During the last years national electronic library initiatives have been discussed, planned and in some of the Nordic countries implementation is underway. Although the projects differ in scope, focus and funding it is obvious that the national initiatives are posing new opportunities and challenges for libraries.

This presentation will focus on the development of licensing electronic journals and databases in the Nordic countries during the last few years. Please note that I will not discuss other tracks of the different Nordic projects such as development of portals, subject gateways etc. The opinions expressed are personal and are based on experiences gathered through participation in establishing consortia primarily in Denmark. Though the presentation will concentrate on the developments in Denmark, I will briefly refer to the current situation in the other Nordic countries.

In the Nordic countries – Finland, Sweden, Norway, Iceland, and Denmark, – development, when it comes to licensing electronic content, has been slightly uneven.

In Finland the FINELIB programme has been very focused on national licensing of electronic resources. Benefiting from the Finnish tradition of centralised solutions in library matters the FINELIB programme, with rather few staff resources, has accomplished a number of licenses (15 or so) subsidised by a grant earmarked for this purpose. Negotiations were performed with the FINELIB secretariat in communication with the academic libraries, and it is my impression that the libraries in general are rather satisfied with the results so far.

In Sweden The Royal Library’s Department for National Co-ordination and Development, BIBSAM has signed a number of national licenses (15 or so). So far there has only been very little central funding to support these licenses financially. BIBSAM has a reference group for national licensing. A national agreement on the ISI Citation Databases has been in place for some years now. A number of Swedish research libraries are members of Nordic consortia on databases – I will refer to that later.

In Norway the National Office for Research Documentation, Academic and Special Libraries (Riksbibliotekstjenesten) has worked on preparing for national licenses as well.
Norway was one of the first with an agreement on the ISI Citation Databases, and as a matter of fact, BIBSYS – originally an institution formed by a number of university libraries, now a national service operating library services – among other things has run an ISI service for Sweden! On the basis of a very thorough study of vendors and their products performed by Riksbibliotekstjenesten by the end of 1998, a number of products were tested by Norwegian research libraries during 1999, and a number of specific offers are currently being considered by the libraries.

In Iceland initial discussions have taken place in order to prepare for a national initiative on electronic library projects. The Icelandic libraries have approached and have been approached by their Nordic colleagues with regard to cooperation and are as yet discussing the first specific actions.

In Denmark the academic libraries began in the late nineties to build consortia in order to benefit from the opportunities of cooperative purchasing. At the same time the initial planning for Denmark's Electronic Research Library Project (DEF), initialised by three ministries, took place.

The first consortium was established by a number of academic institutions in order to gain access to the Crossfire database. The agreement came in place as an affiliation to the CHEST-agreement with Crossfire in the U.K.

The first package deal with a journal publisher – Academic Press - was established by 3 Danish and one Swedish library in late 1997. During 1998, a larger group of libraries negotiated a consortium agreement with Springer. Before this agreement was finalised the process of establishing the DEF project had developed in such a way, that financial support for national licenses was available.

Therefore the above 3 agreements were changed into national licenses. Due to the different pricing models, different financial support models were implemented. DEF supported the Crossfire agreement by paying the basic fees, whereas the libraries pay the yearly fees. The Academic Press agreement was supported with different percentages of the value of the current subscriptions, depending on the institution type. For instance, institutions with no subscriptions were supported by 100%. The Springer agreement was simply a flat fee for Denmark as such. This fee was paid by DEF.

More consortia agreements were in preparation by different groups of libraries and obviously the need for more streamlined contacts between the libraries and DEF were needed in order to make the best of the limited funds available for the support of national licenses.

The Council of the 12 largest academic libraries in Denmark nominated a licensing group to discuss and advise DEF – staffed by the National Library Authority - on the allocation of the available funds.
During 1999, after some initial problems, the process of communication between the licensing group and DEF found a way of handling the business.

Several national licensing agreements, prepared by the licensing group and signed by DEF have been entered into. A package agreement with Kluwer was signed in early 1999. An agreement on a number of Bell & Howell products and as well PCI, JSTOR and Highwire. One of the more tricky ones was entered into in late 1999: After several attempts by different groups of libraries for more than 3 years to get a deal with ISI on the citation databases, an agreement was signed. National funding paid for back files and the libraries agreed on a model for distributing the running costs.

Currently a national license agreement with Elsevier is soon to be signed. This agreement is once again based on a consortium made by 6 Danish libraries in early 1999. Agreements on the agenda for the licensing group during this spring are, among others, Wiley, Blackwell, Catchword, Biosis and Derwent.

