

## FACTORS IN OPEN ACCESS WHICH INFLUENCE THE IMPACT CYCLE

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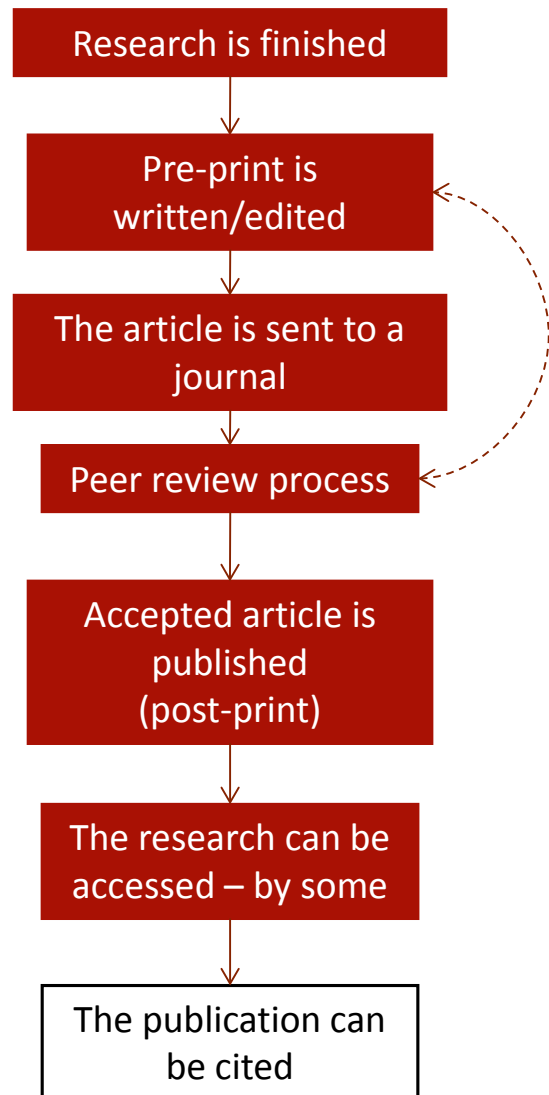
### Introduction

The number of Open Access journals has been on the rise in recent years. This is believed to have had an influence on what can be termed the impact cycle: the cycle from the end of research to the production of a (citeable) publication. Open Access provides free and early access to publications, thus creating a more dynamic impact cycle. This article will explore the impact cycle, and the changes brought on by Open Access.

### Toll access – limited access

The impact cycle refers to the process that a scientific article goes through from its inception, to a pre-print phase, through peer review to, at the final step, publication in a journal. It is a cycle, because of the iterative nature of scientific research: it builds on the already existing body of knowledge. Once research is published, it has an impact on the existing body of knowledge, and may also be cited, thereby providing part of the foundation for new research – starting the impact cycle again. The impact cycle in traditional, non-Open Access publishing, can be illustrated the following way: (See right)

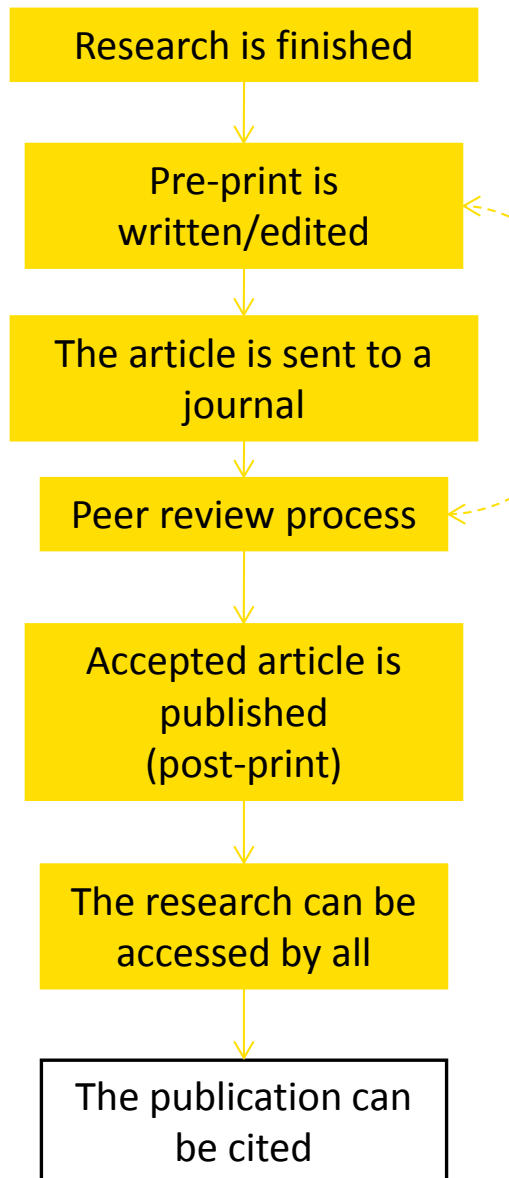
The flowchart is, of course, only a brief description of the scientific publishing process, but it serves to illustrate some of the elements an article will go through. The point of the flowchart is specifically to illustrate the many steps the article will go through before it can be accessed and used for further research – before it can have an impact. If the article is published in a traditional toll access journal, as in the case above, the distribution of the article will be limited, and thus only have limited impact. One of the important steps that this flowchart doesn't illustrate is the knowledge-sharing that takes place among colleagues/the scientific community. Researchers will undoubtedly share their research results, often also at an early stage (that is, before peer review and final publication). However, this knowledge sharing is limited, and the research will only be made available to some, often in an informal manner. This is not believed to change the impact cycle in any major way.



