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Vesa Hongisto National Board of Antiquities

## Digitisation policies and emerging initiatives

On 11 January 2000 the Ministry of Education set up a committee to look into the digitisation of Finnish cultural heritage (KULDI) as part of the Government Content Creation project. It was composed of representatives of museums, archives and research libraries. Its mandate was to promote the digitisation of cultural heritage materials, access to digitised materials on the net and the creation of content production based on this material. Outside its mandate were recordings. The committee agreed the vision 2010 for cultural heritage digitisation:

- by 2010 the foremost cultural heritage in museums, archives and libraries will have been digitised according to prioritisation plans;
- the materials are accessible to all on information networks, providing access to and promoting knowledge of Finnish civilisation at the national and international levels;
- the cultural heritage materials constitute an important resource for research, education and content creation.

The final report of the Committee was presented to the Minister of Culture in June 2003. The Ministry of Education is now preparing the policy paper *Culture in Knowledge Society, Strategy 2010* and *Action Plan*. Committee's arguments and proposals will be included into this Strategy and Action Plan. The *Culture in Knowledge Society, Strategy 2010* and *Action Plan* will for it's part steer the target setting of the cultural sector. The Government has decided on the measures for implementing its extensive Information Society Programme. The contents of the programme were confirmed at a plenary session of the Government

on September 25 as part of the Government Resolution on the Strategy Document. The Information Society Programme includes among other activities actions to improve access to information and culture. The public and private sectors will implement the programme jointly.

The government has supported digitisation and information society projects undertaken by memory organisations. There is a digitisation programme for library material. The programme has been based on a survey of digitisation needs of public and scientific libraries and other memory organisations.

The Ministry of Education has financed among other things the digitisation of newspapers published in Finland in the 1800<sup>th</sup>.

Special digitisation program (Myytti) for museums continues. In the project museums are digitising their collections in accordance with the jointly agreed prioritisation plan. In the program the Ministry of Education is supporting digitisation projects of individual museums. The program has been and is the principal funding source for small museums in addition to their regular budgets to do the digitisation work.

Regulatory issues: changes in legislation

There are ongoing changes in the legislation, which will have an effect to the cultural heritage sector. The government bill on the amendment of the Copyright Act will be launched in the end of 2003 or in the beginning of 2004. The proposal concerns changes required by the EU Information Society Directive 2001/29/EC, certain other amendments and technical revisions.

Amendments not related to the Directive are proposed among other things regarding the following provisions



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on limitations on copyrights: use of materials in archives, libraries, and museums; reproductions for the benefit of people with a disability; limitations relating to public performance of works at religious services; and transient recordings. In addition, it is proposed that the provisions on extended collective licensing will be developed and their application extended. The draft government bill for a new Legal Deposit Act is under preparation (a report 31 March 2003). The Act will be repeal the current Legal Deposit Act and the Act on the Archiving of Films. Under the proposed act, legal deposit would cover not only traditional printed publications, audio and audiovisual recordings and films but also other recordings, electronic publications of Finnish origin available on open networks, and radio and television programmes.

## Cooperation developments

European and international cooperation developments

Centre for Preservation and Conservation, which is a part of the Helsinki University Library – National Library of Finland was responsible for running the Nordic Historical Newspaper project, TIDEN, launched in October 2001. This was one of the first newspaper digitisation projects in which Gothic text was interpreted by Optical Character Recognition to enable free text search to large newspaper contents in Sweden and Finland. All the Finnish newspapers published between 1771 and 1860 have been digitised and the next phase containing copyright-free newspapers until 1890 is under way. By the end of 2003 The Finnish Historical Newspaper Library, available at http://di.gi.lib.helsinki.fi, will contain 300,000 pages of data. It has rapidly become a very

popular service with a million page searches per year. The Finnish future digitisation projects are likely to resemble this project of Helsinki University Library in building critical mass and in looking for cooperation. The TIDEN project was continuing as a pre-study, the project Nordic Journals, funded by the American Andrew Mellon Foundation and concentrating on interoperable search functions. The Centre for Preservation and Conservation is also cooperating with Swedish national institutions, for instance, the digitisation of newspapers and in digitisation processes.

