



Germany

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Digitisation policies and emerging initiatives

Germany is a Federal State composed of 16 "Bundesländer" and one central government (Federal Government) for the country as a whole. According to the German constitution, for certain areas, prominently among them cultural affairs, primary responsibility lies with the 16 Bundesländer. For certain tasks, some of them related to the field of supporting science and research, there is some competence by the Federal government or the possibility of joint action by the Federal Government and the governments of the 16 Bundesländer (which may be fixed in specific agreements). The 16 Bundesländer have instruments like the regular "Conferences" of a certain type each of their ministers (e.g., those of Culture). Some of them have at their disposal a standing administrative apparatus. The "Conferences" may agree on joint recommendations, quality requirements, planning frameworks etc. but these usually require unanimity and formally remain non-binding recommendations. Not all of the activities of the Bundesländer are subject to such discussions; usually, only matters are concerned which have an effect on the "equality of the living conditions" throughout the entire country (in the cultural field e.g., mutual acceptance of school diploma, matters of access to university study, etc.). Since five years now, there is also a "Minister of State for Culture and Federal Government Commissioner for Culture and Media" (BKM) who is the addressee for cultural policy in the Federal government and who is to represent German culture in the European and international context. The matters discussed further in this report do concern both the fields of "culture/ schooling" and of "science,

research, development", and sometimes matters within the competence of the Ministers of the Interior (e.g., archives in some cases).

National level

Presently, there is no national policy on digitisation of cultural heritage in Germany laid down by the governmental bodies responsible for culture. However, in its own area of education and research, the responsible Federal Ministry does maintain a nation-wide policy. One of the latter's guiding idea is to establish, step-by-step, a unified "Digital Library" in the area of scientific and technical information in Germany. Its goal is to enable for rapid and comprehensive access to the worldwide available scientific information. The policy concentrates on developing the Internet-based information infrastructure and includes the improvement of the framework (e.g. standards). One of its main means is the "start-up" support of such services. In September 2002, the Federal Ministry for Education and Research (BMBF) published a strategic paper on "Networking information – activating knowledge" (= "Information vernetzen – Wissen aktivieren") (see <http://www.dl-forum.de>). The Federal Ministry for Industry and Labour (Bundesministerium für Wirtschaft und Arbeit - BMWA) established a funding programme "InnoNet" (promotion of innovative networks) for small and medium enterprises in order to support innovative development. With the assistance of that programme, research results should be implemented in the market more rapidly. Also in this programme, projects relating to digitisation in the cultural heritage can be found. A nation-wide semi-government authority is the

German Research Foundation (DFG), to give support to projects and to establish project schemes for co-ordinate action in all fields of science. The DFG funds a number of projects in the establishment and improvement of scientific information infrastructures in Germany. In its LIS division (Scientific Library Services and Information Systems) the DFG supports the acquisition and Web-based cataloguing of digital research literature, the implementation of innovative electronic means of communication and publishing (including the long-term availability of digital documents), the development of new software and techniques for the improvement of scientific information systems and the construction of a national digital research library providing access to historical materials (<http://www.dfg.de/lis/lis@dfg.de>).

Cooperation developments and initiatives

For this section, initiatives and projects, relevant to the field of digitisation of cultural heritage, have been chosen which are surcompassing an individual organisation. The first group consists of nation-wide activities, whereas the second one provides information on regional or special activities. Those initiatives listed have been chosen to show the focus of the current funding programmes as well as to demonstrate the range of research undertaken currently.

Nation-wide

Digital Library Forum

The portal "Digital Library Forum" (<http://www.dl-forum.de>) funded by the BMBF brings together information on matters of the "Digital Library". Its focus is on the support given by the Federal Ministry BMBF,

by the German Research Foundation (DFG), by individual Bundesländer, and by other funding institutions.

Virtual specialized library

Among many other activities, the German Research Foundation (DFG) is running a programme to support the creation of a "Virtual specialized library" (Virtuelle Fachbibliothek), to be composed of many individual digital libraries. These are being built along the already existing decentralised system of specialized libraries which each aim at the utmost completeness in books and document holdings on a given special field of academic knowledge. The specialized digital libraries are to collect all digital material suitable to complement the traditional paper document stock in their fields. Interconnected within a distributed system, together they are to form "the Virtual specialized library". See: <http://www.virtuellefachbibliotheken.de>; http://www.dfg.de/forschungsfoerderung/wissenschaftliche_infrastruktur/lis/informationen_antragsteller/sondersammelgebiete.html.

Disciplinary Information Consortia

The goal of Information Consortia, funded by the BMBF, is to provide users with a single access point to all relevant information in full-text within their discipline, integrating authorization and billing procedures as part of a complete system. Information Consortia have been built for the disciplines education and social sciences (<http://www.infoconnex.de>), economics and economic practice (<http://www.econdoc.de>) and natural sciences and technology (<http://www.getinfo-doc.de>).