*For the sake of clarity, the flowchart is not shown as a cycle.*

### Golden Open Access – Access for all

One of the factors that Open Access changes in the traditional publication model is the limited access to publications. Golden Open Access journals change this aspect. The business model of these journals is “pay-to-publish”, that is, a fee is paid when an article is published – after this, the article is freely available to all. The following flowchart illustrates this:

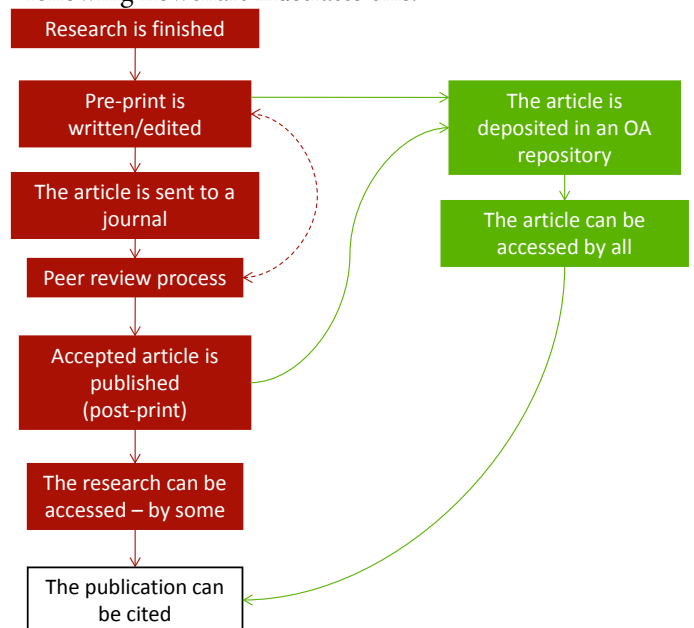


By making the publications freely accessible to all, they can potentially be disseminated further – when artificial barriers for digital content distribution, set up by the toll-access journals, are removed, the content can be spread freely. Making content freely available will help disseminate the content – in the case of scientific publications; the dissemination of content

will likely influence the amount of citations the article will receive.

### Green Open Access – Early access for all

Free access to all is something that is provided by golden Open Access, but it has no effect on when the publication is available. The publication still has to go through peer review and the ordinary publication process before being available. Green Open Access changes this. Green Open Access refers to the practice of depositing a publication in an Open Access repository, from which it will be available to all. This archiving can happen early in the publication process, providing early access (relative to the point at which the final, published article will be available). The following flowchart illustrates this:



A noteworthy detail in this flowchart is the fact that the publication deposited in the repository can be both the pre-print edition (that is, the publication as it exists before the peer review process) or the post-print edition (the publication as it exists after the peer review process – with content similar to what can be found in the journal). The publication will still undergo the traditional publication process, and will eventually be published in a journal.

What green Open Access adds, is the early availability of publications to everyone. This will have both the advantage that golden Open Access provides (access to everyone), and the added bonus of being available much earlier than through the journal in which it will eventually be available. Green Open Access thus decreases the period of time from when the research is finished, to the information becoming a part of the collected body of information that scientific publications represent. In other words, the

“publication-to-knowledge” period is shortened, thereby also shortening the impact cycle time. The flowchart also points out, that citations to an article should not be to the pre-print edition, but rather to the article in its final, published edition, as it is this article that (most) citation databases include in their indexes. The authors should be careful to note the full citation along with the deposited article, so as to make the readers aware of where the published edition can be found, and what they should cite. There has been some discussion about the effects on citation rate of depositing articles. It is believed that early access will lead to citations being received earlier than usual (Eysenbach, 2006). González-Pereira et al (Gonzalez-Pereira, Guerrero-Bote, & Moya-Anegon, 2009) notes, that all subject areas in the citation database SCOPUS have a citation peak within a three-year time frame - that is, research articles from all fields of science receive the most citations in a single year, within a three-year time frame from the date of publication of the original article. Green Open Access may simply move this citation peak closer to the date of publication.

