A. Users and content

**IPR**

As part of the revision of the Copyright Act, legislation was updated to take into account special issues related to the digital and network environment. The reform enacts nationally the changes required by the EU copyright directive of 2001. At the same time WIPO Copyright Treaty WCT and WIPO Performances and Phonograms Treaty WPPT were implemented nationally. The amendments mainly entered force on 1 January 2006.

The changes of the Copyright Act included some revisions made specifically to accommodate the practices of archives, museums and libraries. Obtaining user licenses for mass use was made easier by new licence agreement provisions. For instance, it will be possible to conclude an agreement with an organisation representing the copyright holders about the digital use of the material in teaching.

The internal use of copyrighted material in archives, libraries and museums, for purposes such as preservation of material, technical renewal and safeguarding is allowed using any media. The browsing of copyrighted material in collection databases using computers on the premises is also allowed. A copy of a work acquired for private use, as well as copies of work in the collections of archives, libraries and museums, may be distributed further regardless of where it was obtained.

**Handscape**

Nordic Handscape is a project that aims to investigate and develop possibilities to convey the cultural heritage by mobile technology. The project is initiated and financed by the Nordic Council of Ministers. The project is coordinated by the Museum of National Antiquities in Stockholm and administrated by the Nordic Council of Ministers’ Museum Committee. The project was implemented through five separate projects, one in each Nordic country, during 2004-2005. Pilot tests were carried out during the summer and autumn of 2005 at several locations in the Nordic countries. Finland took part in the project with two pilot projects created in co-operation with a commercial service provider. Archaeological visits sends information of selected archaeological sites and route instructions into user’s mobile phone on request. Garden trails at Louhisaari manor guides visitors in the cultural-historical environment of a 17th century manor through an application that can be downloaded at the museum to the user’s mobile phone. There is also a similar application for treasure hunting adventure trail for children at Louhisaari. Pilots have been operating since the beginning of June 2005 and the report based on the experiences and customer feedback has been submitted to the Nordic Council of Ministers’ Museum Committee. <http://www.nordichandscape.net/>

**Museoverkko – The Museums Net**

Museoverkko, launched fully in 2005, is an extranet service developed and maintained by the NBA for the networking and exchange of knowledge for professionals working with cultural heritage management. The Museums Net can be used to spread information, exchange best practices and distribute digital resources. The Net can also be used for discussion and exchange of views. The service includes on-line browsing of the Sites and Monuments Register of the NBA through an Internet portal and downloadable GIS vector datasets of protected sites. The service requires registration. <https://www.museoverkko.fi/>

**PATU**

The Finnish Museums Association published on-line its printed resource guide for museum professionals, PATU. The guide presents products and services provided by
SME’s for museums and archives, including digital collections management, digitizing services, 3D-modelling and audiovisual and multimedia services.
<http://www.museoliitto.fi/PATU/index.htm>

B. Technologies for digitisation

The ontology-based content infrastructure of the Finnish Web
The FinnOnto 2003-2007 (The Finnish Ontologies on the Semantic Web) is a large national project for the research and development of the infrastructure of the Finnish Semantic Web, the presentation and retrieval of ontology-based information and the automatic sorting of meanings. The aim is to move from current thesauri techniques to the semantically richer ontology technology. The developing technology is used in several pilot applications.

The aims of the project include the development of main national ontologies and the practical services based on this development. Among the most important of these is the National Ontology Library and server ONKI. ONKI offers services for ontology developers for the co-ordination and support of decentralized ontology development. For indexing work a browser-based Web service has been developed, through which a concept needed in content description can easily be found and transferred via the Web service to an external application, for example to a museums’ cataloguing system. For those searching for information a similar Web service is available, which can be used to easily create ontology-based inquiries.

The use of ontologies creates new business opportunities and enables the more effective utilization of valuable data contents in information networks than previously. This technology is applied to several case applications and in national portal projects. Examples of these include the memory institutions’ nationally and internationally awarded MuseoSuomi portal; and the Orava portal of teaching materials, produced from the contents of the Yleisradio Oy national broadcasting company’s Klaffi portal of 2000 video clips and educational units and semantically linked with MuseoSuomi contents. In the area of cultural heritage a new pilot application of Finnish culture on the Semantic Web, KulttuuriSampo, is under development. This pilot is based on the awarded MuseoSuomi concept but incorporates in addition to portable heritage also other Finnish cultural contents including art, poetry, photographs, biographies, scientific research, archives and films.
<http://www.seco.tkk.fi/applications/onki/>
<http://www.museosuomi.fi/>
<http://demo.seco.tkk.fi/orava/>
<http://www.seco.tkk.fi/applications/kulttuurisampo/>

Emerging education

During the last few years, a number of educational institutions have started study programs on digitization of cultural heritage and related technologies. Among these are the University of Jyväskylä, EVTEK Institute of Art and Design, Laurea University of Applied Sciences and Mikkeli Polytechnic.

