

Austria

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The Austrian National Report 2006 is arranged according to the action areas of the *Dynamic Action Plan* with an emphasis on "Users and Content". In the section "Monitoring" we try to give first quantitative information about digitisation activities in Austria.

A. Users and content

The Austrian Initiative for Digital Cultural Heritage Austria started with building up an inventory of digitisation initiatives and projects in Austria. The first data collection was completed end of 2005, since then the database <<http://www.digital-heritage.at>> has been updated and new projects have been added. At the end of 2006 the database lists a total of 50 digitisation projects and 70 institutions that are involved in these activities. The database does not provide a complete inventory of Austrian digitisation projects, because many of the digitisation projects are on a regional or even local level. Nevertheless the data collection gives an overview about larger projects with cultural and scientific content.

What are the main materials / categories of objects being digitised?

Besides archives, museums and libraries also departments at universities, research institutions, foundations, consultants and companies specialised in digitisation services are directly involved in digitisation projects and initiatives. In accordance with the strategic goals set by European education policy, digitisation projects to set up image data banks have been undertaken in Austrian **museums** since 2001. The projects were supported by the Ministry for Education, the Arts and Culture through the initiative "eFit Austria". During 2006 three major Austrian museums completed their comprehensive digitisation projects. The museums

use TMS (The Museum System), one of the most effective museum database systems. After digitising the collection of the "Picture Gallery" in a pilot phase, the other collections of the Kunsthistorische Museum Wien (Museum of Fine Arts) were continuously digitised (totally about 113,000 objects) and imported in a database:

- Egyptian and Near Eastern Collection
- Collection of Greek and Roman Antiquities
- Treasury
- Coin Cabinet
- Collection of Art and Armour
- Music Instruments
- Museum of Carriages and Department of Court Uniforms
- Collection of Ambras Castle
- Museum of Ethnology Art
- Austrian Theatre Museum.

Parallel to the project a representative overview of the museum objects (about 40,000 items) were made available from the museum's website: <<http://www.khm.at>>.

The Österreichische Galerie Belvedere digitised about 9,000 objects from its collections and imported them in a database:

- Museum of Medieval Art
- Baroque Museum
- Collection of the 19th Century
- Collection of the 20th Century
- Gustinus Ambrosi Museum.

During the project a representative overview of the museum objects (about 10%) was made available from the museum's website <<http://www.belvedere.at>> or directly at the web address <<http://bilddatenbank.belvedere.at>>.

The museum's website offers also access to a database about a significant group of painters, the "Nötscher Kreis" <<http://noetscherkreis.belvedere.at>>. The projects in the Kunsthistorische Museum Wien und in the Österreichische Galerie Belvedere were completed by end of the year 2006 and opened to the public in December 2006.

During 2006 the Albertina completed digitising objects of its Graphic, Photo and Architecture Collections (about 177,000). An online presentation with a representative overview (about 22,000) of the museum objects is in preparation and will be made available from the museum's website: <<http://www.albertina.at>>.

The Austrian National Library continued digitising and indexing scientifically the pictures from the Bildarchiv (Image Archive Austria), a collection of about 200,000 printed portraits of important personalities dating from pictures from the early modern period to contemporary history pictures. 120,000 portraits are already digitised. It will be possible to integrate the collection fully in TEL (The European Library) via the OAI-PMH protocol and all objects of the archive will be searchable in TEL.

Additionally to the creation of image databases in Museums and Libraries other comprehensive digitisation projects of newspapers and journals take place. The AAC - Austrian Academy Corpus, a research institution of the Austrian Academy of Science digitised all issues of the journal «Die Fackel» (a journal edited by the famous writer Karl Kraus from 1899 to 1936). The AAC offers the digital edition with free online access to the 37 volumes, 415 issues, 922 numbers, comprising more than 22.500 pages and 6 million word forms: <<http://corpus1.aac.ac.at/fackel/>>.

The AAC-FACKEL contains a fully searchable database of the entire journal with various scientific indexes, search tools and navigation aids in an innovative and highly functional graphic design interface, in which all pages of the original are available as digital texts and as facsimile images.

Another large scale project was the digitisation of all issues of the newspaper "Arbeiterzeitung" from 1945 to its ceasing in 1989. About 200,000 pages of the newspaper were processed. The free of charge online archive offers access to the complete edition of a newspaper.