### More citations to Open Access articles?

Whether Open Access articles receive more citations is also debated. A number of studies (Antelman, 2004), (Eysenbach, 2006) indicate that Open Access articles receive more citations, while other studies (Craig, Plume, McVeigh, Pringle, & Amin, 2007) point out, that this increase in the number of received citations varies depending on which scientific field the cited article belongs to. Some fields of science, such as physics and mathematics, have a strong tradition for self-archiving their publications. Differing from the norm in these fields is likely to be associated with fewer received citations than could otherwise be

expected. On the other hand, in fields of science where Open Access is not yet an established tradition, depositing research articles will most likely increase the dispersion of the article, increasing the visibility of the article, which, in turn, may lead to more received citations.

In summary: to increase the potential number of citations to an article, that article must be dispersed as widely as possible as soon as possible in the publication process. Open Access will help achieve this goal. By depositing an article in an Open Access repository at an early stage, that article will be available for all to access. This will help increase the visibility, which, in turn, may lead to more received citations. This holds especially true for areas in which it is uncommon to use Open Access - due to a likely first-mover advantage.

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## OA MANDATES AND THE NORDIC COUNTRIES

Sólveig Thorsteinsdóttir

### Introduction

The open access movement is about making all peer-reviewed scientific and scholarly literature open to all on the internet. Open access is only possible if barriers, such as copyright and licensing restrictions are removed, and the material is made freely available without restrictions.

There are two ways to make peer-reviewed scientific and scholarly communication freely accessible on the internet. These two different methods are called the "Golden Road" (open access journals) and the "Green Road" (open access repositories). This article focuses on the "Green Road" and the need for mandates for the two repositories in Iceland; Skemman and Hirslan.

### Open access repositories (OA repositories) and open access mandate (OA mandate)

Many institutions and departments host open access repositories. Funding agencies such as the National Institutes of Health require that researchers receiving funds from NIH deposit their research output in the National Library of Medicine's open online archive, PubMed Central.

The Nordic countries host about 77 repositories.(1) The objective of most repositories is to archive scientific and scholarly literature from their institutions or departments. Besides open access, preservation is also an important objective of the repositories. The repositories do not perform peer reviews but most of them host post-prints approved by peer review. The [Berlin Declaration](#) recommends that the repository archiving policies require researchers to deposit their work immediately in open access repositories.

An Open access mandate (OA mandate) means that OA is required. The term OA-policy is broader and can mean either a mandate or a recommendation that can be more or less strong. In this article the focus is on the OA mandate.

Most institutions, departments and funding agencies have either an OA mandate or a policy that recommends that its faculty members or researchers who receive public funds will deposit their research

output in the repository. In the last two years there has been a rapid growth of OA mandates associated with repositories.(2) OA mandates are grouped into institutional mandates, department mandates, school mandates and funder mandates.

The repositories have been in operation for some years, but most have only been able to host between 5 to 20% of the material they had aimed for.(3) Faculties have deposited only a fraction of the literature expected in the repositories. The reaction to this disinterest has been new OA mandates and that older policies have been changed into mandates, e.g. the revised mandate of the National Institutes of Health (NIH) in April 2008.(4)

The effect is clear. As of May 2009, according to the NIH, compliance has jumped from 19% to 49%.(3) The change from the earlier mandate of 2005 is that researchers now are required, (instead of requested) to deposit their work in open access repositories. The drawback of the NIH policy is, that it accepts an embargo period of up to a 12 months before the articles derived from the NIH grants are accessible in the National Library of Medicine's online archive, PubMed Central.

Other mandates limit the embargo to six months, e.g. the Canadian Institutes of Health Research mandate.(5) The mandate from the Queensland University of Technology (QUT), Brisbane, Australia, wants researchers to make their material available at the time of publication. Requests for embargos of more than 12 months must be referred to the Deputy Vice-Chancellor of Technology, Information and Learning Support).(6)

Most mandates regulate also what kind of literature should be deposited. This normally includes peer reviewed journal articles, conference proceedings, and theses, and is usually effective from the date of the implementation of the mandate. Researchers are often recommended to deposit also material prior to this date as well as other material such as books, book chapters and data sets.