The Department of Arts and Culture Studies at the University of Jyväskylä has a Master’s Programme in Digital Culture. The Master’s Programme in Digital Culture builds up a humanistic degree, combining the approaches of arts and culture studies, in which special attention is paid for the relations between culture and technology. Theoretical understanding of the digitalization of culture at large and arts in particular is stressed. The Programme produces MA’s who are able to understand the ongoing cultural change, and to work in the fields of arts and culture requiring new competencies. They will qualify for research intensive employment, but also for jobs within cultural production, content production, and digitalization of cultural heritage.
<http://www.jyu.fi/hum/laitokset/taiku/en/subjects/dgl>

The EVTEK Institute of Art and Design (Polytechnic) has a study program on 3D visualisation. The emphasis is put on digital visualizing and sound, 3D modelling, visual simulation and animation.
<http://3d.evtek.fi/index_noflash.html>

Culture and Media studies are offered at Laurea in the degree programme of Media Communication leading to a Medianomi (AMK) degree. The degree programme has three orientation options: 3D visualisation and animation, digital design and network communications.
<http://opko.laurea.fi/media/koulutusohjelmat/index.html>
Mikkeli Polytechnic offers study possibilities including digitization of archive materials and multimedia production in its Bachelor of Engineering programme. The Mikkeli Polytechnic operates at the Mikpoli IT Centre, a new regional R&D centre which aims to create an IT knowledge cluster in the area.

[C. Sustainability of content]

The digitisation co-operation of museums, libraries and archives – eKAM

The intensifying digitization co-operation of memory organizations builds around the extensive eKAM (Electronic Libraries, Archives, Museums) partnership group. The group includes members from the central memory organizations and the work is co-coordinated by the Finnish National Library. eKAM co-operation aims for the development of digitization and its structures in Finland. There is a great need for resources to be correctly allocated and the roles of different operators defined. Shared digitization projects are part of the goals of the co-operation.

The initiative is lead by an annual meeting of directors from Åbo Akademi University Library, Helsinki University Library, National Archives of Finland, National Board of Antiquities, Finnish National Gallery and Society of Swedish Literature in Finland. An integral part of the co-operation is the partnership group of experts from different memory organizations, meeting a couple of times a year. Under the umbrella of eKAM, operate working groups which are formed as needed and preparation groups involved in the activities of working groups. During 2005 the group working with the prioritisation of collections and the selection of materials was especially active. Another actively working group has been the group discussing the possibilities and financial models of the digitization of collections.

In the sphere of the eKAM co-operation and with the support of the Ministry of Education a new quality tool, Mikaela, has been developed. Mikaela makes it possible to evaluate user’s own digitization plans and to seek comparison partners. Digitisation projects gain visibility and their products are more easily accessible in one location. The tool aims also to the good quality of digitized material and learning from others.

[D. Digital preservation]

The National Archives of Finland has issued a degree concerning the long-term preservation of material produced by records management systems. The storage of digital-only documents to be retained permanently in records management systems became effective on 1 January 2006. The degree states those requirements and features that are prerequisites for the preservation of documents in solely digital form produced by the electronic records management systems increasingly in use in the Finnish public sector. In addition the degree states the fringe conditions for the creations of transfer files to facilitate long-term storage in archives.

NRG and MINERVA results

The activities of NRG/MINERVA have had a boosting effect on the national co-operation between memory organisations. The co-operation has started well on voluntary basis in connection with the above-mentioned eKAM partnership group. A separate national NRG-group has been active in Finland, monitoring the issues topical in the sphere of NRG and MINERVA. This group has been nominated by the Ministry of Education and comprises in addition to the officials of the ministry, of the representatives of the main memory institutions in the country.

The guides and handbooks produced by the MINERVA network have been highly popular among the national museums.

MINERVA co-operation has also worked in favour of the involvement of the central national memory organisations in the MICHAEL Plus project.