

The Collaborative Library Community - a Danish reality

by Mogens Brabrand Jensen, managing director of the Danish Library Centre Ltd.

1. Introduction

One of the ideas in which we take great pride when presenting the Danish library set up, is the notion of the collaborative library community: the idea that the user - no matter which library he or she enters - can count upon the full and immediate support from the totality of library resources in the country.

Two fundamental pre-requisites have to be fulfilled if you want the notion of the collaborative library community to become a reality:

- a) You have to offer a number of shared resources to the libraries: a nation wide union catalogue, a number of common functions, and a network - all based on relevant standards. In Denmark, those shared resources are offered through the DanBib complex.
- b) Furthermore, you need an organizational structure to manage the shared resources. An organizational structure that can facilitate the influence of the libraries on the design and running of the common resources in a way, that is satisfactory to the library community. The Danish Library Centre constitutes such an organizational structure.

2. DanBib

2.1 What is DanBib?

DanBib is a common bibliographic superstructure system for all Danish libraries. The DanBib system comprises:

- a bibliographic database accessible to the general public, the DanBib base, which contains the stocks and localizations of the libraries
- a network accessible to the general public, the BibNet, which makes the library community form a whole
- common functions which improve the inter library co-operation, promote reuse of bibliographical data and facilitate the connection to other databases

The common superstructure system is based on relevant international and national standards relating to, among other things, character sets, data exchange formats, retrieval languages, cataloguing rules and data models.

Under the DanBib brand a number of other tasks within the library area and the areas of information and documentation is carried out, e.g. development contracts, consultative services, advisory services within the field of data, training activities and the publishing of foreign databases.

Thus DanBib is not a traditional computer system - it is a system offering a wide range of services, a "Library Network Service Point".

2.2 The DanBib system

The common database, the DanBib base, contains all bibliographic and administrative data of common interest to the libraries. It implements the Danish National Bibliography and Union Catalogue with 10 million bibliographic records maintained through daily updating carried out by the Danish Library Centre and the libraries jointly. It is structured in a way which makes it possible to delimit logically related sub-databases. The database is built up according to the fundamental principle of 1 title/1 item, so that there are as few double items as possible. Each item consists of a common and a local part.

In the main, the common functions have to do with: searching and retrieval, cataloguing, reuse and copying of data, import and export of data, reporting, holdings of material at the libraries and the arranging of inter library loans.

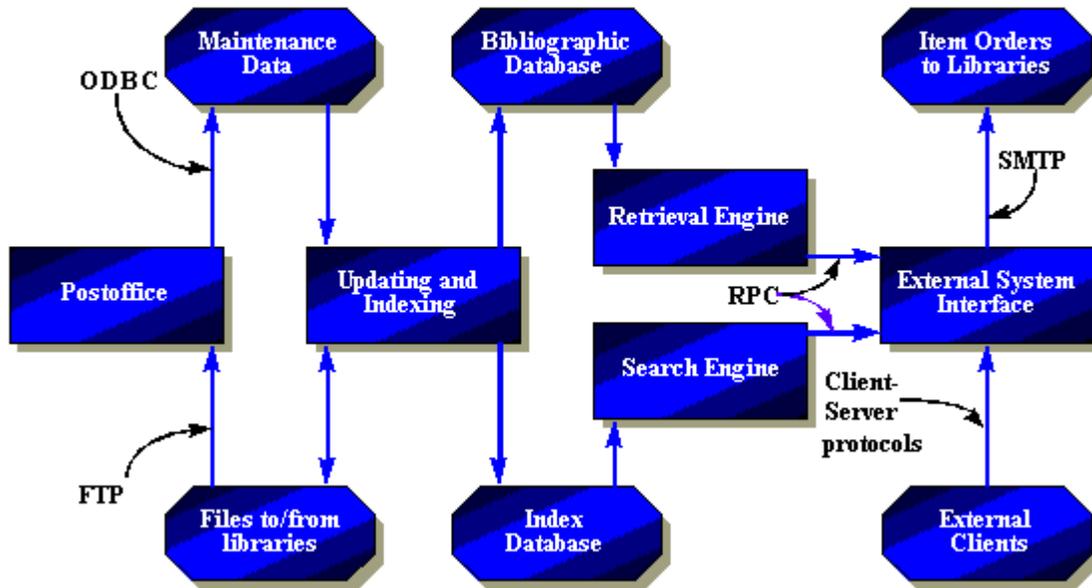
DanBib complies with all relevant standards including the current version of the Z39.50 specifications, and is continuously being updated to support new technologies such as the World-Wide-Web and distributed object applications.