The copyright issue is important. To be able to comply with OA, copyright holders are advised not to waive all their rights. The Creative Common licenses

**Table 1.**  
**Institutional and funders mandate**

Countries	Total Mandates	Mandates	Date
<b>Finland</b>	<b>28</b>		
		Institutional	University of Helsinki
		Institutional	University of Tampere
		Institutional	The 26 universities of Applied Sciences
<b>Denmark</b>	<b>2</b>		
		Institutional	Copenhagen Business School
		Institutional	Roskilde University
<b>Norway</b>	<b>3</b>		
		Institutional	University of Bergen
		Funder	Norwegian Research Council NRC
		Funder	Nor. Knowledge Centre Health Services
<b>Sweden</b>	<b>3</b>		
		Funder	Swedish Research Council
		Funder	Formas, Swedish Res. Council Environm. Agric. Scienc. Spatial Plan
		Institutional	Chalmers University of Technology
<b>Total</b>	<b>36</b>		

or other open content licenses or amendments are often used. The mandates state the relationship with publishers and many do respect the publisher's embargo and policy but the NIH takes a strong stand regarding publishers.

An important change in the 2008 revised mandate from the earlier NIH mandate is that if a publisher refuses to accommodate the NIH policy, then the author must look for another publisher. (4)

### **Rapid recent growth in OA mandates in the Nordic countries**

There has been a rapid growth of OA mandates in the Nordic countries. Prior to 2010 there were only 3 mandates in the Nordic countries. In January 2010, 32 mandates took effect and the 33<sup>rd</sup> mandate will take effect in 2011.

According to the *Registry of Open Access Repository Material Archiving Policies* (ROARMAP) (2) there are 218 OA mandates worldwide.(7) Of these 218 mandates on the ROARMAP list there are 36 mandates from the Nordic countries (Table 1).

Of these 36 mandates from the Nordic countries, two are not yet listed in ROARMAP; the mandate from

the Swedish Research Council Formas for Environment, Agricultural Sciences and Spatial Planning, and the mandate from Roskilde University, Denmark. In the Nordic countries Denmark has two mandates, Finland 28, and Norway and Sweden have three each.

Of these 36 mandates there are 32 institutional mandates; 6 from universities in Denmark, Finland, Norway and Sweden and 26 from the Universities of Applied Sciences in Finland.(8) The are four funder mandates. Two from Norway; the Norwegian Research Council, and the Norwegian Knowledge Centre for Health Services and two from Sweden; The Swedish Research Council, and Formas, Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Table 1).

### **Embargo**

Only three mandates from 2010 address the issue of embargo. None of the mandates require immediate open access to the material. Of the mandates that address the issue of embargo, the shortest is a six month embargo and four mandates respect the publisher's embargo (Table 2).

**Table 2.**  
**Institutional and funder mandates in the Nordic countries**

Institution/funder	Date	Embargo
University of Helsinki	01.01.2010	
University of Tampere	01.01.2011	*Publishers
The universities of Applied Sciences	01.01.2010	
Copenhagen Business School	26.08.2009	*Publishers
Roskilde University		
University of Bergen	01.01.2010	*Publishers
Norwegian Research Council NRC	28.01.2009	
Nor. Knowledge Centre Health Services	25.11.2008	*Publishers
Swedish Research Council	01.01.2010	6 months
Formas, Swedish Res. Council, Environm. Agricult. Scienc. Spatial Plan	01.01.2010	6 months
Chalmers University of Technology	01.01.2010	6-12 months

*\*according to publisher's request*

### The situation in Iceland

There are no OA mandates yet in Iceland. The first repository started in 2006, *Hirslan*, the Landspítali University Hospital Library repository. The second started in 2008, *Skemman*, the repository of the University of Iceland, University of Akureyri, University of Bifröst and the Iceland Academy of the Arts. The lack of mandates in Iceland might have had the effect that only a low percentage of submitted research literature is deposited in the repositories. *Hirslan* is a subject repository for health sciences and the deposit rate for Icelandic research material published in Icelandic journals in the health sciences is around 100%. The publishers of Icelandic health science journals have agreed to allow all the articles from Icelandic health science journals to be hosted in *Hirslan*. The deposit rate for articles written in other languages than Icelandic and published in journals outside Iceland is only around 2% from 2006 – 2010 and 0% for the year 2009. If a mandate would be implemented this situation might change. If an article from Landspítali is not hosted in *Hirslan* a link is made to the article at the publisher site or to other repository where the article is hosted.

Of the 141 articles published in foreign journals there are 18 articles in OA. PubMed Central hosts 14 of these 18 OA articles and 4 are in OA journals where funder or authors have paid for OA publishing. Of the articles published in foreign journals, 39 articles are published by Icelandic scientists. The other 102 articles are published by Icelandic scientists in

collaboration with authors from different countries. These 102 articles may very well be archived in several repositories. Some funders demand that articles funded by them should be in a specific archive, such as the Wellcome Trust and NIH in PubMed Central. If an article from Landspítali is OA in another repository such as PubMed Central, *Hirslan* does not host these articles but links to the article instead. In 2009, there were links to 14 such articles in PubMed Central.

