ALM – Archives, libraries and museums working together to give people access to our cultural heritage

Ruth Hedegaard
Librarian at Vendsyssel historical Museum, Historical Archives
Hjoerring, Denmark
E-mail: rhe@stofanet.dk

Secretary of Genealogy and Local History Section of IFLA

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Abstract

In Denmark as in other countries there is a growing interest of cooperation among archives, libraries and museums. It is important to make a cross strategy for giving people access to our cultural heritage.

In Denmark this interest has resulted in a project combining the digital records from the three different institutions in one database NOKS.
NOKS is a searchable database that gives the possibility of searching simultaneously in the collections of three different types of heritage institutions, Archives, Libraries and Museums. The first edition of the database includes the digital catalogue records of 9 institutions, in all 115,000 records, 8,000 of them with photos attached. Many different items such as printed material, books, leaflets, articles, newspapers and clippings, archives, sound records, films, videos, museum artefacts etc. are included in the database.
The records from the different institutions have been collected from the special databases of the three types of institutions with their different ways of cataloguing and imported into one common database.

A new update is now in progress with several improvements and alterations, one of the most important being the participation of another county. This will show the future possibilities of having a national database with access to our common cultural heritage. Another important thing is the decision to use Dublin Core as the basic structure.
The creation of NOKS has shown the importance of developing standards in the field of cultural history, and several attempts have subsequently been made in that direction.

www.noks.dk is available on the Internet, free of charge.

International ALM experiences

ALM institutions, ALM cooperation etc. are popular themes in the cultural sector just now. ALM, standing for Archives, libraries and museums, is an acronym that is still more used worldwide, and thanks to that, because this is really one of the more promising initiatives in the area of cultural
Many projects and activities involving the three sectors have occurred in the last couple of years, and the following are just a few examples. In Norway, “ABM Utvikling” (ALM-Development in English) has existed since January 2003, being a union of the archives, libraries and museums authorities. In Finland, “Privatarkivregistret” is a database that includes information about archive material in archives, libraries, museums and similar institutions all over the country. In England, the “National Register of Archives” (NRA) is a database with information about the location of manuscripts relating to British history. In California, the “Online Archive of California” (OAC) provides access to material in archives, libraries, museums and other institutions in California.

Danish experiences

These few examples are just a taster for the subject of this paper. In Denmark I have been involved in a project that aims to give people access to our cultural heritage. In Denmark, part of our local heritage is found in archives, libraries and museums, and the location of the material is often decided by local differences. If, for example, you want to know when the local brewery started its production you may find the answer in the museum where they keep a jubilee plaque, in the archives where they have received the protocols and the accounts, or in the library where they have a book with the history of the brewery. Moreover, all three institutions may hold much more information. In the museum they could have some of the old brewery utensils and a film about the production. In the archives they could have lots of photos and another film, and in the libraries they have other books and articles in magazines and newspapers.

For the institutions this is not a problem, but for the people wanting to find and use the material it is not obvious where to go to find information. Actually it is often necessary to visit all three institutions if they are interested in all the information about a subject. They will have to deal with different opening hours, different ways of cataloguing and different ways of presenting material.

Danpa\(^v\)

In Denmark there have been different projects trying to solve some of the problems mentioned above, and DANPA, Denmark’s national private archives database, is one of them. The database consists of search capabilities for descriptive records representing approximately 120,000 private archives coming from 190 archive institutions - among them the State Archives, the Emigration Archives, the Royal Library, the Library and Archives of the Labour Movement and a great part of the local historical archives etc. The latter with their different historical source material were indeed the greatest contributors to the database. The database is available via the Internet free of charge.

NOKS\(^vi\)

NOKS, Nordjyllands kulturhistoriske søgebase, the searchable cultural and historical database of Northern Jutland is another attempt to overcome some of these difficulties.
The aim of NOKS is to make collections in archives, libraries and museums accessible to the Internet users, free of charge. Its main purpose is to give the users possibilities of searching in the digital records from the different institutions at the same time and to have the results shown in one search result.

Another very important aim is to reuse the digitally catalogued records made during the last 15 to 20 years in the institutions, without having to make any manual changes to these. Moreover, it is important to collect all material in the field of local history no matter what sort, museum items, photos, films, sound records, archives, books, articles, newspaper clippings, etc. etc.