The Austrian National Library opened ALEX, the digital "reading room" for law documents <<http://alex.onb.ac.at>>. Users can flick through online and search in historic law texts. The database with 700,000 pages is

available since September 2006 and after only some month it is used by 300 readers per day. The mass digitisation of newspapers ANNO in the Austrian National Library was continued. Meanwhile more than 3,500,000 newspapers and journal pages are accessible online with about 750 readers per day: <<http://anno.onb.ac.at/>>.

In **archives** the main emphasis is on digitisation of audio-visual material. Digitisation seems to be the only viable path to safeguard the highly vulnerable material from deterioration. At the Austrian Broadcasting Corporation, in the Österreichische Mediathek, a historic audiovisual archive and in the Phonogramm Archive of the Austrian Academy of Science digitisation has become an integral part of the institutional practice to keep audio-visual content accessible.

On the **music** sector the Internationale Stiftung Mozarteum (International Mozart Foundation) supported by the US based Packard Humanities Institute published an online Mozart Edition. The project Digital Mozart Edition aims to digitise the complete works of Wolfgang Amadeus Mozart and made it accessible free of charge by 2006. By digitising the Mozart Edition, it is possible to use the original edition in a more flexible way (in terms of subject, integration and retrieval of data) and to make it accessible to a broad public in a cost-effective way.

The works of Lothar Rübelt, an important Austrian sports **photograph**, were lent to the Austrian National Library in 2002 and is subject in scientific indexing now. About 50,000 pictures have already been digitised, about 4,400 (mostly soccer and winter sports) are shown online in the picture archive.

"Frauen in Bewegung" is an other project of the Austrian National Library. It deals with indexing and digitisation of documents from the historic women movement building a digital archive: <<http://www.onb.ac.at/ariadne/vfb/vfbdigindexneu.htm>>.

European Digital Library

At European level the Austrian National Library is involved in important projects and initiatives for the implementation of the i2010 Digital Libraries Strategy. Since 2005 the Austrian National Library is full member

of the project The European Library (TEL): http://europa.eu.int/information_society/activities/digital_libraries/index_en.htm. In the project EDL (European Digital Library, <http://www.edlproject.eu/>) the Austrian National Library is coordinator of the work package „Developing the European Digital Library“. The Austrian National Library is responsible for the integration of stakeholders like archives, libraries and museums in the preparations for the European Digital Library and for drawing up a roadmap for digitisation of the European National Libraries. In November 2006 the Austrian National Library organised the first workshop „Developing the European Digital Library“. In CENL (Conference of European National Librarians) the Austrian National Library runs the working group “Content”. The aim of this working group is to coordinate the European National Libraries’ digitisation strategies with regard to the European Digital Library. The Austrian National Library as well as other research institutes are partners in the important research projects BRICKS: <http://www.brickcommunity.org/> and DELOS <http://www.delos.info/> These projects work on interoperability in a distributed European Library.

How is the digitised cultural heritage content being distributed?

There is no national inventory of digitised collections recorded. In most cases digitised content is offered on the individual websites of the cultural heritage institutions. The website of the Austrian Initiative for Digital Cultural Heritage, <http://www.digital-heritage.at>, is currently the only national portal that focuses on the digitisation of cultural and scientific heritage and on cultural content. Based on the suggested MINERVA good practice model for inventories of digitised content, the website features Austrian digitisation initiatives and projects, and provides access to guidelines and good practice examples as well as selected external sources. Six - partly very different - good practice projects selected with the MINERVA Benchmark tool are emphasized. The website also offers access to strategic documents like the recommendations of the National Representatives Group or the *Dynamic Action Plan, Quality Principles for Cultural Websites*. The Federal Ministry for Education, Science and Culture

provides an online platform with news and information on current developments in the arts and culture domain. The platform, <http://www.kulturleben.at> also features an extensive database covering many different areas of Austrian arts and culture. Furthermore, most Austrian provinces offer regional cultural portals that are run either by the provincial government or by commercial providers. They cover many different cultural sectors like theatre, cinema, museums, libraries, literature, e.g. <http://www.tirol.gv.at/themen/kultur>. While providing information for culturally interested citizens, they are also specifically targeted at the tourism sector e.g. <http://www.noel.gv.at/KulturFreizeit/Kultur.htm>. The research and scientific libraries together with the Austrian National Library and the Austrian universities form the Austrian library network (Österreichischer Bibliothekenverbund) which offers integrated search in more than sixty research and scientific libraries through a common web-OPAC. Technical infrastructure and central services are provided by the Österreichische Bibliothekenverbund und Service GmbH: <http://www.obvsg.at/> The Austrian Library Association (Büchereiverband Österreichs) is the umbrella organisation of the more than 3000 Austrian public libraries and school libraries. The association connects its member libraries through the Internet. At present, the catalogues of more than 500 libraries can be searched online, through a common interface. In its final stage, about 1000 libraries will be interlinked: <http://www.bvoe.at/>.