If an Icelandic researcher co-authors with an author who has a contract with a funder or a university other than Landspítali University Hospital and is required to deposit the article in another repository, the other authors, e.g. Icelandic co-authors are not under the same obligation to deposit. A mandate is needed for *Hirslan*, requiring researchers without other requirements from a funder or a university to deposit their work in *Hirslan*. This was the case with the 39 articles published in 2009 by Icelanders only and not made open access. The Icelandic OA mandate could be a funder mandate that could be from RANNÍS, the Icelandic Centre for Research, or an institutional mandate either from the University of Iceland or Landspítali University Hospital, since some authors at Landspítali University hospital receive funds from these three funder/institutions.

*Skemman* hosts only student and faculty theses, but only a few of those who deposit their work in the repository allow open access. In Finland the Ministry of Education has published a policy for academic

**Table 3.**  
**Total peer-reviewed scientific articles hosted or linked to in the repository Hirslan**

	Total	In Icelandic journals	In Foreign journals
All articles published 2009	206	65	141
OA articles of the total published	83	65	18
% OA	40%	100%	13%

theses, restricting the use of trade secrets in theses and forcing public access to them. A strong mandate and a support from the Ministry of Iceland might change the access to the theses. It is also a practice of students in Icelandic universities to sell their theses, and if they allowed open access, they might find it difficult to sell them.

### Summary

After the first mandate was implemented in Australia in 2004 there has been a slow increase in mandates. The revision of the NIH mandate in 2008 seems to have had a great impact on the rapid recent growth of mandates, not only in the Nordic countries but all over the world.

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## CHALMERS CHOOSING THE GREEN PATH TO OPEN ACCESS

Maria Kinger

In January this year an Open Access Policy<sup>1</sup> was adopted at Chalmers University of Technology (Gothenburg, Sweden). During the last decade the Library at Chalmers has been an active part in preparing ground for and advocating the policy and the idea of Open Access publishing. It has been a sometimes slow process but now we have a rather radical policy (Presidents Decision C2007/1118), mandating Green Open Access as the general rule for disseminating free access to Chalmers research. The decision also includes providing access to the university's own publications. The core sentences are; *"All research published by Chalmers' researchers must be made available in an open archive, normally within six months of publication although no later than 12 months. This means that researchers at Chalmers must submit a full-text copy of all their publications in electronic form to Chalmers Publication Library (CPL)"*. The policy applies from 1st January 2010 but in practice it will have to be enforced retroactively, since not all resources required are in place from the start. However this is in full agreement with the decision, in which the Library Director is given a special mission to assess the resources needed and to make a plan for implementation, to be reported on 15th March. This paper describes the process preceding the policy decision.

### Background

In the years of 2000 the library started to engage in disseminating information on university's publications in a new way. We set out to build a publication database, a project focusing on publication metadata with the aim to present a portal to Chalmers research publications on the web. Thoughts of Open Access did not grow into the picture of what we aspired for until a few years later. In February 2003 the Library hosted a seminar for researchers on the theme "Change of regime in scientific publishing" (*Systemskifte inom vetenskaplig publicering*) we invited both national and international speakers among others David Prosser from newly formed SPARC Europe (the Library soon joined as member) and David Wray from Institute of Physics. Quite a few faculty members turned up but at large the seminar attracted more interest from librarians than from researchers.

### Chalmers Publication Library

The next step for us was to launch the publication database into an operational service, named Chalmers publication Library (CPL)<sup>2</sup>, in 2004 researchers at the Physics Department were interested in becoming our test pilots. About the same time we were contacted by central administration at the university as they were looking for tools to measure research performance. They had thoughts on changing the way local research funds was allocated and sought ways of making the relations between input and output more visible. A better yearly publication statistics seemed possible to achieve using the database we just had put up to test, compared with the formerly used manually prepared publication lists. Except from the local need for publication statistics, all Swedish universities and colleges are required to report the amount of reviewed scientific publishing to the Swedish Ministry of Education and Research, and one could foresee a continuous need for a tool like this. A few months after this first contact, a President Decision on compulsory registration of all scientific publications into CPL was taken (**President Decision ref. C2004/700**) in June 2004. CPL staff had a busy time during 2004-2005 advocating the use of publication registration. Researchers were not happy to have been laden with the extra burden of having to register their works, and the most common complaint then was; *all my articles are found in Web of Science anyway so why do you not download the data from there?* As we due to copyright restrictions could not do that, and even so, it would not have been sufficient to cover the all university publications anyway, we did our best to improve the user interface, building import routines for EndNote- and BibTex-formats etc. We also cooperated with the university webmasters when a new content management system (CMS) was about to be put up for the university at large. This cooperation led to the creation of a built-in xml-based feature, incorporating publication lists from our database to the CMS. The list function was well accepted and many researchers started to add their publication data way back beyond the mandated year 2004. We were also contacted by a couple of departments who earlier had managed local publication databases as they wanted to use CPL instead. This content was also incorporated and the CPL year span grew quickly and we soon had records dating back to the 1960s.