The architecture of the system is partitioned into a number of independent modules, which communicates via standard UNIX Socket mechanisms. Individual modules may be configured to execute on separate machines in order to optimise the system configuration and satisfy given performance requirements.

The system includes the following main modules:

- Bibliographic Database. Storage and retrieval of bibliographic records is handled by a standard relational database system.
- Index Database. Inverted index files are maintained within a proprietary file structure.
- Search Engine. Searching is handled by efficient search algorithms, which utilize the Index Database to identify relevant bibliographic records. The search engine can effectively handle search-requests with millions of hits without recourse to special stop-word lists etc.
- Maintenance System. General housekeeping, updating and indexing is performed by independent utilities. Status- and control information is maintained in a relational database.
- External Interfaces. Access to the central search and retrieval modules is handled via general interface modules. The system supports a variety of clients via standard protocols including Telnet, HTTP, Z39.50 and ODBC-SQL.
- Post Office. Exchange large scale batch transactions and delivery of bibliographic data is controlled via a central Post Office module. The Post Office receive and dispatch batch files and track their progress through the system in a relational database.

- The architecture and logical relationships between the main modules are illustrated by the following figure:



2.3 BibNet

BibNet is a library network with full Internet functions. It creates the basis for the libraries' submission and reception of electronic request as part of the lending co-operation. This is done through the mailbox which is a request function attached to the DanBib system. The mailbox enables the libraries to send electronic requests to each other while they are searching in the DanBib base. The mailbox function also makes it possible to send online requests of titles without localizations.

BibNet also provides the libraries with a possibility of offering access to their own catalogues on the BibNet.

The small public libraries, which are not directly connected to BibNet, will have a possibility of being connected to the system of the county libraries. Through this they get access to the network services available on BibNet.

Besides access to the DanBib base and the library systems, BibNet comprises other services, such as direct access or connection to foreign databases which act as a supplement to the DanBib base. Among these databases should be mentioned First-Search, BookData and UnCover. The ISI databases are expected to be accessible via the BibNet later this spring.

3. The Danish Library Centre

If the shared resources which DanBib constitutes shall be considered truly shared or common, it is mandatory that the resources are developed and run within an organizational framework which is responsive to the needs and wishes of the libraries.

To

achieve this has, of course, something to do with the level of the professional competence of the organization in question as well as with organizational values and culture - issues which will not be discussed in any detail in the following.

Also of great importance is the organizational relations between the library community and the host for the shared resources. Does the library community feel that it can control or influence the host organization? Do some members of the community gain advantages which are not within the reach of other members? Does the organizational set up add fuel to the well-known rivalry among members of the library community - or can you find a neutral position in this respect?

The Danish model answering these questions has been the creation of the Danish Library Centre Ltd.

3.1 Scope of activities

The following activities constitute the main tasks of the Centre:

- a) The Centre produces the majority of the Danish national bibliography under a contract entered with the national Government.
- b) The Centre carries out - on a centralized basis - most of the library cataloguing for the municipal libraries, i.e. public and school libraries.
- c) It is hosting the DanBib activities - of which the national bibliography and the library cataloguing can be considered part.
- d) It publishes the bibliographic records in a number of ways: online publishing of the DanBib base, data deliverances to the local library systems, producing cd-rom's containing one or several of the logic databases within the DanBib complex; to a small extent some printed bibliographies are still produced, also.
- e) It produces selection materials on which the libraries base their selection of books and other media.
- f) Lists of books, leaflets on authors, posters and other material which can assist the libraries in providing good service to their users are also a part of the product profile of the Centre.
- g) A comprehensive training programme is offered to the libraries, concentrating on the use of the database products offered by the Centre.
- h) Finally, all lending materials which are not paperbound, are distributed by DBC media - a company that is run together with the Danish Library Centre: talking books, vidoes, music and multimedia.