At the same time a number of Danish and Nordic consortia are in operation. A group of Danish libraries have a consortium on the INSPEC database, 13 or more Nordic institutions during 1998 entered into an agreement with IHS on the (IEL) IEEE/IEE Electronic Library and a Scandinavian consortium on The Engineering Information Village has been in place since 1997.

None of the these agreements are as yet supported by national funding in Denmark, whereas the Finnish participants in the IEL consortium are supported by national Finnish funds!

This very brief outline of the current state of affairs in Denmark as to licensing electronic products reveals the complexity of the issue. So far it is impossible to find two identical agreements, two agreements covering the same group of institutions, two identical subsidising models and not even all agreements with journal publishers are package deals.

As it seems the Danish approach has not been a planned centralised approach. Based on two concurrent developments – bottom up consortium development at institutional level and the development of a broad national project working along a number of tracks among which electronic licensing is only one – the two approaches, to a certain degree, have merged into a cooperation for at least some time to come. However it has not been an easy process to establish the cooperation between DEF and the libraries.

First of all, the libraries as a group do not have identical priorities. Different products of course apply to different libraries, and with limited funding there is plenty of room for discussion and disagreement.

Secondly, DEF has been in a learning process with regard to gaining knowledge of the products covered by the agreements, negotiating with publishers of whom they have never heard of, mediating the interest of the different types of libraries and balancing the
funding of different agreements. Of course one of DEF's primary concerns is the accountability vis-à-vis the funding ministries.

Furthermore, there are a lot of more practical issues to be dealt with. Due to initial institution based consortia building, a division of labour had emerged among the libraries as to administration of license agreements, calculation of the financial impact of different purchasing models, access control and communication with publishers and consortium members. For obvious reasons DEF did not have the competence to deal with these tasks – at least not from the very beginning. Therefore DEF to a large extent depends on practical support from libraries in relation to these tasks.

Although the emerged mode of cooperation between the national body and libraries as such has a number of inherent problems, it is my personal opinion that this model is more attractive than a more streamlined centralised model, where a national body negotiates a deal, presents it to the libraries, who then can take it or leave it.

The developments in the Nordic countries are somewhat uneven. One of the explanations may be found in the differences in traditions and “national cultures”. One of the differences can probably be explained along the lines of a centralised versus a decentralised approach. While it seems that on the one hand Finland, Sweden and Norway favour the centralised approach, it seems that on the other hand the Danish approach so far has been rather decentralised - some would even label it anarchistic.

But although the approach in Finland, Sweden and Norway can be described as more centralised, it can hide some important differences. In Finland there has been funding available to support licenses, this fact of course makes the take up from centralised negotiations more easy. So far central funding has not been available in Norway and Sweden.

It is important to notice that the national initiatives are, for the funding bodies, more or less explicitly seen as vehicles, not only for better services, easier and faster access to information for end users etc. but also as projects that should pay off – in other words: the funding currently available for national programmes is not to be considered a long term commitment to increased library funding. There is no sign what so ever that the governments in the long run will increase the funding of academic libraries. Thus the national electronic library projects are also vehicles for rationalisation and the aim is as well to motivate new forms of cooperation between the libraries.

As a matter of fact licensing of electronic content offers both opportunities – rationalisation and new forms of co-operative structures. The question is, are the libraries ready to cope with these opportunities??
Based on the experiences from consortia building and management of electronic journals at my institution, the Technical Knowledge Center & Library of Denmark – DTV – I will outline briefly how it has been possible to provide improved services, while keeping costs down and establishing new promising structures of library based co-operation.

Licensing electronic journals is not just an additional way of acquiring scientific journals. In order to obtain the benefits of the electronic editions of scientific journals, libraries have to consider a number of different issues. Among these issues are:

- How do e-journals fit into the current set up of the overall profile of the library services.
- Can the additional costs of electronic subscriptions be recovered by changing current services.
- Can the services be developed in such a way that end users can search and retrieve information with less library staff support.
- Can some of the inherent costs of handling print materials be saved.
- What is the future of library automation systems and OPACs.

In the past, libraries all over the world have been trying to streamline the processes associated with handling print material and providing the best possible services based on printed journals.