<sup>1</sup> Policy text  
[http://www.chalmers.se/en/sections/about\\_chalmers/policies-rules/open-access-policy](http://www.chalmers.se/en/sections/about_chalmers/policies-rules/open-access-policy)

<sup>2</sup> CPL <http://publications.lib.chalmers.se/>



### ... what about the full texts?

From year 2006 and onwards Chalmers official publication statistics has been based on the data registered in CPL. By then we had a well established workflow for metadata registration, usually performed by the authors themselves, but the focus was still on just metadata, catalogue records. Providing access the full text content, was in this workflow, just possible by adding an URL in the registration form, and it could lead to a source anywhere; URLs to publishers' sites or local departmental servers. CPL did not have a full text archive of its own, though this was a feature much asked for by both students and researchers, especially in connection with a reorganisation of the university schools and departments in 2004/2005 which lead to the closing down and relocation of institutional servers and content.

We started to look for solutions to the juridical and technical questions implied in handling the full texts and understood that we had to work closely together with other functions at the university. The library alone did not have all the skills needed. These contacts proved fruitful for instance we found that the Printing office in fact already was using pdf-files as model for printing. Contact with lawyers also brought us a step further, according to Swedish law both researchers and students have full rights to his/her thesis and the university does not have the right to publish electronically without permission. We talked to Chalmers lawyers and gave them examples of publishing agreements used by other organisations both in Sweden and abroad and together we took forth a *Publishing agreement* to use. We set up a full text server, decided on a name conversion for files etc., and little by little we started e-publishing in a rather primitive way, people had to send in paper agreements and send us their pdf-files by mail. It was not until autumn 2008 we finally had an upload function for parallel publishing in place, much due to our participation in *Parallel publishing of scientific articles (PAVA)*<sup>3</sup>, a national project sponsored by the Royal Library development program *OpenAccess.se*<sup>4</sup>, but electronic publishing of Chalmers' own material still lingered at a Neolithic stage.

### The SPA forum

The question of an Open Access policy was raised by library representatives within the local *Steering and reference group for electronic Publishing and Archiving (SPA)* in November 2007. Though, the idea of a policy had been advocated by the Library within our organisation during a couple of years already, SPA provided a better forum for pursuing the matter. The SPA group had originated out of a reference group earlier formed round the publication database, but was

renamed and extended since SPA was given the broader mission to include electronic publishing and archiving. It consisted of representatives from a range of functions dealing with the university's publishing in different ways, except from the Library, representatives from e.g. faculty, administrators, the central IT unit, the Board of graduate students, the Printing office and the Archive were members in this group. The chairman Per-Eric Thörnström came from the Office of Planning, a part of Chalmers central administration. There was also an external representative from Gothenburg University, an organisation with whom we have a close cooperation, since our universities have common departments. Both universities also use the same, jointly developed open source software (Scigloo<sup>5</sup>) for their publication databases<sup>6</sup> CPL and GUP (Gothenburg University Publications). When, at SPA's first meeting, we lifted the subject of introducing an Open Access policy at Chalmers to the agenda, we could refer to a recommendation made by SUHF (The Association of Swedish Higher Education) in June 2005. It was a recommendation to SUHF members to introduce an Open Access policy in order to realize the Berlin Declaration, and as our university was a member it was easy arguing. In December 2007 the chairman of SPA was officially given the task to prepare a decision for an Open Access policy. From this point the Library, together with the other members in SPA, has served as a source of reference and support.

Before putting a policy text up for decision by Chalmers' president, SPA saw the need to anchor the proposed decision in order to get a policy that would have the Faculty members' approval. Therefore a series of anchorage meetings were held during the spring of 2008. To support this process SPA asked Tore Lund at the Library, Bibliometrics division to carry out a local survey<sup>7</sup>. Based on bibliometric data from 5 years (2003-2007) the journals most frequently published in by Chalmers researchers were selected and sorted by publisher. Then the percentage of possible Green Open Access was calculated using the information on publisher copyright policies in the RoMEO database. The survey showed that at least 85% of Chalmers journal articles could be parallel published either direct upon publication (78%) or after an embargo period of between 3-24 months (7%). This survey helped answering an important question during the process of anchoring the policy. The idea of a policy was discussed with among others the Heads of Departments, the Faculty Senate, and the Board of Graduate Studies (FUN).

<sup>5</sup> Scigloo <http://www.scigloo.org>

<sup>6</sup> In fact, we also use the same database.