## Cross-sectoral ALM

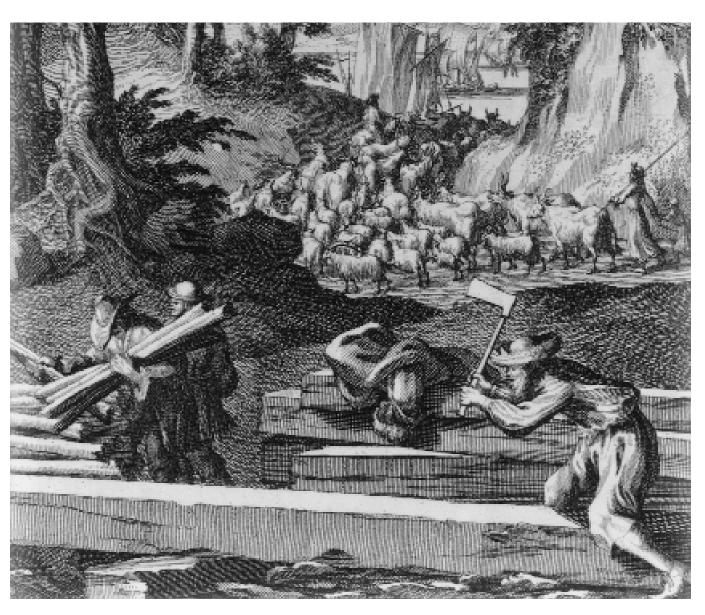
A joint project (Kamut 2) of museums, archives and libraries aiming to create a common portal for all these memory organisations has started in August 2003. The pre-study of the project will be ready in the first quarter 2004. In the pre-study the current data structures of principal Collection Management Systems are studied and compared in order to find basis for a common data retrieval. In the pre study suitable technology alternatives will be evaluated as well.

# Research community

An ongoing research project Finnish Museums On-Line will be finalised in the first quarter of 2004. The aim of this case study is to investigate how cultural collections could be made available and semantically interoperable through WWW. According to the project vision, semantic Web technologies provide means for integrating different databases and a basis for creating intelligent information retrieval systems for such a global data repository.

http://www.cs.helsinki.fi/group/seco/museums/





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A research project Finnish Ontologies and Thesauri has started. The goal of the project is to create ontologies based on Finnish controlled vocabularies, such as the Finnish Web-thesaurus and MASA, the controlled vocabulary used in many Finnish Museums.

The work has been initiated in 2003 and a large two-year national project has started in September 2003. http://www.cs.helsinki.fi/group/seco/ontologies/

A research and digitisation project of the Finnish library material of the 18th century has been planned at Helsinki University Library – National Library of Finland and is beginning within a year, if sufficient funding can be acquired. The team of researchers includes book and church historians at Helsinki University. The European cooperation partner is Kungliga Biblioteket in Stockholm, Sweden. In the 18th century Finland was part of Sweden and many of the original Finnish books of that era are only available in Sweden, due to wars and fires.

# Emerging issues

# Long-term preservation

The conversion of unique analogous sound recordings (music and speech, e.g. linguistic and folkloristic materials) in digital format for the purpose of long-term preservation is recognized as an urgent task within the framework of digitisation of the cultural heritage. If sound recordings are not converted in digital format in time they will be definitively lost, due to the deterioration of the medium. Digitisation of such materials has been realized on private initiative with the support of the Ministry of Education. The financial

resources available have, however, been insufficient. The critical situation of unique sound recordings has been recognized by the above-mentioned Committee for Digitisation of Cultural Heritage (KULDI) but no satisfactory solution for the long term preservation of the digitised sound recordings has yet been found. For other long-term preservation projects and initiatives, see following chapters.

# Developments at the regional and local level

### Museums

As mentioned before, a National museum portal project (Finnish museums / Suomen museot on-line) has started. The project was launched in order to create a possibility for citizens, museum professionals and researchers to search simultaneously Finnish museums collections on the Web. The museums in different sectors are using different indexing terms and classification rules and standards. Therefore traditional searching methods are not effective enough to reach satisfactory search results. New semantic Web technologies will be used in search operations in order to solve this problem.

The target is to build the systems so that it is possible for the museums to use the existing collection management systems and make benefit of the investments they have done.

The system is centraliser and the data transfer is planned as simple as possible. This makes it easy also for small museums to feed data to the systems. They do not need to have fast Internet connections nor know much about data security issues. The deadline for the pilot version of the system is at the end of this year.



The systems will be open for all Finnish museums, but in practise a certain level of collection management systems quality is needed. In the project a standard centralized collection management system with remote access is provided. This is a suitable way especially for small institutions to solve their collection management without having an own system or IT skills and resources.

#### Libraries

A National library portal project (Nelli) has started. This project was launched in order to find more effective ways of using the material by creating a user interface compatible with the Virtual University gateway. Another important task is to promote library co-operation both nationally and internationally. The rapid technical development enables the libraries to widen the scope of services available to the users. Finnish university libraries have decided to implement a portal application and a digital library application. Prior to the portal / digital library project, Voyager library system has been implemented in the libraries in a project co-ordinated by the Helsinki University Library - National Library of Finland, which will also co-ordinate the portal / digital library initiative. The portal will allow the users to access efficiently a large number of heterogeneous data resources, allow description of these resources and provide personified services. The digital library application will enable storage and retrieval of electronic resources, and grouping of these resources into logical collections. The portal application must be interoperable both with the integrated library system and the digital library application, to the extent that the patrons will see a single service.

http://www.lib.helsinki.fi/finelib/english/index.html

### **Archives**

The National Archives Service gives highest priority to its archival database (VAKKA) that, when completed, will include all the inventories and descriptions of the record groups preserved in the branches to the National Archives Service, i.e. the National Archives and the seven provincial archives. This database with an architecture based on ISAD(G) is accessible via Internet and enables the user to identify the quested record units within the records groups. The VAKKA-database is, however, also connected with the long-term preservation system for digitised collections maintained by the Digitisation Centre of the National Archives Service.

