

# Slovenia

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## Strategic documents

Two important legal acts on digital heritage were passed in the Slovenian Parliament in 2006: Act on Legal Deposit of Publications and Act on Protection of Documents and Archives and Archival Institutions. These acts bring new legal foundations to libraries and archives for collecting, manipulation, preservation and use of digitized and digitally born publications and archival documents which is of long-term importance for all written heritage institutions in Slovenia.

The previous strategic document on information society from 2003, the Strategy of the Republic of Slovenia in the Information Society will be replaced in 2007 by a new one, which has been prepared as a draft in 2006: Strategy si2010. The aim of the new document is to bring Slovenia in line with the EU information society initiatives arising from the revised Lisbon strategy and the i2010 initiative. Another strategic document is in preparation since 2006: *Resolution on National Program for Language Policy 2007-2011*, in which digitisation will be stressed as a technological means for language evolution. The National and University Library has presented its strategy for the development of the Digital Library of Slovenia – dLib.si. Its aim is to approach user demands for even more service oriented library performance and to digitally preserve and present to public the most precious collections of our cultural heritage.

## A. Users and content

In recent years, cultural institutions, especially libraries, museums and archives in Slovenia have become aware of the need for digitizing cultural heritage. To gain the necessary information they have joined different EU initiatives and projects. Especially libraries have shown a number of activities (EDLProject, Tel-ME-MOR, DIZZIS, MINERVA Plus and others), also the main archives and museums. But in general, it is believed that the

process up to now has been imperfect which is why the institutions are facing more and more pressure by users to make their collections available through the internet. It has become obvious that there should be more digital information, full text and images from all fields of cultural heritage, science, media and arts accessible through the web in the Slovenian language. The aim is what was stressed also in the previous NRG reports that users gain web access to the Slovenian and European cultural and scientific information space. The digitization projects have been carried out through regular financial tools provided mostly by the Ministry of Culture and the Directorate for the Information Society of the Ministry of Higher Education. The main category of objects that have been digitised in 2006 is library materials of different kinds (manuscripts, newspapers and other periodicals, non-book materials, like postcards, pictures, graphic art, maps and music from 78rpm records) where the national library has taken the leading role. The development has also been noticed in archives, museums and heritage art galleries, especially the national gallery, where historical and ethnological objects, pictures, sculptures, photos and artistic installations have been used to make digitised collections or in the State Archive where old archival documents of the ministries, towns and societies have been transferred to digital medium. Among the key issues institutions have been instructed to avoid duplication of efforts and try to make synergies by cooperating in digitisation projects. The plan for developing an inventory of ongoing digitisation projects has not yet been carried out but it remains an important priority. Some institutions have started to develop their own priority lists of materials to be digitized and are selecting them by their cultural value and user interests and needs. It is important now to bring these activities together. The National and University Library has been given the task to develop the national inventory or register of digitisation projects and we are waiting for the realization of this project.

In the digitisation activities during 2006 most priorities have been achieved. The national library portal has been built on four levels: content, intellectual rights, technology and promotion. The key purpose of all levels has been to enable immediate and easy access to digital contents. The development of the content level includes addition of digitised collections according to the adopted selection criteria. There are eight digital collections available, ranging from scientific articles, historical and current journals, to photos of important Slovenians, historical maps, placards and sound recordings.

The coordinated distribution of the digitised CH content has been recommended to all institutions involved but not enough coordination has been achieved by now. It seems that, although the national portal of library heritage, The Slovenian Digital Library <<http://www.dlib.si>> which is connected to the European Digital Library project, has been set up, other institutions have not yet discovered its potentials for wider accessibility of their own digital collections. Some patience is needed here, to give the national library portal a chance to develop its full capacities – in which case it may attract other institutions. A portal of local cultural information <<http://www.kamra.si>> is in development as a service aimed at local cultural heritage, local studies and local digital information of all kinds.

It is planned to be managed by Slovenian regional libraries and will embrace information also from all other institutions in their respective regions. This will make important regional partnerships between culture and other fields, make visible the role of regional libraries as important information centres offering e-contents, and promote digitisation of local cultural heritage. At the moment the development of this portal has been delayed because of unsolved organisational issues. Other cultural institutions report that they mostly present their digitised contents on their web sites and a number of individual portals are planned to be developed. This could be a less desirable development as the authorities are trying to achieve high level of coordination in digitisation.

