OPEN ACCESS IN SWEDEN. RECENT DEVELOPMENTS
Ingegerd Rabow

Introduction

Activities to promote Open Access to research publications started in the late 90s and have primarily been driven by the university library sector and the National Library. They have worked both jointly and separately to establish new publishing outlets for the universities. Helping universities to the widest possible dissemination of their research output was perceived as a logical development of the traditional university library role.

To engage researchers, administrators and funders has been a somewhat slower process, in spite of the many international initiatives mandating Open Access to publicly funded. research.(listed in the database JULIET)

The intensive information campaigns orchestrated by the university libraries and by committed researchers and administrators have, however, produced positive results and there is a growing insight among researchers that wider dissemination and increased visibility may have beneficial effects on their impact.

Early OA initiatives were the *Nordic Conference on Scholarly Communication*, a biannual series starting in 2002, *the Directory of Open Access Journals (DOAJ)* 2003-, *ScieCom – Swedish Resource Centre for Scientific Communication 2002-2004*, and *SVEP – Electronic Publishing in Swedish Universities/University Colleges* (2003-2005)

In 2003 the Ministry of Education and Research required HE-institutions to report their refereed research output every fourth year. This mandate and later large-scale university evaluations have been important incentives for the setting-up of university publication databases. Thirteen universities now require registration in such databases. Integration with full text is the logical complement. (see below)

Major stakeholders - libraries, funders, universities

• *The Swedish National Library*
The Ministry of Education and Research has given the National Library (NL) the role of coordinator for information provision to higher education and research. The National Coordination Department (NCD) has responsibility for the funding and coordination of development projects at university

libraries, and for the coordination of national licence agreements for e-resources. Several projects dealing with developments in scientific publishing have been funded, eg the large SVEP-project, with many results, e.g.nationally accepted metadata standards and standardised subject categories. The latest NL-programme, OpenAccess.se , has been set up to fund projects promoting Open Access to the output of higher education institutions.. (See below)

• *The Swedish Research Council*
is a government agency under the Ministry of Education and Research. The Council has three main areas of responsibility: research funding, research policy and science communication. It has three Scientific Councils: for Humanities and Social Sciences, for Medicine, and for Natural & Engineering Sciences. It also includes a Committee for Educational Science and a Committee for Research Infrastructures. The Council is the largest provider of public funds (approximately SEK 2.5 billion a year) for Swedish basic research at Swedish higher education institutions (HEI:s) and research institutes. The Council signed the Berlin Declaration in 2005 and supports the fundamental principle that publicly funded research shall be open to all. The Council is now considering means and ways to incorporate an Open Access policy into their grant conditions.

• *The Association of Swedish Higher Education (SUHF)*
organises all Swedish vice-chancellors. Although without legal status SUHF is acknowledged as the official representative of the university sector and has direct contacts with Parliament, Government and government commissions. SUHF is a member of the European University Association (EUA) and The Nordic Association of University Administrators (NUAS).

The Association signed the Berlin Declaration in 2004. Issues regarding Open Access and scientific communication as well as high quality information provision to the university sector are now primarily handled by the SUHF expert group *Council of Library Directors*, with the help of a number of task groups. Focuas areas for 2008-2009are:
• Systems for research evaluation, incl. bibliometrics
• Access to digital information resources-licensing agreements

• Development and operative management of modern systems for handling scientific information and making it accessible.

The Council is discussing the possibilities of an increased Nordic cooperation on these issues.

Recent SUHF-survey : status of e-publishing

The SUHF Electronic Publishing Group recently reported the results of a survey of Sweden's 42 universities/university colleges. (Report in Swedish)

leadership showing how E-publishing, Registration and Open Access best can be integrated in the daily work of their institutions. .
• SUHF try to find common financing models for activities where joint action is preferable
No decisions have yet been made.

Funding programmes:

The openaccess.se programme started in 2006 as a four-year funding programme to support Open Access and to promote maximum accessibility and visibility of

E-publishing universities/university colleges

Type	Institutions	DIVA	Own	DSpace	Eprints	PURE	OPAC/Web
E-publishing IRs	33	16	7	5	2	1	3
Decision e-publishing*	27						
Mandates (ETD)**	17						
OA-policy (recomendation)	6						
OA-journal publishing***	10						

* Many decisions to recommend.**Often qualified with `if copyright agreements permit´. Sweden has not yet any unequivocal university mandate for full-text deposition. *** A total of 15 titles with two to

CRIS - Registration of publications (bibliographic data)

Type	Institutions	OPUS	DSpace	Own	PURE	Web page
Registration	26*	10	3	10	1	1
Mandate	13					

*Eight institutions have totally or partly integrated systems for registration AND publishing. During 2008 this nuumber will grow to 13 when DIVA and OPUS will merge into one system.

Compliance with the SVEP national recommendations for metadata standards is very high but considerably lower for the recommended subject categories.

