Introduction
Almost three years ago, in June 2007, Blekinge Institute of Technology (BTH) was the first Swedish HE-institution to adopt an OA-mandate. This was not merely a recommendation to publish Open Access – it was a requirement. The policy is short and I quote:

"The Vice-Chancellor decides, that all scientific articles (journal articles, conference reports or other peer-reviewed documents) published by staff employed by BTH shall be deposited as copies in electronic format together with bibliographic data into the BTH research database. These documents shall be freely available in this database, unless access is prohibited by copyright agreements or for reasons of security. Researchers at BTH should make it their first priority to endeavour to publish their research articles in freely available scientific journals, if appropriate ones can be found. If not, they should choose publishers who allow self-archiving of post-print documents."

Since that forward-looking decision in 2007 much has happened in the OA-area, especially last year, when influential research funders introduced policies requiring researchers funded by them to make their resulting work freely available. There have been information activities about OA at most HE-institution, and recently Chalmers University of Technology decided on a strong OA-mandate. It feels good right now, as if the wind has changed – but how does it look in reality?

At BTH we have now had three years experience of an OA-mandate. Has it influenced researchers to make their documents more available? I suspect that one-sided categorical imperatives from above sometimes have difficulties in reaching out, especially if instructions and conditions for implementing the requirements are inadequate. Is it the adoption of an OA-policy enough to make researchers publish OA? If not – what more is needed and how can we in the near future support our researchers, who try to follow the mandates from their funders and university leaders at the same time as they are encouraged to publish in journals indexed by Thomson ISI?

Figure 1. Number of journal articles and conference reports and percentage of full-text in the BTH publication database.

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1 BTHs OA-policy  
http://www.bth.se/fou/forsinfo.nsf/textpages/bth-oa-policy

2 Chalmers Open Access Policy:  
http://www.chalmers.se/en/sections/about_chalmers/policies-rules/open-access-policy
Before and after
BTH has around 250 researchers and doctoral students and has had its self-made publication database running since the late 90’s. Since then, we at the library have tried to make researchers deposit bibliographic data about their documents and, if possible, full-texts.

To answer the question of how BTH’s OA-policy and the library’s activities around it actually have influenced the publishing of full-text articles, I took a deep dive into our publication database and selected peer-reviewed journal articles and conference reports published between 2005 and 2009. In this way I could compare production 2.5 years before the OA-mandate with production 2.5 years after. How many articles were published in OA-journals and how many were self-archived? Was there any noticeable difference Before and After? I have used the services SHERPA/RoMEO and DOAJ to check OA- and hybrid-journals

When analysing the Excel-sheets my expectation was confirmed, i.e. no dramatic change had happened to the number of available full-texts via OA-journals or self-archiving. A small increase was seen during the last two years, but the number of full-text publications during the last five years are on average around a third of the total number of publications.

The last two years the number of full-text conference reports has increased more than journal articles. The latter have actually decreased more than half during 2009, from 30% in 2008 to 13% in 2009. The reason for the increase in conference reports compared to journal articles may be that in these cases you more seldom have to deal with a publisher or a company guarding revenues and intellectual property rights. Thus it seems less risky to deposit ones articles in the institutional publication database. It is also a fact that many BTH-researchers send their articles to IEEE-conferences and they allow self-archiving.

As far as I know, no researchers at BTH have yet used and paid hybrid-journals for OA-publishing. Publishing in OA-journals has increased from two in 2005 to five in each of the last three years. It has changed from minimal to little. Publishing in OA-journals constitutes around 28% of the full-text publishing of journal articles and around 6% of the total journal publishing between 2005 and 2009 at BTH. This means, that the most important road to full-text publishing is parallel publishing, which thus constitutes 72% of the full-text publishing at BTH.