Advanced library automation systems have been developed in order to keep track of printed documents. Journal circulation services, photocopying and document delivery services have been installed in order to give users the best possible services, either by moving printed material or duplicating it in order to reach the users or by having the user go to the document repositories – that is libraries – to obtain the requested documents, often to experience that the documents are on loan or otherwise unavailable.

With the emergence of electronic journals a number of the problems associated with print material become more apparent and new ways of providing services become possible.

Despite the fact that publishers nowadays often offer the electronic edition at no additional cost when combined with a print subscription and despite the fact that consortia agreements on package deals often mean additional payments to the publisher, it is my point that it is possible to provide services based on electronic journals at the same costs, if not lower costs than the costs associated with handling printed journals. But this requires some rather radical decisions and changes in the management of serials and indeed in the management of library service in general.

One of the major things to be considered is actually: when an electronic edition is available why then continue receiving the print edition. Handling print journals is very labour intensive and thus costly not only in the initial registration processes – unpacking, bar coding, shelving, claiming etc. – and additional costs emerge during the life of a particular journal issue: checking in and out, photocopying, shelving, re-shelving, binding
etc. In general, a printed issue is only available for one user at a time, whereas electronic issues are available for all licensed users. In short, there are several good reasons to consider the option of cancelling print editions wherever possible. I am perfectly aware of all the concerns many librarians have in this respect. "My users prefer browsing in the printed edition, they cannot read the electronic edition on their way to work" etc. "What about the archiving issue?" Of course there are a lot of issues to be solved. My point is that a close look at the problems and costs of handling print will reveal quite a number of problems as well. A further point is: given the so called journals crisis, can libraries afford to handle both print and electronic editions of journals – obviously libraries have enough difficulties acquiring adequate funding, so we had better consider every possible alternative.

Being one of the first libraries to cancel hundreds of print editions, our experience at DTV is that when such a radical step is bundled with package deals and therefore access to significantly more journal titles as well as an easy to use integrated service, we have had very few complaints from users and much more frequent positive feedback on the decisions taken.

The decision to cancel hundreds of print editions was one element in a reengineering plan designed at DTV in 1997 and implemented in 1998. Other elements were opting for electronic licensing, consortia building, package deals and – very important as well – developing an integrated database and electronic journal service in order to ease access to the electronic journals and thus minimise the number of access points to the electronic journals.

Based on the tradition at DTV of developing advanced IT-services, a prototype of what is now known as the DADS-system – Digital Article Database Service – was launched in early 1998, based initially on tables of contents from Swets, SwetScan, the INSPEC database and our some 300 Elsevier journals. During 1998 and 1999 a number of other publishers were added – among these, Academic Press, Kluwer, MCB, Siam, Springer, Royal Society of Chemistry as well as the IEL (IEEE/IEE Electronic Library) and the Compendex database. Due to a consortium agreement between 5 other Danish libraries, another 350 Elsevier journals have been added. As of today this service includes instant access to some 1.6 million full text documents. More data sets are soon to be included.

It is rather obvious that such a service will attract a lot of use and this has absolutely been the case. Today this service accounts for about 40% of the total requests for documents from the library. From the users' point of view, this has meant faster and easier around the clock access from their desktops to the full text of much more information than before. Thus a significant proportion of document requests are processed by the users themselves, without the involvement of library staff. For the library it has meant a reduced demand for library staff providing technical and customer services.

However, development of the system and as well the new tasks of negotiating licenses, consortia administration, access control and related issues, has meant more demand for
staff in these areas. The overall balance though is, that it has been possible to significantly enhance the content offered to the users while keeping costs down.

A special feature of the DADS-system as implemented at DTV is the linking to OPAC. This allows users to order documents not available in electronic format – for instance found as an INSPEC record – from the library holdings of printed journals and even place an order for documents from other sources – as an ILL-request.

Due to the cancellation of print editions, journal titles replaced by the electronic editions are not processed in the library automation system, which means that the OPAC, to a certain degree, is developing into a database of printed materials only – that is books and older volumes of journals - and that the handling and management of electronic resources takes place outside the library automation system – that is, to a large extent, in the DADS-system.

An important feature is the development of co-operation between a number of libraries on electronic licensing and resource sharing in relation to the DADS-system, which at the moment is in operation at 8 universities. A consortium of these institutions – the DADS-partner group - was formed during autumn 1999 and is in the process of defining the scope of future co-operation, among which the most important questions are the distribution of costs associated with the operation and future development of the system.