The survey results show clearly a need for coordination and administration of current and future projects, as well as for the allocation of responsibility and funding for the transition from project to operative stage, and for supporting long-term operations. This is a task that must be firmly anchored within the university sector.

The most important areas for coordination and cooperation on a national HE-level were defined as: intellectual property issues, intra-institutional marketing of self-archiving, maintenance of standards, a current awareness service, and support for OA-journal publishing For most areas a close cooperation with SUHF is essential. The Electronic Publishing Group has therefore recently recommended SUHF that:

• SUHF accept responsibility for a permanent, comprehensive and nation-wide cooperation around E-publishing activities at the Higher Education institutions.
• SUHF formulate guidelines for the university

the output of researchers, teachers and students at the HE-institutions. The programme is administered by the National Cooperation Department at the National Library and headed by a Steering Committee with representatives from university libraries, universities, research organisations, and the National Library. Funding comes from the Ministry of Education and Rersearch via the National Library budget for development projects. Specific projects have received co-financing from the Swedish Research Council and the Swedish Knowledge Foundation

Main objectives :
• To promote co-ordination and development of standards and tools for electronic publishing at Swedish universities/university colleges
• To promote a rapid growth of the volume and diversity of material in academic repositories
• To promote access to and use of content in academic repositories and Open Access journals
• To secure long-term access to digital publications and other material in academic repositories
• To develop quality standards for content and services in academic repositories
• To support publishing in OA-journals and the migration of Swedish scientific journals to OAl

Ten projects from the latest Call for Proposals received funding for a total of 4 mill SEK 2008-2009. In total 17 projects are funded. Several of these aim at supporting researchers when publishing, whether in OA-journals or in open archives. Examples:

Journal Info 2.0 The Journal info service was launched by Lund university in 2007 to provide support for researchers when selecting journals for publishing. The information about individual journals includes publisher, scope, quality indicators, cost, financing model, copyright conditions, and OA alternatives. This service is already internationally well known and appreciated and has now received additional funding fur further developments. New fields will be added e.g. refereed publication: author and publisher names will be normalised. A large programme of user tests will be executed and the results from these tests will be added together with advanced search functions

The project team behind *Parallel publishing of scientific articles (PAVA)* will, together with selected research groups from different universities, study and test work-flows for parallel publishing in institutional repositories. In this way they expect both to identify problems and obstacles and see what support functions researchers would need. They will cooperate with another project *Open Access Domain models*, dealing with domain modelling of rights and terms in connection with parallel publishing of scientific articles. The aim of this project is to create services connecting rights data to individual articles in a consistent way.

The SUHF-survey (see above) showed a heavy demand for help and support regarding intellectual property issues, as copyright has a crucial role when moving to Open Access publishing. *Copyright in a new publishing environment* can be seen as an answer. It aims to give all academic users practical, uncomplicated and updated information based on an extensive survey of actual legal practice at Swedish HE-institutions. Advice and guidelines will be presented together with reports on interesting cases of legal practice from foreign institutions. Relations between author and institution, researcher and publisher, law and contract will be clarified. Various communication channels will be used: a website, a manual focusing on practical situations, courses and seminars. The project is co-financed by the Swedish Research Council.

Open Access and information provision to private businesses will investigate what role Open Access can play in Swedish private R&D companies, and how these companies could contribute to the publication costs in an Open Access model. A combination of surveys and site visits to twelve different companies will address the following questions: How is the access to scientific publications today in private companies with in-house R&D operations? To what extent are OA publications used? How can the companies pay their share of the publications costs in an Open Access model for scientific publishing?

Unified access to and reporting of Swedish scientific publications aims to improve the accessibility and visibility of research publications created by Swedish researchers, and provide a secure infrastructure for the reporting of research output. This large project has been granted 1.5M SEK. A service will be developed to harvest metadata for all Swedish scientific publications from all the HE publication databases. The metadata will be accessible for end-user searching and for harvesting to other services The current national metadata format recommendations will be analysed, requirements for the search service will be specified. Tools will be developed for using metadata from the search service as a basis for the reporting and analysis of Swedish scientific publishing output The search service will be available within the LIBRIS national library system..

A couple of projects concern support for OA-journal publishing. *Best Practices Guide to Open Access Journals Publishing* is a cooperation between Co-Action Publishing and Lund University Library Head Office to create a comprehensive handbook for editors, researchers, librarians, and university presses. Input will be collected through interviews with editors and presses, primarily in the Nordic region and by reports from other projects, particularly the Nordbib-funded project, *Aiding Scientific Journals Towards Open Access Publishing* (see below)

With Evaluating advantages and problems with Open Access for biomedical journals a group of Swedish biomedical journal editors will analyze advantages and problems in adapting to an Open Access model.

