweden</strong></td>
<td><strong>OA Globally</strong></td>
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</table>
References


Websites


Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities:
http://openaccess.mpg.de/Berlin-Declaration (Accessed 4 September 2014.)

Budapest Open Access Initiative:
http://www.budapestopenaccessinitiative.org/read (Accessed 3 October 2014.)


ResearchGate:

Sherpa/RoMEO:
http://www.sherpa.ac.uk/romeo/ (Accessed 3 October 2014.)

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