The annual turnover of the two companies in 1996 was approx. 120 million Dkr. The number of employees is 150. Both companies are certified according to the ISO 9001 requirements.

3.2 Organizational Set-up

The Centre is set up as a private limited company with four shareholders:

- * 46% of the shares are held by the National Association of Local Authorities - a powerful interest organization counting all Danish local governments outside the City of Copenhagen as its members
- * 11% are held by the City of Copenhagen
- * 29% are held by the National Government, represented by the Ministry of Cultural Affairs
- * Finally, Gyldendal - a private publishing house - owns the remaining 14% of the shares.

In a Danish context, the ownership of the Centre is remarkable in two ways. First of all, it should be noted that national and local government have come together in the same company. There is a strong tradition in Denmark for local government to form nation wide companies to produce services demanded by all local authorities: IT-services, financial and insurance services, training, auditing, disposal of chemical waste etc. Even though similar needs exist within national government the two levels of government normally do not work together within a joint company structure to produce a common solution. Not until 1994, where the national Government became a shareholder in the Danish Library Centre.

Also the presence of a private partner - Gyldendal - in a government-owned enterprise - is very seldomly seen in Denmark.

The shareholders appoint all together 7 members of the board of the Centre:

- 3 members - among these the chairman of the board - are appointed by the National Association of Local Authorities
- 2 members - among these the vice-chairman of the board - are appointed by the Secretary of Cultural Affairs
- 1 member is appointed by the City of Copenhagen
- 1 member is appointed by Gyldendal

The chairman of the board is the mayor of the City of Roskilde, Mr. Henrik Christiansen, who is also a member of the board of the National Association of Local Authorities. The vice-chairman is the national librarian, Mr. Morten Laursen Vig.

According to Danish legislation, the employees of a limited company are entitled to appoint a number of members of the board not exceeding 50% (to be round up) of the members appointed by the shareholders. So, a further four members of the board are appointed by the employees of the Centre.

The presence of the local as well as national government in the board reflects the fact that the services of the Centre are aiming at libraries organized at both levels of government. Accordingly, both levels want to influence the decisions of the Centre. A look at the composition of the board may give the impression that local government can overrule national government at any time. It has, however, been laid down in a

shareholders' agreement that any decision concerning DanBib must be supported by local as well as national government representatives to be valid. To put it another way: both levels of government have the right to veto on DanBib issues. - So far, this right has not been exercised - and, hopefully, should not be in the time to come. If, however, a stalemate should occur in the board on a DanBib issue, the shareholder's agreement prescribes that the issue should be settled through political discussions among the National Association of Local Authorities, the City of Copenhagen and the Secretary of Cultural Affairs.

3.3 User influence

The board does not, of course, represent the only means of user influence upon the Centre. A number of other ways are open.

First of all the market reaction should be mentioned. The libraries buy the services of the Centre, and the Centre shall only survive, if it is able to produce services to the liking of the libraries. This is, indeed, a strong motivating force for the Centre to be well-informed about the wishes of the libraries - and to comply with these wishes.

Furthermore, a series of development discussions is conducted each year with the management of 40-50 libraries - to ensure that the development plans of the Centre match the needs of the libraries.

Finally, a user organization has been created to facilitate the dialogue between the Centre and the libraries. It consists of four advisory committees on

- bibliographic data and bibliographic development
- IT systems and network
- general library services
- library services to students

The meetings of the committees and the council are linked closely with the strategic planning of the Centre, and the focus in the user groups is clearly on the development plans.

4. A Source of Inspiration

We believe, that the Danish model for making the library community truly co-operative, has proven to be successful in Denmark. We do not claim that everyone else should copy this model - we would not even recommend it.

Each country has its own individual context - brewed together from history, tradition, individuals, politics, and a number of other ingredients. Any national solution must, of course, take this specific context into consideration.

The Danish experience can, however, serve as a source of inspiration.