Sweden

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The responsibility for carrying out policies, strategies and activities on the digitisation of the Swedish cultural heritage is a task for the government agencies and companies in the field. The Government supervises the operations of the agencies by issuing appropriation directions and ordinances that contain instructions about their activities. However, the Government may not determine how the agencies should act in individual cases or how they should for instance apply legislation. Certain decisions taken by government agencies may be appealed to the Government.

A. Users and content

Like the rest of the world, a rapidly growing part of the Swedish cultural heritage is in digital form, covering born digital documents, books, newspapers, pictures etc. as well as analogue materials converted to digital to improve accessibility and usability. Only a few years back this material was often looked upon as something less cultural and more of a play ground for techno geeks. Today, it is a consensus among the cultural heritage institutions that the digital content in their holdings and collections is essential, and that some basic conditions need to be fulfilled to make it more accessible and available to users. The digital information should:

- be easy to find and easy to retrieve, also cross-sectorial
- be possible for the user to fully understand, accept and use
- be retrievable, accessible and usable not only on short term but also for future generations.

With these elements in mind, the government has decided to raise funding during the fiscal years 2006 and 2007 of in total 550 million SEK (about 58 million Euros) for increased accessibility to and for the preservation of cultural heritage. The aim is to make it possible for cultural institutions to hire people short-term for labour intensive activities (disposal, conservation, restoration, inventorying, digitisation etc.).

It is not easy to describe all the work done in creating new services out of existing digitised collections due to the decentralised structure of the MLA sector in Sweden. However there is a substantial amount of information already digitised on which new services can be built. Digitisation of collections and modern standard re-digitisation of older material is taking place in internal projects within MLA institutions and in special development projects all over the country both on local, regional and national level.

"Ask the Library" services
A joint initiative on national level are the "Ask the Library" services. Public libraries and university libraries assist in information search. Librarians help people with information on databases and search systems, the choice of search terms, provide literature tips and definitions of words (from dictionaries), and refer to scientists and experts. In Sweden there are three Internet services on a national level: Ask the Library, Librarian on Duty and Children's Library. In 2005 these services started to work together.

The Royal Library (the National Library)
The digitisation activities at the Royal Library (the national library) are mainly aiming at on a demand scanning, in the first place of newspapers and posters, and providing enhanced access to fragile and/or valuable volumes.[1] An example of the latter is the digitisation of *Suecia Antiqua et Hodierna*, a work of distinction from Sweden's period as a great and powerful nation in the 17th century. The Suecia Antiqua-project has also tested a model of analysing benefits in relations to costs connected to digitisation, and the

results have been handed over to MINERVA Plus as an example of best practice.

The National Archives

The digitisation strategy of the National Archives focus on large-scale scanning of basic archival material like parish records, land survey files and court records, used by a broad variety of academics as well as the public looking for their family roots. In Fränsta, located in the middle of Sweden, the National Archives has a department (MKC) that provides large-scale scanning of all kinds of paper documents for internal and external customers. The production is today 90,000 images per day. Another department at the National Archives (SVAR) is scanning microfilm and produced in 2005 in total 2.5 million images. Most of these images are converted into a database, today containing about 37 million images. For the moment only a minor part (about 11%) can be accessed over the Internet <http://www.svar.ra.se> due to regulations on secrecy and personal integrity. The National Archives is also running several digitisation projects targeted at special parts of central and regional state archives holdings.[2]

To balance the demands of different user groups, an advisory board of scholars and other users support the state archives in selecting the holdings and collections that is most urgent and important to digitise.

The National Heritage Board
The National Heritage Board has focused on improved and widened access to three major information sources: Ancient sites and monuments information system, Information system of culture-historical buildings and images of cultural heritage. Together they give access via Internet to information on 1,5 million ancient sites and monuments, some 45,000 culture-historical buildings and 60,000 images. The number of users is growing steadily, to a total of 100,000 individual users, both professionals and members of the public. Continuous efforts are made to adapt originally complex user interfaces to a wider audience. A dedicated information cultural heritage Web service, based on these sources, will be developed during 2006 and be operational in 2007.

SVT (The Swedish Public Service Broadcaster)
The Swedish public service television company, SVT, launched a new Website in 2005 called Open Archive that gives the public an opportunity to access the SVT archives in order to relive milestones in Swedish television history – news, programmes and films of all genres. A collection of newsreels gives a glimpse of every day life from the period 1896 to 1966. For IPR reasons there are no programmes and films with music and no productions with actors available on Open Archive, expect for the newsreels which also include music. SVT archives contain over 200,000 hours of material and only about 10% is digitised today.