Are there any eLearning uses for digitised cultural heritage material?

In the education sector digital culture heritage material is used for eLearning still little. In the future it is intended to integrate digital heritage objects in the “Bildungspool Austria”. The aim of the cultural heritage projects carried out under the eFit-Initiative <http://www.eFit.at> of the Ministry for Education, Science and Culture is to provide digital objects for educational use. Several successful eLearning projects have been initiated and carried out also under this initiative. Many content initiatives at schools took place. Attention has been paid that electronic media standards were used for processing and

cataloguing. These learning objects build the Bildungspool Austria, a Austria-wide content catalogue, as a part of an "Austrian Learning Network" which gives an overview of all electronic education material in Austria <<http://bildungspool.bildung.at>>. The basis is a content repository with a uniformly specified description and obligatory metadata specification. Bildungspool Austria is partner in two successful projects CALIBRATE <<http://celebrate.eun.org>> and eContentPlus project MELT <<http://melt-project.eun.org>> and became a national gateway and content brokerage system for a EU-wide federated content exchange.

A good practice model for the co-operation of schools with cultural institutions is the project Museum:online. In practical lessons students and teachers work on (inter)national cultural projects, supported by experts from cultural heritage institutions. The co-operative results are documented and showcased on the Museum:online website <<http://www.museumonline.at>> to encourage the interest in museums and the cultural heritage by the young. More than 400 web projects have been developed by schools together with cultural institutions.

Are there any special issues that deal with the general accessibility of digitised cultural content?

The majority of projects registered under the Austrian initiative for Digital Cultural Heritage platform offer access free of charge to cultural heritage contents, only (high-quality) content has to be purchased on DVD or CD-ROM. In most projects digitised contents is available either through searchable databases, through various different indexes, or simply by browsing available contents.

However, these are still projects that are not available online, but can only be used only on site and under certain restrictions (for example, use is by appointment only, or restricted to certain user groups). Partly limited online access is due to the unclear copyright situation.

For this reason the Österreichische Mediathek can offer only a limited online access to a selected number of objects (video clips and audio files) only, despite the fact that over 10,000 audio recordings have already been digitised. The same is true for the Austrian Broadcasting services (ORF) and for the Phonogrammarchiv of the

Austrian Academy of Sciences.

Furthermore, some databases are for administrative use only, and access is reserved for the employees.

With regards to reaching an international audience, about a third of the online sites provide multilingual access to their contents.

B. Technologies

The uniform use of "The Museum System" in three important Austrian museums facilitates the interoperability of their databases. The educational metadata have been harmonised with the in the "Bildungspool Austria".

Other cultural heritage institutions generally use Dublin Core and METS for metadata. Mostly used protocols are OAI-PMH or Z39.50.

C. Sustainability of content

The Austrian Picture Archive <<http://www.bildarchiv.at>> of the Austrian National Library is currently the only online service that exploits cultural heritage content commercially. From its early conceptualisation, developing a sound business model – and not the mere digitisation of cultural content – has been the focus and driver for service enhancement. This strategy pays off already.

Initiatives like the "Digitisation-on-Demand" project co-ordinated by the University Innsbruck <<http://www.uibk.ac.at/ub/dea/eten/>> can supply valuable experience with the commercialisation of services. With the project Digitisation-on-Demand a new and exciting service is under development, where millions of books will be available on request as e-book. The Digitisation-on-Demand project joins 13 European libraries from 8 countries in order to investigate the market for this DoD service. The project started during 2006 and is supported by the eTEN Programme under the action line "e-Government". The main objective of the project is to extend the service of libraries and to set up a network of European libraries for a Digitisation-on-Demand Service.

The feasibility study about registration and preservation of the Austrian scientific and cultural heritage, commissioned by the Ministry for Education, Science

and Culture and the Austrian Council for Research and Technology Development was completed in autumn 2006. The chapter "Digitisation" gives recommendations for an Austrian digitisation strategy. For the entire study can see <http://www.uma.at/kulturerbe/>.

