



Koninklijke Bibliotheek

The Road to E-Deposit at the Koninklijke Bibliotheek

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The Koninklijke Bibliotheek (KB), founded in 1798, is the national library of the Netherlands (www.kb.nl) and has a long and distinguished leadership position internationally in preservation activity. The deposit collection maintained by the KB is based on voluntary agreements with publishers and contains about 70 kilometres of books and journals, but also a growing amount of electronic publications that are kept in an electronic deposit or the 'E-Deposit'.

From the start the KB has played an active role in the European Commission Program Telematics for Libraries and has initiated several strategic projects. Under the technical leadership of Johan Steenbakkers, director of Information Technology, the KB has an advanced position in the development of a depository of electronic publications.

Since the start in 1995 the Koninklijke Bibliotheek is a member of CoBRA, an initiative group of national libraries (including England, France and Germany) for innovative projects. Digital preservation has been a priority issue from the start. The CoBRA group has recently been adopted as standing committee by the Conference of European National Librarians (CENL, chaired by the director general of the KB).

From 1996 onwards the KB has been a development site for solutions for handling electronic publications. Important reasons for these international ICT organizations, AT&T / Bell Lab and IBM, to select the Koninklijke Bibliotheek for a strategic co-operation were the ongoing research activities and the co-operation of the library with important scientific publishers.

Pioneering (1995-...)

In 1994 the KB decided to include electronic publications into its deposit collection. To realise this, specific infrastructure, organisation and skills had to be developed, not only for handling electronic publications but also for guaranteeing long term access. From 1995 onwards the KB experimented with electronic publications in co-operation with publishers. A preliminary agreement was signed in 1996 with Elsevier Science to deposit 270 electronic journals with a Dutch imprint. This was later expanded to 351 titles. This

initiative was followed by Kluwer Academic Publishers and SDU Uitgevers. To handle the electronic publications the KB, together with AT&T (Bell Laboratories), developed a small content management system. This system was replaced in 1998 by the pilot deposit system.

Pilot deposit system (1998)

In 1998 the KB implemented a pilot deposit system based on IBM Digital Library and Tivoli Storage Management software. This pilot system caters to born-digital publications, amongst which of the deposit collection, and scanned images produced by the library's digitisation programme. The pilot system has been maintained and expanded until today (2 TB of storage) but will be replaced at the end of 2002 by the new, large scale E-Deposit developed in co-operation with IBM.

Arrangement with publishers (1999)

In 1999 the Dutch Publisher's Association signed an arrangement to deposit all electronic publications at the KB. The arrangement covers offline and online publications and prescribes restricted access conditions. Only registered library visitors may view the publications onsite. The intention is to develop in the near future new business models for co-operation between national libraries and publishers in the field of digital information.

NEDLIB project (1998-2000)

To initiate work on long-term preservation, a group of 8 European national libraries, in co-operation with 3 publishers (Elsevier Science, Kluwer Academic Publishers and Springer), started in 1998 the project Networked European Deposit Library or NEDLIB (www.kb.nl/nedlib). The project was initiated by CoBRA and co-funded by the EC. The KB was leading the project. The aim of NEDLIB was to define the basic technological conditions for a networked European deposit library. The objectives of NEDLIB concur with the mission of national deposit libraries to ensure that electronic publications of the present can be used now and in the future. The NEDLIB project was successfully concluded at the end of 2000.

DNEP project (1999-2002)

In 2000 the KB contracted the development of a new deposit system to IBM-Netherlands - Global Services - as a result of a European tender procedure. The project 'Depot for Netherlands Electronic Publications' (DNEP) started earlier in 1999 with a survey of the ICT market. To prepare for the selection procedure, the library specified its requirements, which were based on the NEDLIB results, applying the Open Archival Information System Reference Model (OAIS-RM), ISO standard for digital archiving. The deposit system can meet large scale and high quality storage requirements and supports digital preservation functionality. The system design is future proof and provides for scalability, extensibility and flexibility. The development of the deposit system as such started in October 2000 and is planned to take a two years period. In the DNEP project the expertise of the KB and the technical knowledge, innovation and research forces of IBM are combined. -Because of

the size and complexity of the DNEP-project the KB involved professional project managers from Expanding Visions to support the director Information Technology in running the project.

The KB Deposit System (2002)

IBM actually started in October 2000 to develop the deposit system. This is done on site on the KB premises. In October 2002 the deposit system will be handed over to the KB. At this moment the KB-staff is implementing the workflow for the electronic publications, as well as the interfaces to the catalogue and other digital library functions. The KB Deposit System will initially have a storage capacity of 12 TB and is scalable over 500 TB. Constructing the system, as much as possible off-the-shelf components were used, like DB2, TSM, WebShere and Content Manager. Parallel to the system development KB and IBM jointly have studied and tested Long Term Preservation issues. The research results have been used in the design of the system but will also be published as a series of reports. Plans have been drafted for continued research on digital preservation and long term access. The deposit system will be developed further, technically and functionally; this includes developing specific preservation technologies.

The E-Deposit in place (2003-...)

The deposit system will be the technical heart of the E-Deposit of the KB. The contribution of several members of the KB staff, defining the requirements and testing the system during the development phase, has been a critical success factor. But once the system will be in place the job really starts. At the moment the processing department is developing the workflow and acquiring the new skills needed for processing a variety of electronic publications. The acceptance of the challenge that results from electronic publishing is bound to have a major impact on the KB organisation and the tasks performed by its staff. It is not only a challenge for the KB, but also an exciting perspective for the years to come.

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