<sup>7</sup> *How many of our papers are published in journals allowing e-prints?(in Swedish)*  
<http://roxen.lib.chalmers.se/bibliometri/oarapport.pdf>

<sup>3</sup> The PAVA project

[http://www.kb.se/OpenAccess\\_english/projects/#Parallel](http://www.kb.se/OpenAccess_english/projects/#Parallel)

<sup>4</sup> Open Access.se [http://www.kb.se/OpenAccess\\_english/](http://www.kb.se/OpenAccess_english/)

## Down the Green Road

A first policy draft was presented to the President in September 2008 but was turned down and sent back to SPA to be reworked. The main reason for this was due to a new *Government bill on Research and Innovation*<sup>8</sup> presented that autumn. The general content of the policy was accepted, but there were concerns rooted in the new focus on bibliometric measurements mentioned in the bill. The main concern was that the choice of publication channels would affect our future research funding from Central government, and a policy demanding Open Access journal as a first choice might then have a negative effect. The government bill played an important role when later deciding on favouring Green Open Access in the final version of the policy. The reworked policy includes a recommendation to researchers to seek publication in Open Access journals, when this is appropriate, but not demanding it as a first choice. SPA's chairman Per-Eric Thörnström has given me a resume of these discussions and the anchoring meetings. I asked him what arguments advocating an Open Access policy, he found, won easy approval from faculty members:

- *Free access to scientific results* was from an academic point of view considered the most interesting.
- Parallel publishing as a mean to *increase visibility* to one's research seemed attractive, especially combined with the *potential benefit of getting more citations*.
- Some researchers, though not that many, were also *annoyed with the way commercial interests profit on scientific communication*.

I also asked what the most common arguments against a policy were:

- The most common opposition to introducing an OA policy was that researchers would not like it. It was said that a mandate to self archive was to going to be perceived as a time

consuming administrative burden and it was believed that researchers would not comply. (Really good arguments against the policy were lacking according to Mr. Thörnström)

- A few faculty members did misunderstand the green policy and thought it wrong to force researchers to publish in OA journals.

Finally my last question to him was; - How big an influence did the Governmental bill in 2008 have on the choice of a Green OA policy at Chalmers?

- Yes, clearly it had a big influence, since the bill states that funding will be allocated according scientific quality, and indicators like citation figures will be important to us. It did not seem possible to mandate for Gold Open Access, too few journals have an impact ranking high enough. What could be done without taking such a risk and still achieve the goal - *free access*? The answer was quite obvious.

The fact that a rising number of funders are mandating Open Access publishing has made it easier to get acceptance for the need to provide facilities for this at Chalmers. Especially now since the Swedish Research Council has incorporated an OA policy into their grant conditions from 2010, as they cover about 17% of our external funding.

## Work in progress

It was with great interest me and my colleagues sometime before Christmas '09 read Leif Hansen's paper<sup>9</sup> in a previous issue of *ScieCom info*. We then knew that the CBS experiences soon might become highly relevant to us. There are many issues to address as we move into our new role as a key disseminator of our universities research results. We are happy for all advice from colleagues in the field and will closely follow and try to learn the do's and don'ts from others.



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<sup>8</sup> *A Boost to Research and Innovation - A summary of Government Bill 2008/09:50*:  
<http://www.regeringen.se/content/1/c6/13/07/65/d9e23a41.pdf>

<sup>9</sup> *ScieCom Info*, Vol 5, No 4 (2009)  
<http://www.sciecom.org/ojs/index.php/sciecominfo/article/view/1812>

## OpenAIRE – EUROPEAN REPOSITORIES JOINTLY SUPPORTS THE EC OPEN ACCESS PILOT

Jan Hagerlid

OpenAIRE (Open Access Infrastructure for Research in Europe), is a three-year project funded under the 7<sup>th</sup> Framework Programme of the European Commission. The project had its kick-off meeting in Athens on January 27 in 2010. The overall budget is 4.1 Million Euro.

The main goal of OpenAIRE is to support the Open Access pilot, launched by the European Commission in August 2008. This Open Access pilot covers about 20% of the FP7 budget, which amounts to more than 50 billion Euros for the period 2007 - 2013. The pilot commits researchers from 7 thematic areas to deposit their research publications in an institutional or disciplinary Open Access repository. In the areas of Health, Energy, Environment, Information & Communication Technology and Research Infrastructures the authors have to make their best efforts to ensure Open Access to their publications within six months and in the areas of Socio-economic sciences and Humanities and Science in Society within twelve months.

It also supports the European Research Council Open Access policy from December 2007 which likewise commits researchers to deposit their research publications in Open Access repositories and make them Open Access within six months.

### **Why the success of the EU Open Access mandates is so important**

The degree of success of these two very significant Open Access mandates will have a great impact for the general acceptance and support for Open Access in Europe. Governments, national research funders, researchers and universities all around Europe are affected by them and will follow their implementation closely. Success can be measured in compliance to the mandates but also in the experiences of the researchers involved. Is it reasonably easy and straight-forward for them to deposit their research publications? Can they and the EU commission see tangible benefits in increased use of Open Access publications?