## B. Technologies for digitisation

Starting the library heritage and knowledge management portal Digital Library of Slovenia (d-Lib.si) and other

joined portals for different cultural fields is basic for Slovenian library network, archives and museums. It will provide adequate services in the information society, put digital heritage to public use, develop collections of digitised objects as a source for added value products in culture industry, education, tourism etc., and motivate other cultural institutions to join in building the portal. The portals have been designed as an infrastructure for lifelong learning, research, cultural activities and access to virtual heritage kept by heritage institutions.

The Ministry of Culture proposes to institutions to use technical solutions and guidelines developed through MINERVA, CALIMERA, MICHAEL and other EU projects in creating portals.

It is important to make strategies for digitisation in different fields of culture and promote the use of interoperable software and international guidelines. The national library reports of the usage of international recommendations and standards which are applicable for digitisation of library materials, and the Dublin Core Metadata Schema and Mets (archiving) for the metadata creation.

For digital objects they report to have used:

- *A Framework of Guidance for building Good Digital Collections*. 2nd ed. Bethesda, MD: National Information Standards Organization, 2004.  
<<http://www.niso.org/framework/framework2.pdf>>
- *Benchmark for Faithful Digital Reproductions of Monographs and Serials*. The Digital Library Federation Benchmark Working Group (2001-2002), 2002.  
<<http://www.diglib.org/standards/bmarkfin.htm>>
- *CDL Guidelines for Digital Images* (CDL GDI). Maintained by the CDL Digital Library Services Advisory Group. Version 2.0. California Digital Library, 2005.  
<[http://www.cdlib.org/inside/diglib/guidelines/bpgimages/cdl\\_gdi\\_v2.pdf](http://www.cdlib.org/inside/diglib/guidelines/bpgimages/cdl_gdi_v2.pdf)>
- *Handbook for digital projects: a Management Tool for Preservation and Acces*. 1. izd. Maxine K. Sitts, ur. Northeast Document Conservation Center Andover, Massachusetts, 2000. ISBN 0-9634685-4-5.
- Puglia, S., Reed, J., Rhodes E. *Technical Guidelines for Digitizing Archival Material for Electronic Access: Creation of Production Master Files – Raster Image*. U.S. National Archives and Records Administration, 2004.  
<<http://www.archives.gov/research/arc/digitizing-archival-materials.pdf>>

The national library ensures interoperability via OAI, Dublin Core and XML. Research needs emerging in their work are most often long term preservation, web archiving and sustainability of digitisation. The technological development of the digital library portal has been carried out according to the plan in 2006. The key endeavours were aimed at adding metadata to digitized items, the development of tools for easy data retrieval (i.e. seeming key-board), searching algorithms running as web applications etc. The portal was migrated on a new server for safety and functionality reasons and supports dynamic sites .asp, .aspx, php etc. which often demand the use of the database in the back and more flexible and efficient operation system. Slovenia will support interoperability of products and services of the information society by using open standards, it will support the use of Creative Commons licensing in the field of IPR and provide for e-inclusion for all.

### C. Sustainability of content

The aim of creating Slovenian digital collections is not only the digitization itself but making conditions for cultural institutions to be able to offer better services related to cultural objects. There is never enough stress on the need to make systematic financing tools which could be available to any public institution, business firm or individual intending to enter the coordinated digitization processes. In the above mentioned strategy a special priority has been given to the development and culture of the Slovenian language, meaning more software and e-contents in Slovenian language which will expand the use of the internet to whole population. On the other hand we wish to stress the need for inclusion and access to digitized collections for all European citizens by providing multilingual services for retrieval and use of European cultural wealth. An interesting agreement has been achieved between the national library and scientific publishers supported from public funds. They have started to deliver their digitally born contents into the portal. In the national library a formal intellectual rights framework has been developed for licensing the download and access to the digital contents on the portal. As a result of good

cooperation four important documents have been developed in the regional library: a list of benefits the digital portal brings to digital publishers, guidelines for publishers for inclusion of digital documents into the portal, permission for harvesting, and cooperation agreement which regulates intellectual rights of the authors.

In Slovenia there is still a lot to be done to achieve a sustainable development in digitization. Only a starting point has been passed by promoting general awareness of the need for sustainability in digitisation of cultural heritage. MINERVA Plus project has helped a lot but not yet enough to spread the idea of working together among all cultural and other institutions. In the library sector we can also follow a development of new educational and training programs, which were started in 2005 and have been very successful. Training programs for regional library portal management have also been carried out and attracted more than 150 librarians. It is to be expected that in other areas, especially museums and archives, similar educational programs will be developed in short time.