As indicated, it is possible to change the cost structure of library services by taking advantage of the new electronic products and the associated pricing strategies offered by publishers. At this point I will strike, that if libraries want to benefit by the new opportunities, some rather radical decisions will have to be taken. We cannot just consider electronic journals and databases as yet another service. We have to change the way we operate our libraries. Given the current funding conditions, my advice is not to try do everything for everyone – this will eventually end up with the library providing mediocre services across the board.

It is important to notice that the above developments in library services and library co-operation are not primarily motivated by the national project but much more based on the developments in technology, information products and pricing models.

Library consortia and national licensing projects:

The recent development of library consortia can be considered a major step towards what I will label real library co-operation. So far the dominant features of library co-operation in general have been the development of regional or national union catalogues and interlibrary loan and document delivery services. These forms of co-operation still leave the individual libraries as autonomous entities. The consortia co-operation is in reality a step towards inter-institutional collection development, where libraries pool shares of their funds for collection development into mutual commitments.
Although consortia are different in their organisational set up, management etc. these arrangements are based on substantial commitment of co-operation and faith and thus somewhat fragile. In the context of national licensing based on subsidies, this raises a number of questions and concerns.

One of the important things in this respect, is the fact that national projects supporting licensing in general will be associated with rules, principles, regulations etc., which to a certain degree and in some cases will put pressure on the fragile foundation of consortia. For libraries it is very essential to maintain control of their funding and to have the largest possible control over spending. Therefore it is very important, that national licence agreements are negotiated in very close communication with the libraries, in order not to infringe on library strategies. We must not forget that most of the university libraries for instance are or should I say ought to be very much integrated in the teaching, learning and research processes of their universities and indeed that library priorities and strategies must be very close tied to the strategies and missions of their universities. In this context, national projects must be very sensitive towards the concerns expressed by the libraries. After all, the substantial part of the value inherent to electronic licensing agreements has to be paid by the libraries.

Another general feature of national projects is the demand for accountability vis-à-vis the funding body – for instance ministries, government institutions etc. There is a tendency that this will generate full grown or very well developed organisational structures with co-ordinating committees, steering groups, consultancy reports, assessment, evaluation – in short bureaucracy - with a lot of inherent costs and maybe most important very long time delays in decision making. While this to a certain extent is based on the way government institutions work in general, it is also a consequence of the fact that this field of work is new for governmental library agencies. While libraries for years have been in contact with publishers and database producers and have a good knowledge of products and services offered, this is not the case with the staff of the governmental institutions regulating libraries.

There are therefore a number of very good reasons that the governmental library offices executing licensing projects should be very open to communication and influence from the libraries and indeed more important that libraries strengthen their co-operation in order to demonstrate that we in fact are able to develop new services and co-operate more extensively in order to make the best of the opportunities provided by developments in technology. If libraries are unable to cope with these challenges there is every possible risk that more centralised approaches will prevail and thus jeopardise the autonomy of libraries and cause problems between libraries and the universities.

An interesting question is of course: what will happen when there is no more national funding for electronic licensing or indeed other national electronic library projects. The discussion as to what the future will bring has started.

One of the most probable scenarios in the future will be that the ministries, government offices and library authorities in order to continue the projects, will top slice library
funding. However logic this might be from a central or governmental point of view, this will, to say the least, not be the libraries’ and even the universities’ cup of tea. In order to decrease the probability of such solutions, libraries really need to shape up and build a co-operative movement demonstrating new services, applying new technologies and keeping costs down.

The question is whether we are able to cope with this challenge, whether we as individual institutions and together are able to change the way we operate the libraries, whether we are able to take advantage of the technological opportunities, whether we are able to mediate different priorities and commit ourselves. If not we run the risk that others will offer quick solutions for us.

Lars Bjoernshauge
Links to Nordic projects:

Finland - FINELIB: hul.helsinki.fi/finlib/english/index.html

Sweden - BIBSAM: www.kb.se/ENG/kbstart.htm

Norway - RBT/Riksbibliotektjenesten: www.rbt.no/fellesavtaler/fulltekst/rapport/engelsk/

Denmark - Denmark's Electronic Research Library – DEF: www.deflink.dk/english/

Articles on the re-engineering process at DTV:


Links to DTV:

DTV Homepage: http://www.dtv.dk/index_e.htm

The DADS system: www.dtv.dk/help/dads/index_e.htm

DADS-test site: www.dtv.dk/service/dadstest/tilmeld_e.htm

My homepage: www.dtv.dk/privat/lbj/index.htm - E-mail: lbj@dtvdk