The City of Stockholm
The City of Stockholm has since 2001 been working on a project which now has developed a Website called "Stockholmskällan" (Sources to Stockholm) to be launched 1st of February 2006 and exposing the cultural heritage of Stockholm <http://www.stockholmskallan.se>. This Website is aimed to be used in the first place by pupils and teachers in secondary and high school but also by everyone who is interested in the history of Stockholm. "Stockholmskällan" contains material from the city archives, library and museum of Stockholm and from the city's office of statistic.

B. Technologies for digitisation

In 2005, the following national initiatives and projects were identified as the main ones targeted at enhanced accessibility and usability of cultural and scientific content through digitisation:

ABM-Centre
In a joint initiative of the Royal Library (KB), the National Museum, the National Heritage Board, the Swedish National Archives and the Council for Cultural Affairs, an MLA secretariat, ABM-centrum, was established in 2004. The chief objectives of the secretariat is to promote understanding and collaboration between cultural heritage institutions in Sweden, stimulate coordination of digitisation and promote use of new technology and skills development activities across institutional boarders.

Besides disseminating best practices and new methods, the ABM-centrum in 2005 arranged a number of seminars on different aspects of selection criteria for digitisation, targeted at managers of collections and holdings and of digitisation units at archives, libraries and museums in Sweden. These seminars were organised in collaboration with the National Secretariat for Preservation Issues at the Royal Library. This secretariat gives advice in all matters concerning preservation, in the first place to Swedish libraries.

The KMM project
The KMM project (Knowledge Management Systems in Museums) funded by the Swedish Council for Cultural Affairs the started in July 2005. The project is a long term national R&D initiative concerning "Knowledge Engineering in Museums", focusing on development, research, demonstration, implementation and evaluation of a Swedish state of the art Testbed and R&D platform based on the CIDOC Conceptual Reference Model. The *Dynamic Action Plan* is going to be used as the co-ordination mechanism for the project. The KMM partners are: Uppsala University (owner), Luleå University of Technology, The VLM-Institute, MLA-Västernorrland, Regional Museums of Västernorrland, Stockholm and Halland. Museum Gustavianum, Grenna Museum/The Andrée Expedition. Municipality of Uppsala, TietoEnator Health Care and Education AB, Infografic AB, Inyan AB , PsDs DATA AB, META - Knowledge about Knowledge. Three more Regional museums and two more local museums will join in 2006. The KMM project (Knowledge Management Systems in Museums) will join the MICHAEL Plus project in 2006.

C. Sustainability of content

The Swedish Government has formed a Strategy Group on IT Policy
The Swedish Government has formed a Strategy Group on IT Policy. The group has an advisory role vis à vis the Government. The task is to play a proactive role in efforts to achieve the IT policy goal of an information society for all. Another central task is to seek in collaboration with other players in the community. The Strategy Group will therefore seek to place IT policy in

a broader perspective in which the benefits to society and its citizens, user needs and the development of IT-related activities in all policy areas and sectors of society are central concerns.
In 2004 the group appointed a sub group on IT and culture. One of the main tasks of the group in the case of cultural heritage has been to analyse the conditions for digitisation and long-term digital preservation. In its work the sub-group has focused on means for

- strengthening the role of IT in cultural heritage
- supporting the use of IT at small and regional cultural heritage institutions
- enhancing the digital accessibility to the cultural heritage
- increasing the use of digital cultural heritage in education and learning
- long-term digital preservation
- increasing use of digital cultural heritage in commercial services and products
- handling the growing cultural heritage on the Internet through adapting the regulation on legal deposit the technical challenges.

All the work done by the IT and culture group will be published in a report in 2006.

D. Digital preservation

In 2005, the following national initiatives and projects were identified as the main ones in digital preservation.

The Swedish National archives of recorded Sound and Moving Images (SLBA)
The main task for The Swedish National Archive of Recorded Sound and Moving Images (SLBA) is service to scientific research. It collects recorded sound and moving images but not pictures and no audiovisual material on the Internet. SLBA also keeps a selection of local radio programs, including local commercial radio, and local cable television. Its holdings are among the largest in Europe and contain about 5 million hours stored on tapes, discs and cassettes. For long-term preservation a state inquiry has recommended a migration of SLBAs audiovisual

content from analogue to digital form. Based on that recommendation the Parliament has decided to give SLBA extra money in 2006 and 2007 for the migration of public service material.

