CASE Story: CRIS/OAR synergy at The Technical University of Denmark

**Background**

Orbit is the Current Research Information Systems and Institutional Repository/Open Access Repository at The Technical University of Denmark (DTU). DTU is a broadly founded, business-oriented elite university where research goes hand in hand with education, innovation and advisory functions for government authorities. The University has a staff of more than 4,500, around 1,500 scientific personnel and more than 800 are PhD fellows.

All staff is registered in Orbit and can register publications, projects and activities, but only publications from the scientific personnel is counted as DTU records, other records are Personal records, which means that these publications are not counted in the yearly research assessments based partly on data from Orbit.

Responsible for the development of Orbit and the daily operation and administration of the system is ePub, a small team under The Technical Information Center (Library), that staffs seven full time employees 3 librarians, 3 developers/programmers and one manager.

Orbit is build on the Open Source platform Metatoo: [http://www.toolxite.dk/metatoo/](http://www.toolxite.dk/metatoo/) developed and maintained by The Technical Information Center.

![Screenshot of the front-end of Orbit (www.orbit.dtu.dk)](image)

**Mission of the Orbit**

Orbit is first of all a CRIS and secondly an Institutional Repository. This has impact on the priority of the development of the system. Orbit has a very high coverage of bibliographic metadata, but lacks when it comes to full texts.

Orbit is the main data provider of research information to all web-based communication platforms internally and externally at DTU. It provides a main search interface, web services that provides personal bibliographies; project
information and CV data to researchers own web pages as well as department sites. Orbit also provides an expert database, where researchers can be searched and found by expert knowledge described with abstract and keywords.

Orbit also functions as Institutional Repository and researchers can upload their full text articles and at the same time decide on what access their should be to the article, either: Personal (no public access), Campus-wide access and Public Access (Open Access).

**Business case**

ePub is the service provider to the DTU administration who is the customer. As a CRIS Orbit has placed itself as an important tool for management information especially when it comes to the yearly assessments made by the DTU administration.

Orbit's economy has developed from a yearly-negotiated contract to a running contract, and this year to a part of the basis economy of the library section, now being at a level of 3 full-time equivalent. The development of the contract with DTU management can be seen as recognition of Orbit's value to the university and Orbit is now seen as an essential library services towards the university.

**Service sustainability**

The CRIS role of Orbit is one of the central components of the University's IT infrastructure for communication, management and hereby fully sustainable.

Running the daily operation in an organisation that changes all the time and has grown a lot over the past couple of years is a demanding task. Every time DTU makes organisational changes it means new, issues like: new department names, new employees and employees moving to other departments.

A couple of years ago SCRUM methods were implemented into our organisation and development of Orbit. In the beginning this was very fruitful, it improved the way we estimated and broke down complex tasks into manageable tasks. In spite of this, a growing number of small tasks and bug fixes made our team forget what had been learned and the benefits that had earlier been won by SCRUM. This was one of the reasons why we implemented ideas from ITIL late last year. We hope that ITIL will help to take away many of the assessments of tasks from the developers by defining clear roles within our group and by building up an actual helpdesk and a single point of contact. We are still in the very beginning of the implementation – but just having the change of “how-to-do” things in mind has been fruitful. Small but important changes have been introduced such as: Single point of contact for our users e.g. one phone number and one helpdesk email, implementing work flows at the helpdesk, rearranging our bug-tracking system, building up a help Wiki [www.orbit.dtu.dk/help](http://www.orbit.dtu.dk/help) for our users and also for our own sake. These steps will hopefully in time give us more time to make needed changes and development in Orbit. Already we believe that the ITIL ideas have brought better service to our users.
**Overview of current contents**

Orbit has a very high coverage of bibliographic registration of scientific publications (9 scientific document types, like articles in journal, books and conference papers), popular science, patents, projects, student theses and reports and persons. It is mandatory to upload PhDs, and post-prints of articles published in peer-review scientific journals. Despite, the fact that DTU has had an Open Access policy for more than two years, coverage of full texts in Orbit is still rather poor, below 10%, expect for PhDs where the coverage is closer to 90%, but PhDs are uploaded by the PhD-administration at DTU. One of the reasons why the coverage of post-prints of journals articles is still low is maybe a result of an OA policy that has no consequences for the researchers.

**Key challenges**

OA will be one of the big challenges for Orbit in 2008. DTU expects to be part of a self-archiving project with 4 other Danish universities in 2008, the project aims to boost OA content in the participating universities IR with 10-15%. The CRIS/OAR model is used by all universities in Denmark all having the same problem – there isn’t much Open Access content in the repositories, despite the fact that they all are well embedded in the institutions, have reasonable high level of faculty engagement and very high coverage of high quality bibliographic metadata.

The project will try to facilitate ideas and solutions that will benefit the researcher in such a way that self-archiving become easier and more valuable for the researcher. Even though, evidence shows that the only way to really boost OA is by mandating it. OA mandates in Denmark do not seem to be implemented in a near future. OA might be on the library agenda but it is still not considered important at higher political levels in Denmark and it seems that it will take some time before the political agenda will change and the funding organisations will demand OA – thereby changing the researchers behaviour. DEFF (a kind of Danish JISC) is planning a Danish OA roadmap that will provide a plan for initiatives that are going to boost OA in Denmark.

Not many non-mandating OA/Self-archiving initiatives have been tried in Denmark, so in the mean time we might as well get started, as Jens Vigen form CERN has put it “just do it, don’t spend to much time thinking about it”. Hopefully Open Repositories 08 will provide us good inspiration.