Kurfürstenbrief for Friederich II dated 24 August 1803
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VASCODA

Vascoda is a project aiming at building an Internet portal for science and research in Germany, combining the distributed content coming from the "virtual libraries" and the different "information consortia" (see above). The portal complements these "virtual library" and "information consortia" initiatives, and allows them to jointly present themselves in the Vascoda portal (<http://www.vascoda.de>). It thereby unites 37 important German libraries, research institutes and information centres. Vascoda is funded by the BMBF and the DFG.

BAM-Portal

It is the aim of the common Internet Portal for Libraries, Archives and Museums (BAM-Portal) to become a central reference portal for digitised cultural assets for Germany and – together with other online-information-systems – part of a European network for online-resources of libraries, archives, and museums. In a first phase, funded by the German Research Foundation (DFG), a technical venue with test content was designed which allows libraries, archives and museums to make their digitised resources (information, content services, digitised objects) accessible through a special search engine. In a next step, an organisational structure has to be developed which runs the BAM-Portal under real-life conditions. <http://www.bam-portal.de>

NESTOR

NESTOR is a three-year project for creating a German network among libraries, archives, museums and universities to enhance awareness, and joint tools, concerning all matters of the long-term accessibility of digital data. The project is funded by the Federal

Ministry BMBF and has representatives from all those four sectors
<http://www.langzeitarchivierung.de>

Archivportal D

"Archivportal D" is prepared as a joint project of German State archives for an access point to archival descriptive information, open for all archival institutions which are willing to contribute their finding aids. A search engine will be combined with supplementary services and personalisation for specific groups of searchers. The data format will be XML. EAD (Encoded Archival Description) will be used as an exchange format for the integration of heterogeneous data structures. Contributing repositories will receive tools for preparing their respective data.

Database of Personal Papers

The German Federal Archives (Bundesarchiv) host a central database for 21.000 collections of personal papers filled in by repositories of all kinds in Germany. A collection-based description is offered via a MySQL-database. The access works either with name search or with a structured presentation. The collection description includes biographical information on the collector.
<http://www.bundesarchiv.de/fi ndbuecher/stab/nachlaesse/einfueh.php>

Minutes of Cabinet Meetings

The German Federal Archives (Bundesarchiv) present on their Website the digitised minutes of the cabinet meetings of the Federal government. The presentation is XML-based and allows several search-methods, from hyperlink navigation to full-text search, and presents biographical information on persons. Thorough editing

with annotations identifies persons and events and links entries that refer to each other.

http://www.bundesarchiv.de/bestaende_finding_mittel/editionen/kabprot/index.html

PARSIFAL

The consortium PARSIFAL (composed of the German Federal Archives, The Archive School Marburg and the Archives Directorate Baden-Württemberg) provides archives with low cost tools for editing finding aids on XML-basis. The free software tool Midosa XML works similar to an XML-editor, but on the level of the document "finding aids" instead of the DTD-level. It includes style sheets for HTML presentations, RTF-printout and conversion to EAD-finding aids. Information.

<http://www.midosad.de>

EUBAM

Since September 2001, EUBAM is in existence, being a permanent joint Working Group of representatives from the ministries of culture, the BMBF, the sectors Archives / Libraries / Museums / Monument Protection, the German Research Council DFG, and other experts. Its task is the information of these sectors on the EU activities in the funding of culture and in the digitisation of cultural heritage, as well as the representation of Germany in the related EU bodies (e.g., NRG). (<http://www.eubam.de>) In February 2003, EUBAM held its first German national information day on the start of the 6th Framework programme and on other EU programmes.

LOSTART

LOSTART is a joint project since the mid-1990s of the Federal German Minister of Culture (BKM)

and the Bundesländer (<http://www.lostart.de>). The aim of this Internet portal is to list all cultural objects which have been alienated from their – most often – Jewish possessors between 1933 and 1945 as well as the spoils of war (those cultural objects having gone astray on grounds of World War II). In both cases, Lostart lists the objects missing and looked for, and the objects presently in the custody of cultural institutions which are in doubt about the latter's provenance and rightful ownership.

ARCHE. Laser-beamer for colour microfilms

Within the funding programme "InnoNet" (promotion of innovative networks), the Federal Ministry for Industry and Labour (Bundesministerium für Wirtschaft und Arbeit) funds the two-year project ARCHE (under preparation) to develop a laser-beamer for colour microfilms for the long-term preservation of born digitals or digitised documents, combined with a complete digitisation workflow including the re-digitisation of the colour microfilms. The project consortium includes research institutes, a university library, the Archives Directorate Baden-Württemberg, 5 public bodies, and 5 SMEs.