NOKS is a benefit to the users of the Internet of course, but the project has also shown the importance of having standards for cataloguing and descriptions in the cultural institutions.

The idea of making the database came from the staff in the three institutions, which already had experience of working together. They knew that there were big differences in their ways of cataloguing, their ways of presenting material and their ways of having contact with their visitors. Archives and libraries are used to having reading rooms and to finding material upon demand, whereas museums are used to have visitors coming to see the exhibitions and the staff do not give individual information and guidance to any great extent.

Instead of looking at the problems from the institutions’ point of view, it was decided to make the starting point the common user, who does not know how or where the best place is to find the information they want.

The Organisation of NOKS and the records

The NOKS project started in 2001 and it took a year, before the database was on the Internet. The original participants were three local historical archives, three cultural historical museums, two art museums and the Central Library of the County of Northern Jutland, all the institutions were from the County of Northern Jutland.

To have a successful result it is important to have equality of representation from the different institutions, and the project steering committee was appointed according to these principles.

The budget for the project was 1.14 million Danish Kroner or € 143,000, coming from the state, the municipalities and the participating institutions.

The database consists of 115,000 records, 8,000 of them with digital photos from the archives and the co-operating museums. 75,000 records came from the archives, 20,000 from the library and equally 20,000 from the museums. Within the first two years more than 100,000 searches were made, and during the first year 60,000.

The NOKS database and the search system

The database was designed in cooperation with a private IT company during 2001-2002. The records for the database came as mentioned before from the three different sets of institutions with their different ways of cataloguing and their different systems, the archives’ system [ARKIBAS], the library system [DDE using MARC] and the museums’ system [DMI].
Furthermore, some of the information in the archives’ and the museums’ system is for internal use only and not intended to be publicly accessible. The challenge was to overcome these difficulties, and in NOKS the data has been taken from each institution and physically moved to one server. Before this data can be used it has to be converted to the same format, and it must be fastened together with a joint connection to the records from the individual institutions.

The conversion of the subject retrieval system into the same format proved to be rather difficult, and another solution was chosen.

All the subject terms from all the records were put together in one list, which became extremely long with 11,500 entries. The list was then reduced to 4,500 subject terms, where the 7,000 terms omitted were related to the main 4,500 subject headings.

Connections were created, so that one subject term points to different records from archives, libraries and museums at the same time.

This is illustrated in the figure below:

The illustration has been used before, but it is a crucial point in the construction of the database, and therefore it is presented again.

From the subject term list one term is chosen, for example “care of senior citizens”. This points to the subject of the library, but also to the other subject terms “senior citizens” from the archives and “elderly people” from the museums. The records from all the institutions will be found, no matter what term is used originally. It is therefore possible to follow a structured search.

Another important thing to mention in this connection is the difference between a free text search and a structured subject term search, and how important it is not to rely on free text searching. The reduction of the number of subject headings in the subject list caused losses in precision and
consistency, but many examples prove the advanced search to be very efficient after all. In a free text search the names of organisations, enterprises etc. may not be spelled in the same way, as some of the institutions may have used abbreviations, others may have used different names etc. If you make a free text search in NOKS on the German occupation of Denmark during World War 2, the result is 353 records. The same search using the subject terms relating to “occupation” results in 1590 records. A rather remarkable example showing how you cannot rely on free text searching, if you want a high quality search, attempting to find all the relevant material.

The search system has other possibilities. You can narrow the search to a specific area or specific categories of material. You may want pictures from Hjoerring, archives from everywhere, or books and pictures from a specific parish etc.

The users of NOKS

The use of NOKS was a success from the start, witnessed by more than 100,000 searches within the first two years.

The users of NOKS are very different. Students at the universities use it to search material for their papers, teachers to get inspiration for their work, pupils to get information for their schoolwork, genealogists to know more about families and localities, and the Association of Genealogists has played an important role in making NOKS known to their users.

Reactions from all over Denmark and from Danes abroad signify that NOKS is known throughout Denmark and internationally as well.

For the staff it has meant more work, as we get many enquiries from people who have found material in NOKS. Consequently many visit for example Vendsyssel historical Museum and Archives and are often happily surprised, when they discover more material that is not yet digitised. It means more work, but it also means promoting the institution as more people get to know its collections. At the same time it is a benefit for the staff to get to know about the holdings of the other institutions.