The National Archives
In 2003 The National Archives and the Luleå University of Technology (LTU) started a joint project to provide new models as well as methods and practical tools in long-term-preservation and access of digital information. In 2005 the National Archives, LTU and the local municipality of Boden established a national centre on long-term digital preservation and access as a part of the university (LDB-centre). This centre is a multidisciplinary research and development organisation that will create and provide knowledge about digital preservation and access to authorities, consultants, and companies and the education and training sectors.

The Royal Library (the National Library)
As a national library the Royal Library (KB) has acquired, described, preserved and made available all Swedish printed publications since the 17th century and has also made the information about the publications available digitally since the 1980s in digital catalogues and other digital formats. However many documents of today are born digital and published only in digital form and the number of items increases rapidly. To avoid losses in Swedish cultural heritage the Royal Library started in 1990s to collect, preserve and make available Swedish documents from the Internet. The collection contains today about 3 million files from 280,000 Websites, mainly with the suffixes .se, .nu, .org, .net and .edu. Due to the Swedish regulations on personal integrity this material can not be accessed over the Internet, but a special decree by the Government in 2002 authorised the Royal Library to collect Swedish Websites and allowed public access within the premises of the library.

E. Monitoring

The Swedish Institute for Growth Policy Studies
ITPS - The Swedish Institute for Growth Policy Studies is the Swedish Government's agency for understanding growth and for evaluating government policies. ITPS falls under the Ministry of Industry, Employment and Communications. Its objective is to develop and disseminate relevant knowledge on the determinants of economic growth as inputs to industrial, structural and innovation policies in Sweden. The Swedish ICT policy was evaluated in 2003, in the report *A learning ICT policy for growth and welfare*.

The Swedish National Council for Cultural Affairs
The Swedish National Council for Cultural Affairs is a government authority whose principal task is the allocation of state cultural funding to theatre, dance, music, literature, arts periodicals and public libraries, and to the fine arts, museums and exhibitions. The council also provides the Swedish government with the basic data it needs to make cultural policy decisions, by evaluating state spending in the cultural sphere, etc. and gives information about culture and cultural policy. The Council for Cultural Affairs supports, develops and initiates interaction between the state, the regions, municipalities and representatives for cultural life in Sweden, e.g. libraries, museums and performing arts centres. The aim is to safeguard and develop Swedish national cultural policy, and to promote cultural diversity and an even geographical spread in cultural provision. In 2004 the Council was commissioned by the Government to more deeply analyse culture and the new technology and the coordination efforts made in digitisation.

NRG and MINERVA results at national level and their impact on the institutions

The NRG and MINERVA results are on a national level distributed mainly through:

• reports by Swedish NRG to the Ministry of Education and Culture, and the top management at national cultural heritage institutions (political level)
• conferences, seminars, hearings and work shops organised by national institutions and state commissions in the cultural field (general level)
• the above mentioned Swedish ABM-centre to central, regional and local institutions (practical level)
• an overall information and promotion through Culturenet Sweden

As appointed experts by the Ministry of Education and Culture the NRG frequently reports back to the Ministry. The NRG also worked in the IT and Culture sub group of the Strategy Group on IT Policy. They also provide and present back ground information to the Swedish representatives in CAC in matters concerning digitisation.

Over the years more and more of the national cultural institutions have started to collaborate in the field of digitisation and digital preservation. Swedish institutions in the cultural heritage field will join several MINERVA spin off projects and initiatives like MINERVA Plus, the thematic network MINERVA EC and MICHAEL Plus.

1 Goals and principles for digitisation at the Royal Library, see
<http://www.kb.se/digsam/principles>.
2 For example: The Oxenstierna project, publishing letters sent by and to the Swedish chancellor Axel Oxenstierna in the 17th century
<http://www.ra.se/ra/oxenstierna/oxenstierna.html>;
the project "Old geometric taxation books", aiming at a national digital edition of large scale maps on village level from 1633 to 1655 <http://www.ra.se/ra/geometriska/index.htm>;
the project "Old handwritten maps", scanning maps in the custody of the Swedish Warfare Archives <http://www.ra.se/kra/kart.html>;
the project "Swedish Diploma", publishing all medieval diploma at the National Archives available in print
<http://www.ra.se/ra/diplomat.html>.