### **Pan-European network for Open Access with broad coverage**

OpenAIRE will create underlying structures to support researchers in complying with the EU Open Access mandates. It will establish and operate a European Helpdesk System, with a European Centre and National Open Access Liaison Offices in 27 countries. It will build an OpenAIRE portal and e-Infrastructure for the repository networks building on the solutions developed within the DRIVER project. (<http://www.driver-repository.eu/>) This portal will give access to the EU-funded scientific publications but also provide monitoring tools for depositing and usage statistics. The main focus of the project is on networking and services but it will also have some research activities exploring scientific data management services together with 5 disciplinary communities.

This ambitious effort unites 38 partners from 27 European countries. All member states but one are directly represented (Luxembourg is represented indirectly through Belgium) plus Norway. With this broad coverage the project for the first time establishes a genuinely pan-European infrastructure for Open Access and digital repositories. This will have a wide-reaching significance beyond the specific goals of the OpenAIRE project.

### **Synergy between European and national OA mandates**

The Open Access Liaison Office for Sweden is run by OpenAccess.se programme at the National Library of Sweden. The liaison offices are organized in regions and the Nordic region will be coordinated by the Danish Technical University. In Sweden there will be a rising need to advise researchers also on complying with OA mandates from national research funders, and we hope that there will be a synergy between this and our role within the OpenAIRE project. One important new task will be to create links with VINNOVA, which has the national responsibility for providing information and advice on EU's Framework Programme for Research and Technical Development.

More information about Open AIRE, see <http://www.openaire.eu>



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## USAGE-BASED AUTHOR ROYALTIES – A NEW OA BUSINESS MODEL FROM SCIYO

Jan Erik Frantsovåg

In December 2009 the Croatia-based Open Access publisher Sciyo launched a new model in Open Access publishing - usage-based author royalties.

Sciyo publishes books and journals, and has a standard publishing fee of EUR 470. Details about this are difficult, not to say impossible, to find on their website <http://sciyo.com/>, so these facts are from their promotional material introducing their new model.

The new model is that authors will be paid (which in itself is unusual in scientific publishing) according to the number of readers they attract, as measured by the number of actual downloads. The payment is not very large, EUR 0.02 per download. If the annual amount for an author is less than EUR 100, it will be credited to the author's account with Sciyo and used as part payment on future publishing with Sciyo. If it is EUR 100 or more, it will be paid out to the author's bank account.

Sciyo reports 720 000 downloads over the past year, this volume of traffic could cost them EUR 14 400.

Paying for downloads is a dangerous sport. There are two clear dangers present:

1. That of authors (and their friends and families) downloading articles with no other intent than to create income for the authors.
2. That of competitors downloading articles in order to weaken Sciyo's financial situation.

In addition to that, we will see traffic increases from onlookers curious about the business model, with no real interest in the content itself – like myself.

In order to make their model work Sciyo needs to create strong mechanisms to hinder abusive downloading from authors or competitors.

### How will the model work for authors?

An author needs 5 000 downloads in a year to get a payment from Sciyo. Clearly, few authors will reach this threshold. What most authors could hope for is an amount that will reduce future publishing charges, thus making publishing less costly for the author. If the author is planning to publish more with a Sciyo publication, this is favourable to the author. If not, the author will never benefit from this “income” – the

promise to pay will effectively not cost Sciyo anything.

### What is in it for Sciyo?

For one thing, this is a model that will create publicity for Sciyo and make libraries, readers and authors aware of their existence and publishing activities. At a price of (a maximum of) EUR 14 400 this is really not very expensive as marketing costs go.

The model will undoubtedly attract authors, though the payment promised is not large enough to make authors choose to publish with Sciyo if this is contrary to other needs. However, it will make Sciyo a more attractive venue of publishing, and this could for some authors or manuscripts tip the scales in favour of Sciyo.

If an author has already published with Sciyo and accrued some credit with Sciyo through downloads, this will make publishing with Sciyo cheaper, and this could also increase the willingness of authors to publish with Sciyo.

The better papers and more read authors will create more income through this model than more inferior papers and less read authors. Thus, authors that will attract readers through the quality of their work and writing will be the ones that will benefit the most from continuing publishing with Sciyo. And these are the authors that Sciyo need to attract and keep as future authors, in order to get a reputation for roadworthiness and quality.

In this way, the major cost for Sciyo will be directed towards keeping the qualitatively best work and best authors coming back to Sciyo to continue publishing, increasing Sciyo's standing. Lesser works and lesser authors will cost Sciyo little or nothing, especially if they do not come back with further papers to be published.

I think OA publishers should follow Sciyo and their model closely, it could be that this is a model more publishers should consider following up in some way or other.



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