Sustainable funding models for financing digitisation have not yet come into practice. Digitisation is performed through regular financial programs which often means that financial resources for digitisation have to be created by abandoning some other programs. Where this was not possible the digitisation has not taken its full run.

In spite of limited financial resources for digitisation another interesting agreement has been achieved between the national library and the Research Agency of Slovenia. Each publisher financed by the agency is obliged to deliver his digital publication to the portal in PDF file. In this way, the portal has planned to receive 134 titles of Slovenian scientific journals in 2006. Promotion of the portal and growth of web users are also important for the sustainability of digitisation. The national library has focused its promotional activities to public libraries, publishers and media (25 press releases). They also organized a TEL-ME-MORE conference.

In Slovenia we expect to have a small number of competence centres for digitisation of cultural heritage. At this moment we can identify only one of them, the national library. In the near future, the state archives, and the national radio and television institutions could also take over this role.

## D. Digital preservation

One of the strategic goals is to collect and preserve Slovenian digitally born publication production. In 2006 Slovenia has adopted a new Act on Legal Deposit which includes as well the collecting of digital publications from the web by means of robot harvesting. Again, the library sector has been the most proactive.

The National and University Library has started efforts to include digitally born publications into the Digital Library of Slovenia. The problems we are facing now are: digital repository for web publications and negotiations with web publishers to ensure access for web archive users.

Long-term digital preservation issues are included into the strategy cited above as an important element in the development of the information society. Digital library preserving the legal deposit of web publications seems to be a good answer.

The development of web archiving in the national library was temporarily slowed down in 2006 because of the deficiency of the originally developed robot. By the end of the year they set up a robot Heritrix 1.10 which is used in some other national libraries in EU and upgraded it with the Web Curator Tool service, developed in the UK and New Zealand national libraries. It is the first application of this tool in the Windows operation system which has also been documented and published on the web. This new tool will become fully operational after the adoption of the Regulation on harvesting web publications which is in preparation. This document which descends from the Act on Legal Deposit of Publications will define criteria and frequency of harvesting, archiving of versions, access to web archive and colophon of the web publications etc.

## E. Monitoring progress

As soon as a sustainable system of supporting the digitization projects is established it will be very important to measure the progress from a common baseline, using agreed indicators. For this report the Ministry of Culture has gathered some data on digital activities in 2006. By these, we can only approximately identify the results of digitisation initiatives in some institutions. The plan is to establish a regular and mandatory reporting system on digitisation. This year report was made on the data from 16 cultural institutions (6 libraries, 10 museums).

Digitized collections are very different in subject, there has been little cooperation or record exchange in the projects between different institutions.

According to the kind of institution, digitized collections include mainly:

- Libraries: monographic and serial publications, print music, pictures, photos and old postcards from local studies collections, manuscripts, maps, audio and video materials, research texts.
- Museums: numismatic materials, photos, graphic art, drawings of archaeological objects, archaeological objects, archives, letters, film negatives, posters, documents, negative photos on glass, drawings, paintings and sculptures, special collections, objects from exhibitions, and other museum objects.

In most cases the digitization projects were carried out inside institutions, bigger projects were executed in cooperation with business firms.

This year, the MINERVA documents were not reported to be considered.

Only a part of the digitized collections have been put on the web. Some of them are only accessible in the internal data bases.

## Input/output indicators

Input	MEUR / Posts	Comment
Funding allocated to support digitisation - government	375.000 EUR	Estimation
Funding allocated from within existing institutional budgets*	221.000 EUR	Estimation
Size of work-force (full-time equivalent posts) 10 FTE	292.000 EUR	Estimation

\*Combined total, including personnel costs.

Output	Number of collections / items	Comment
Number of digitised collections		
- museums	34	
- libraries	8	
- archives	/	No information
Number of digitised collections recorded in a national inventory		
- museums	0	
- libraries	0	
- archives	0	
Number of digitised items per collection type		Data are only for the national library
- object entries (m/i)	260.674(m)/470.006(i)	
- text documents (m/i)	258.852(m)/262.527(i)	
- images (m/i)	1.362(m/i)	
- audio (m/i)	1(m/i)	
- moving images (m/i)	0	

#### Use of web-sites distributing digitised heritage content

Use	Amount	Comment
Use of web-sites distributing digitised heritage content		Data for the national library
- user sessions	1.493.548	
- average duration of user sessions		
- average page impressions per user session		
Purchase or distribution of CDs / DVDs		
Audiences for streaming, video-casting or broadcasting		