D. Digital Preservation

Long term access to digital cultural and scientific resources was the focal point of the international conference on cultural heritage "An Expedition to European Digital Cultural Heritage; Collecting, Connecting – and Conserving?" held in June 2006 during the Austrian presidency of the European Union. To emphasize the focal point "long term preservation" two sessions were dedicated to this subject. The session offered insight on the following questions: What are newly emerging technologies, methods and strategies for long-term preservation and archiving? What are the advances in the known long-term preservation strategies? What is the status of international collaboration? And what are best practice examples to enhance access to archive material? During 2006 the Austrian Computer Society (OCG) established a new Working Group dealing with long-term preservation. The aims of the working group are: awareness of the problem, bundling of information and knowledge transfer, fostering of cooperation on national and international level, discussion about best practice models, support of training activities. The Austrian National Library set a substantial step by establishing a department of long-term preservation and by buying and developing an preservation software (DigiTool). Under the Austrian eGovernment initiative the Federal Chancellery established a working group dealing with long-term preservation. Members of the working group are representatives from federal and state governments and archives. The Working group will discuss organisational and legal questions. Although the working group deals mainly with the documentation of governmental processes some results could be relevant for preservation of cultural heritage material and online publications too. A working group of representatives from libraries and copyright holders is still negotiating about the legal deposit of online material. Stakeholders discuss the

Austrian National Library's proposal for the extension of the current legislation.

In the project reUse <http://www.uibk.ac.at/reuse/> a model is developed for collecting digital master copies of books, magazines, and other publications. Libraries would take over from publishers to function as trusted repositories and preservation archives for the digital copies of print publications.

The project is coordinated by the University of Innsbruck Library and funded by the EU's eContent Programme. The Austrian National Library is leader of a sub project under the Project PLANETS <http://www.planets-project.eu/>, which brings together European National Libraries and Archives, leading research institutions, and technology companies to address the challenge of preserving access to digital cultural and scientific knowledge.

E. Monitoring progress

It is difficult to provide any meaningful figures on how much content has been digitised so far.

Results can vary in order of magnitudes if the results are quantified in different ways, e.g.: Is it the number of digital objects produced or the number of digital images or data sets in a database? Is it the individual pages of a newspaper or music score, or the complete works? Should only high-resolution images be counted or also low-resolution material?

As the data collection of digital culture heritage projects in the project inventory of the Austrian Initiative for Digital Cultural Heritage is not complete at all it is hardly possible to provide an estimate on how much content has been digitised so far and if this material can be used and re-used by interested third parties.

The numbers presented here base only on very rudimentary data and are a very rough estimation.

Input/Output Indicators

| Input | MEUR / Posts | Comment |
|---|--------------|---------|
| Funding allocated to support digitisation - government | 1.6 Mill | |
| Funding allocated from within existing institutional budgets* | 0.8 Mill | |
| Size of work-force (full-time equivalent posts) | 33,5 | |

*Combined total, including personnel costs.

| Output | Number of collections / items | Comment |
|--|----------------------------------|---|
| Number of digitised collections | 35 | |
| - museums | 24 | |
| - libraries | 8 | |
| - archives | 3 | collections of single entities |
| Number of digitised collections recorded in a national inventory | | there is no national inventory of digitised collections |
| - museums | - | |
| - libraries | - | |
| - archives | - | |
| Number of digitised items per collection type | | the figures are the total sum of all museums, libraries or archives |
| - object entries (m/i) | included in the number of images | see images |
| - text documents (m/i) | 1,355,000 / 1,155,000 | mainly pages of newspapers |
| - images (m/i) | 719,253 / 512,370 | including photos, autographs and objects |
| - audio (m/i) | 14,231 / 12,231 | audios and videos |
| - moving images (m/i) | 278,000 / 267,000 | from broadcasting archive |

Use indicators

| Use | Amount | Comment |
|--|-----------|--|
| Use of web-sites distributing digitised heritage content | | some institutions completed their end of 2006 and could not give statistical figures for the year 2006 |
| - user sessions | 4,018,641 | |
| - average duration of user sessions | - | varies to much between collections |
| - average page impressions per user session | - | varies to much between collections |
| Purchase or distribution of CDs / DVD s | 2,500 | DCs or DVDs are available for 2 collections only |
| Audiences for streaming, video-casting or broadcasting | - | no streaming, video-casting or broadcasting are available |