Destined publication support
It is obvious, that researchers at BTH need support and advice in order to fulfil our own OA-policy, not to mention the policies of research funders. If you as a researcher wants to live up to the intentions of the Association of Swedish Higher Education (SUHF), the Swedish Research Council, the EU 7th frame programme, the Swedish Royal Academy and other important stakeholders on the research arena in Sweden and Europe, we at BTH should primarily work with OA via our publication database, and make sure that all possible documents are deposited in full-text. The library works actively with this kind of support. It is absolutely the cheapest and most cost-efficient way to make articles OA, but BTH must also give economic support to researchers who want to publish in OA-journals or in so called hybrid journals. (Subscription journals offering OA for individual articles against a fee)

During the last three years, BTH researchers have published around 70 peer-reviewed journal articles per year in around 180 different journals, of which 13% offer hybrid OA and 10% are full OA. Somewhat more than 20% of these 70 articles are published in OA-journals or are parallel published in our database. As the majority of scientific publishers allow parallel publishing of so called post-prints, it is reasonable to suppose, that at least half of these 70 journal articles can become OA via parallel publishing in our database or via journals not charging publication fees. Then the rest is 35 articles. Publication fees usually vary between USD 1,500 and USD 3,000. Springer, the first publisher to offer hybrid OA via their Open Choice programme, is often used by BTH researchers. They charge EUR 2,000.

If we choose Springer we would have to pay around 700,000 SEK per year. Let us say that 10 of these 35 articles are written under an OA-mandate from a funder and the only possibility is to publish in a hybrid journal or an OA-journal charging publication fees. Then the rest is 25 articles. Publication fees usually vary between USD 1,500 and USD 3,000. Springer, the first publisher to offer hybrid OA via their Open Choice programme, is often used by BTH researchers. They charge EUR 2,000.

We will have to continuously evaluate the results of such a model. In the best of worlds researchers at BTH would be able to publish two thirds of their articles as OA!

As I understand, Lund is the only university in Sweden with a fund to support OA-publishing. The Head Office of Lund University Libraries has received 1.5 million SEK in central university funding. The fund has primarily been used for membership in Biomed Central, PLoS, Hindawi, Co-Action Publishing, and Hereditas. 1.5 million SEK represents around 3% of

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1 http://www.bth.se/fou/
2 http://www.sherpa.ac.uk/romeo/
3 http://www.doaj.org/
the total number of articles published by Lund University researchers during one year. For BTH this model would mean around 14% of published articles. Today only a small part of the research at BTH is financed by the Swedish Research Council, but if the Swedish Knowledge Foundation (KK-stiftelsen) and Vinnova decide to follow the steps of the Swedish Research Council, a large part of the BTH research publications will have to become OA, irrespective of the existence of a local OA-policy. There is every reason for BTH to observe the trend and, in accordance with its profile of applied research focusing on sustainability, make OA-publishing as easy as possible for its researchers. What can be more sustainable than that?

Conclusions
BTH’s OA-policy has neither meant a dramatic increase in published full-text articles in our publication database nor in OA-journals, in spite of the support for parallel publishing the library has offered since a year back.

In practice, the policy has functioned as a solid point for the lever, but the power has not yet been enough to shift the researchers. Maybe the trend that research funders in Sweden and abroad require open access can give the necessary extra impact to the movement. It is not enough just to adopt an OA-policy, especially if it goes against the publishing culture of the majority of researchers and often is seen as being at logger-heads with the encouraged publishing in ISI-journals.

The BTH management are aware of the problems with the present trend to base allocation of resources on ISI-publications, but as long as this is government policy we try to adapt. Thus we must stimulate ISI-publishing at the same time as we want to disseminate the new knowledge created by our researchers as freely as possible; we must follow the wishes of research funders and promote the advantages of free full-text publishing. Now we must find roads leading to both goals.

What we need to do next here at BTH is to anchor and supplement our policy document with a descriptive and constructive guide, telling individual researchers at BTH what they can do to fulfill different stipulations and wishes regarding OA. Instructions and support from the library for parallel publishing must, of course, be clear and easy to find.

Vice chancellor Ursula Hass has started a process to discuss and anchor such an augmented policy document in our schools. In this way she hopes to lay the foundations for a widely accepted policy. A policy that not only gives support in principle, but also makes way for administrative systems that in practice offer researchers the possibility to choose the OA road. An economic solution for OA publication fees must be included in such a policy decision.

Peter Linde  
Blekinge Institute of Technology, Karlskrona, Sweden

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