Nordic cooperation
The Nordbib programme is a Nordic research funding programme running from 2006–2009, co-financed by The Nordic Council of Ministers (12.3 mill. DKK) and NordForsk (10 mill. DKK). NordForsk, is an independent institution operating under the Nordic Council of Ministers for Education and Research. The Nordbib programme aims to create a joint Nordic approach to Open Access and research distribution.
The programme comprises joint Nordic initiatives in the areas of production of digital scientific contents and publication of Nordic scientific journals as well as developing co-operation with publishing companies and scientific societies regarding migration to e-publishing.
The programme activities are organised in three focus areas or Work Packages:

• Policy and Visibility - WP 1
Promote dialogue and work out recommendations with

regard to OA and,thus, seek to guide rights holders, publishers and the research political environment towards OA policies

• Content and Accessibility - WP 2

Support activities related to generating contents, creating access to research and learning resources, and addressing interaction and task distribution in connection with e-science.

• Infrastructure and Interoperability - WP 3

Promote interoperability between different systems in information learning, and scientific environments. The co-operation will guarantee that highly specialized knowledge and know-how regarding standards and technical solutions can be adopted and rendered useful in other environments.

One example is the large WP2 project *Aiding scientific journals towards Open Access publishing*, a joint Nordic project to support the transition of scientific or learned Nordic journals to Open Access, either by supporting the transition of existing journals or by the creation of new ones.

The target results of the project are:

1. Analysis of significant issues when scientific journals consider and execute a transition to Open Access publishing, and presentation of such analyses and the ensuing recommendations in written and electronic media
2. Improvements in the computational infrastructure for operating a journal in Open Access mode, and analysis of its ramifications
3. Creation of a network of stakeholders in OA publishing in the Nordic countries
4. Strengthening Nordic university libraries and other university units in their publishing

The project is organized in six working groups addressing different aspects, e.g. editorial software systems, business models, communication platforms, copyright support, low volume printing, and governmental funding policies. Participants represent publishing, libraries. universities, and learned societies. The Swedish participation is co-financed by the Swedish Research Council and the openaccess.se programme.

Financing models - the role of libraries

SCOAP3 http://www.scoap3.org/
On behalf of a Swedish research library consortium the National Library has recently signed the Expression of Interest (EoI) to join SCOAP3 (Sponsoring Consortium for Open Access Publishing in Particle Physics), a new financing model. SCOAP3 plans to provide financial support to publishers providing peer-review and publication of complete journals dedicated to high-energy physics (HEP,) as well as select articles

in so called `broadband journals'. Members of the Swedish consortium are research libraries serving institutions with HEP research. The consortium is prepared to pledge funding in relation to their present output of HEP-articles, The funding will come from their expected savings in subscription costs. Remaining costs will be met by the NL The Swedish participation is formally supported by the Swedish LHC Consortium and the Board of the Section for Elementary Particle and Astroparticle Physics of the Swedish Physical Society.

BioMed Central memberships
Seven Swedish research libraries are members; four as Supporter Members and the rest as Prepay Members. Supporter Members pay a flat rate annual Membership fee based on the number of science and medical researchers and graduate students at their institution. Members of the institution are then given a 15% discount on the Article Processing Charge (APC) when publishing in BMC journals.
Prepay Membership is an advanced payment system whereby customers pay upfront for articles published by their authorised users to be processed and published. Upon publication, the full APC for the journal in question, minus the discount that applies, will be deducted from the account. The higher the amount paid in advance, the greater the discount given.

PLoS Memberships
Lund University is the only Nordic member, although there are many members in other European countries. PLoS Institutional Members pay an annual fee, at the level of their choosing, which entitles:
• Affiliated scientists to reduced charges for publication in all PLoS journals-including the flagship journals, PLoS Biology and PLoS Medicine;
• Libraries to institutional usage reports for all PLoS publications;
• Member Institutions to a listing on the PLoS Web site Members page, along with a list of the articles published in PLoS journals by affiliated authors.

PLoS encourages consortial memberships, which are negotiated on a case-by-case basis.

Conclusions - Future developments

Several successful projects with promising results have been completed within the National Library development funding programmes and within other programmes. But, sadly, the completion of a project usually means the completion of the funding.

What is needed now is a serious discussion between the universities and other stakeholders how they can work together to successfully implement relevant results of these projects, and coordinate the

administration and financing of the university output through various Open Access models.

Scientific communication, including open data and e-science, is in rapid transition. Efficient coordination, administration, and allocating of tasks is needed. Responsibility must be clearly defined and accompanied by adequate funding - from what sources? Permanent solutions must be presented. It is necessary to find synergies and not waste time and money on duplicate efforts. Interest areas must be recognised and decisions taken at the right levels.

Important issues for joint action are funding policies, the role of libraries in the handling of various financial models, Nordic journal support policies, copyright policies, quality control, long-term preservation, and models for the integration of CRIS-databases with institutional repositories, thereby giving direct access to full-text publications.

We need mutually productive and beneficial cross-fertilization between stake-holders. The theme of the last Nordic Conferenc on Scientific Communication was `Beyond Declarations'. Now is the time to declare: `Beyond Projects'!

Ingegerd Rabow, Senior Librarian, Lund University Libraries Head Office, E-mail: Ingegerd.Rabow@lub.lu.se