The present situation of NOKS and NOKS 2

Since NOKS was launched in 2003 great efforts have been made to produce an update. A search database like NOKS is only justified if it is updated regularly. The money donated for NOKS was not a permanent grant but only given for this project. The institutions participating in NOKS have taken the initiative to establish an association with the purpose of raising money for an update, and more archives, libraries and museums have joined the association.

A similar organisation has been set up in the county of Vejle that aims to have a database similar to NOKS. A co-operation between NOKS and Vejle County has been established and there are plans to establish an updated database with data from Vejle as well.

Recently the NOKS association has succeeded in raising money. The Library Authorities and the Cultural Heritage Agency have each granted 165,000 Danish Kroner or € 22,165 for an update and further development of the system. Vejle county will join in a joint venture project, bringing 150,000 Danish Kroner or € 20,150. The agreement is to have a common project developing a new database with two regional interfaces NOKS and VAKS – and a common interface.
Vejle will bring in 10 institutions, and the 9 members from NOKS 1 will increase with the members of the NOKS association to 22 institutions in all – maybe more. Furthermore the number of items in the database will rise from 115,000 to about 250,000 with 30,000 digitised photographs, tapes and films.

In the future it will be possible for other counties to participate as well, and NOKS is planned to develop into a national database with the potential, not only of searching material from all over Denmark, but also with the possibility of narrowing the search to a specific area, since there is the advantage of being able to do several different searches. This update will show the appropriateness of having more participants.

Several improvements and alterations have been made in the construction of NOKS 2. One of the important changes is the addition of another County (as mentioned above) together with the increase in the number of participants in the NOKS association. Another very important change is the decision to convert the records to Dublin Core, a decision that was in total co-ordination with the ALM committee founded by The Ministry of Cultural Affairs and the national ALM authorities. The main task for the ALM committee was to outline the basic principles and ways of exchanging data from different systems, using the newest platforms and protocols.

The first report of the ALM committee focused on standards and tools to improve the creation of ALM databases. The committee members looked upon Open Archives initiatives and decided to start the process towards a national standard by mapping the elements of the different systems of archives, libraries and museums to the basic 15 elements of Dublin Core. The first national Dublin Core mapping schemes are currently being prepared by a specialist group.

Another significant change is the subject search. Instead of using alphabetical subject terms, it was decided to construct a simple subject hierarchy. The inspiration for this came from [www.bibliotek.dk](http://www.bibliotek.dk) - the database that gives the possibility of searching and reserving books in the main part of the Danish libraries. This means that the users of NOKS will see the same sort of subject hierarchy as in the library database which is very familiar to many people.

At last I should mention that the update of NOKS can also give an indication as to the speed of the digitising of the collections in the institutions already involved in NOKS 1.

**Recommendations and future plans**

The example of the search on the Occupation in Denmark shows how important it is not to rely on free text searching. It is necessary to have a structured subject search if you want high quality searching. It also shows that it is possible to search in all the different institutions at once, which is the really important point. It is possible to make material in archives, libraries and museums available to the users of the Internet.

NOKS shows that it is possible to reuse the existing digital descriptions that are already at hand without making any manual alterations to them.

NOKS has equally shown the importance of standards. There have been limitations and lack of consistency in the database due to the joining of three different systems and cultures together in one database.
ALM search databases have a future, and the committee on standards appointed by the Cultural Ministry shows that this principle has the attention of the authorities. NOKS has very clearly shown how important it is to have standards in order to facilitate quality searches and descriptions. It is to be hoped that in 5-10 years the national authorities will have decided on national/international standards followed by all ALM institutions. The way that NOKS has been created, drawing records physically from the institutions, is just a step on the road and not the complete solution. In the future ALM databases will be created virtually and searched online. You will see more solutions and more possibilities for searching in many databases at a time, and there will be more prospects for putting new records on the Internet online etc.

Experiences from NOKS/VAKS will contribute to the refinement of data and practices in the ALM institutions. In the future we will see new sorts of regional and national ALM databases, and prospects of searching in several ALM bases simultaneously.

**Further reading**


**Notes**

i [www.abm-utvikling.no/](www.abm-utvikling.no/)


iii [www.hmc.gov.uk/nra/nrafaq.htm](www.hmc.gov.uk/nra/nrafaq.htm)

iv [www.oac.cdlib.org/about/](www.oac.cdlib.org/about/)

v [www.danpa.dk](www.danpa.dk)

vi [www.noks.dk](www.noks.dk)