Munsing contract about the reunification of Württemberg, dated 14 December 1482
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Digitisation activities in the monument protection area

Digitisation activities are at present only starting in Germany in the monument protection area. Published handbooks, as well as monument "Topographies" (published by the regional monument protection authorities in Germany) do exist but are not yet digitised. Most of the regional monument protection authorities have kept electronically their lists of monuments of interest as databases. The database systems/software presently used are not overall uniform. For the future, a considerable extension of digitisation and more interlinking between the systems is envisaged. Currently, activities are starting to combine database entries with electronic geodata kept by the land registry authorities. An important document on European level to base the work on and to strive for compatibility of the databases is the "Core data index to historic buildings and monuments of the architectural heritage. Recommendation R(95) 3 of the Committee of Ministers of the CE to Member States on co-ordinating documentation methods and systems related to historic buildings and monuments of the architectural heritage" established by the Council of Europe in Strasbourg. It does determine the data fields which should be observed in the databases.

Cooperation developments (regional or specific)

DIGICULT-SH

In an EU-funded project, an Internet portal is presently being started in the German Bundesland Schleswig-Holstein, with the aim of bringing together all cultural information relevant in that region (theatres and theatre programmes, festivals, etc. as well as the permanent information relating to libraries, museums etc. with

their holdings). This includes the installation of a digital communication infrastructure for input/retrieval, decentralised search possibilities, the digitisation of the catalogues and object photos, and more. (<http://www.kulturnetz-sh.de>). <http://www.museen-sh.de> is a portal that presents the museums of this Bundesland, together with holdings, events, and other information related to them.

Kulturportal Bayern

On 30 June 2003, an Internet portal for culture (<http://www.kulturportal-bayern.de>) in the German Bundesland Bayern has been launched, offering information on cultural policy and its legal basis in this Bundesland, and covering the many cultural sectors like sculpture, theatre, dance, film, music, literature, architecture a.s.o. Besides the interlinking between such institutions, and their higher administrations, a dynamic database is offered which provides information on current events in the individual municipalities of the Bundesland. The Internet pages <http://www.museen-in-bayern.de> (offered by the Bavarian museum authority) do provide information specifically on and for the 1.150 museums in Bavaria, including search possibility by localities or special exhibitions.

Kalliope II

The Internet portal "<http://www.kalliopeportal.de>", organised by the State Library Berlin and funded by the DFG, is intended as the central retrieval tool for personal papers and autographs in Germany, leading to all such material. The portal also connects to other databases on this type of material. With an XML-based interface to be realised in the present project phase, communication with technically different

systems shall be realised. Kalliope makes use of the name authority file (PND) of the German National Library (DDB).

Manuscript database

<http://www.manuscripta-mediaevalia.de> is a specialized database, providing reference to some 64.000 handwritten manuscripts and to the full text of many of them, from German libraries.

DINI

DINI (German initiative for networked information) is an initiative established by German universities and scientific societies. Its aim is to foster agreements, co-operation and standards to ease the use of digital communication technology, i.a. at the universities. DINI is comprised of AMH (WG of media centres at German universities), Section 4 of the German library association (DBV) covering the scientific libraries, ZKI (association of centres for information processing in academic teaching), and several Scientific Societies. <http://www.dini.de>

OPUS

The German Research Foundation DFG has funded a project at the University of Stuttgart to establish an Online Publication Network, comprising its electronic publications in academic research and teaching relevant to the university. This test network has in early 2003 been extended to 21 German universities and 2 regional library networks in Germany http://elib.uni-stuttgart.de/opus/gemeinsame_suche.php

Karlsruher Virtueller Volltextkatalog (KVVK)

A new reference tool has been established by the University Library Karlsruhe (which already runs

the central German search engine KVK to browse the electronic catalogues of German regional library networks which list conventional printed material). This new tool is called KVVK (Karlsruhe virtual catalogue of electronic publications). It is a catalogue of electronic full-text publications held in 22 institutions (mostly German universities).