http://www.narc.fi/atengl.html

The National Archives Service has given high priority to the establishment of a reliable long-term preservation system for digitised materials (image digitisation). The Digitisation Centre of the National Archives Service has developed, with support from the Ministry of Education, such a system for digital materials preserved by the National Archives Service. Due to the special archival requirements a tailor-made system was designed by the staff of the National Archives using open source solutions as Linux, MySQL and PHP. The digital preservation system is connected with the archival database (VAKKA) and has also special retrieval viewing functions. The scanned images are in TIFF-format, from which high quality JPEG-images are generated enabling realtime-zoomable images to be generated on the Internet. The design of the digital preservation system has also taken in consideration the preservation of sound and film recordings, which in a near future will be included in the materials to be preserved in this system.





Finnish National Archives has according to its Strategy of Preserving Digital Material launched an R&D project (Sähke), which focuses on the long-term preservation of material produced by records management systems a type of systems that is increasingly in use in the Finnish public sector. The term "records management system" is defined by the project to mean exclusively a type of system, which includes a registry of cases and their related documents within the system. The project has its focus on the archival aspects of the system. Thus, the functional requirements will concentrate on the building and maintaining of retention schedules and filing plans and associated metadata: especially concerning the publicity or secrecy information of different hierarchical structures in the system and their retention periods i.e. case groups and cases. Registration metadata and its collection are also important matters. The system shall assign the metadata as automated as possible and the assignment shall be guided by the default values planned in the retention schedule and filing plan.

The specifications, which the project has produced, will be tested during spring of 2004. After that the National Archives will start to plan an acquisition and access system for the electronic materials that will be transferred to the National Archives Service. The building up of the system will start in 2005 and the goal is to get it completed by the end of 2007. Then the acquisitions of electronic records can begin. The development work of the project has concerned the so-called workflow materials only. Questions concerning the long-term preservation of e.g. relational databases and GIS systems remain open. They will be addressed in projects, which will be launched after the present project is completed.

http://www.narc.fi/sahke/sahke\_article.html

Four Finnish research institutions (The Department of Music Anthropology, University of Tampere, Finnish Jazz and Pop Archive, Research Institute for the Languages of Finland, Finnish Literature Society) launched three years ago (2000) a project which aims at digitising their sound archives, comprising almost 70, 000 hours of recorded speech and music altogether. The question of long-term preservation is urgent for sound archives, as the carrier for their holdings, the analogical magnetic tape, is subject for rapid decay, and as the old analogical technology is vanishing. The institutes agreed on certain common principles for digitising (e.g. using standard formats.) and tried to find a technology which would be both suitable for the large amount of data created by digitising sound, and still economically reachable for each institution. Their solution was a mass storage system basing on magnetic tape with large capacity (25 or 50 GB) with a plan to "refresh" the data regularly (every 5-10 years). The next generation mass storage system is yet not clear, as the technology is in progress all the time. The search for the next system is an ongoing task of the project.

http://www.uta.fi/laitokset/mustut/digiprojekti/frames.htm

# Benchmarking

The MINERVA project has made benchmarking as a tool more widespread and familiar. The national benchmarking group has been an informant about MINERVA in Finland. The national memory organisations (in addition to Helsinki University Library, National Board of Antiquities and National Archives as well as Ministry of Education) are members of this network. The national memory organisations have contacted the other institutions in their sector

and informed the potential users about MINERVA and the online benchmarking database. The group has also disseminated the MINERVA paper format questionnaires to memory organisations and collected information of their digitisation activities. The MINERVA online database has also been actively used in Finland. There have been altogether 17 answers to the MINERVA benchmarking Web-based questionnaire: 16 from project level and two from programme level. Out of this material, three of the projects belong to the programmes. Five of the projects are from the archive sector, nine from the library sector, one from the museum sector, and one from the other areas (societies).

# Use of NRG/MINERVA results and impact

The use of NRG/MINERVA results has not yet had a big impact in Finland. This is mainly because the NRG/MINERVA results have so far been in quite early or preliminary phase. But in the foreseen future the there will be impacts in several levels. The NRG/MINERVA process itself has influenced to the work and results of the committee of memory organisations when it has set the targets for cultural heritage digitisation. Several MINERVA groups are producing results, which may be useful.

- The benchmarking database developed in the MINERVA project has proven to be a practical tool.
   It is now under consideration if an own corresponding system could be taken in use at the national level.
- The Good Practice Handbook and Handbook for quality in cultural Web sistes seem both usable as general level guides especially for small institutions. It is also under consideration to translate them into Finnish after they have been finalised.
- Applicable parts of the preliminary results of the interoperability work have already been taken in use in National museum portal project.

Ephemera: Menu 1885 © Helsinki University Library - National Library of Finland