<http://www.ubka-uni.karlsruhe.de/kvbk.html>

Web-OPAC of online dissertations

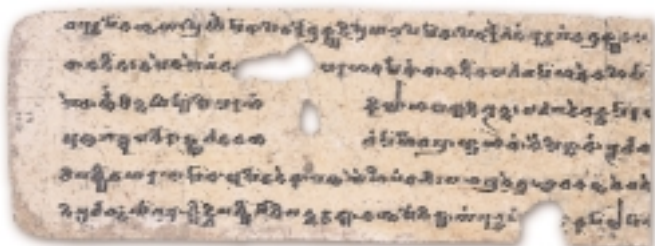
of the DDB (German National Library)

It enables access to the electronic catalogue of the German National Library DDB. Among its millions of bibliographic references is included the presently largest collection of online dissertations in Germany (ca. 20.000 from 70 German universities). <http://dbf-opac.ddb.de>

IBS-EZB

The German Research Foundation DFG has funded a project at the University of Regensburg to establish a user-interface for the electronic periodicals library. This user-interface shall potentially be multilingual. It shall allow the search for articles in electronic periodicals, regardless of the individual publisher. Use shall be made of the relevant databases of the participating publishers. The system shall also comprise an alerting service informing users on new electronic periodical articles in their field of interest. An interface with the German union reference data base for periodicals (ZDB) shall be developed. Currently, about 180 partners are involved mostly from Germany, Austria and Switzerland – but recently, also the Library of Congress joined.

<http://www.bibliothek.uni-regensburg.de/projekte/ezb/ibsezb.htm>



Sanscrit-Fragment from the Berliner Turfan-Sammlung
Staatsbibliothek zu Berlin - Preussischer Kulturbesitz, Orientabteilung

Emerging issues

Emerging issues can on the one hand be deduced from the upcoming issues in the discussions taking place currently in the cultural sector in Germany. On the other hand, they result from the new technological phenomena encountered while technology takes its rapid path of progress.

Open Access Initiative

The Max Planck Society as one of the leading public research organizations in Germany fosters the idea of "open access" in formulating the Berlin declaration, which has been signed by numerous high ranking representatives of science, culture and politics – domestic and European. The Berlin declaration is aiming at stimulating discussion within the scientific community on how to proceed, as rapidly as possible, to the universally accepted goal of providing open access to the primary scientific literature and to agree on significant, concrete steps that can be taken by the organizations which foster and support scientific research, by the scientists which generate the research results, the publishers which facilitate the peer-review and distribution of results of the research, and the scientists, librarians and others who depend on access to this knowledge so as to promote the rapid and efficient transition to open access publishing.
http://echo.mpg.de/echo_web/ECHO/home/documents/declaration

Issues discussed a lot in Germany presently are:

Long-term preservation of born digitals as well as digitised information

There is a growing awareness of the importance

of long-term preservation in Germany now, as the first experiences are being made with changing hardware systems and the need to migrate data more and more. This is particularly true in the universities and in the library sector, both concerned with scientific publications in digital format as well as the related reference tools which need to be conserved for a very long future. In those areas where first-time digitisation of material does not have an equally long-established tradition, awareness is not yet always as high as it should be. Recent projects (<http://www.langzeitarchivierung.de>), however, aim at compensating for this shortcoming.

Access

Both the increasing number of materials and the growing complexity of the documents stored digitally pose a strict requirement for precise and quick access. This requirement also develops in view of the growing amount of use of electronic documents. The incorporation of metadata during the process of creation or storage is, therefore, an important issue in the networks being built, e.g. for electronic dissertations. In Germany, there is an increasing number of portals in development. They are planned as central access points to specific topics and themes. The information comes from very different sources. So, the awareness for more technical standards and a more controlled vocabulary is about to develop. Nevertheless, a lot of those initiatives try to solve these problems individually and thus there is a risk of duplicating the work. This calls for intensified effort to propagate standards and to share developments.

Networks

Concurrent with the formation of portals, there is also a number of networks emerging. Here is a need to develop a kind of central directory with information on the aims and contents of the individual networks in order to co-operate and share results.

Need for funding of digitisation

A lot of the German cultural institutions accept the idea to open their resources for a wider public, but all of them, and the more so the small institutions, are lacking the money to digitise their holdings or at least the information on their holdings. So, what is needed is a funding scheme for digitisation which includes also small and medium sized museums, libraries and archives.

Use of NRG/MINERVA results and impact

The results of the MINERVA Working Groups as well as the NRG report have been distributed within relevant institutions in Germany. This widespread distribution heightened the awareness of the deficits and open tasks on the one hand but made available also the research results achieved as a reaction to the recommendations of the NRG.

The first NRG report was distributed through EUBAM. So it was recognised by this expert group, which had been called especially in existence to tackle the relation between the EU-bodies and the institutions involved in cultural activities in Germany. It was also made known to the archive directors' conference (Archivreferentenkonferenz des Bundes und der Länder (ARK)), as well as to the Working Group on Museums (UAM) and to the one on Libraries within the Conference of Cultural Ministers (KMK) in Germany.

Zeitung des Hamburgischen unpartheyischen Correspondenten, 1750
Staatsbibliothek zu Berlin - Preussischer Kulturbesitz,
Zeitungsabteilung



Astrolab, Toledo 1029/1030
Staatsbibliothek zu Berlin - Preussischer Kulturbesitz, Orientabteilung