

Deutsche Nationalbibliothek  
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## Annual Report 2010

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**2010 |** The relocation of the Deutsches Musikarchiv to the annex building in Leipzig saw the German National Library leave Berlin after 40 years. For Leipzig, however, the expansion represents a considerable enrichment to the music city. The new reading room and recording studio, with their close physical proximity to the library's other services, enable the German National Library to offer its users new possibilities for working in the Deutsches Musikarchiv.

Local use, exhibitions and events represent one end of the spectrum of the German National Library's work, web-based services for global use, the other. Further aspects include collaboration in international bodies and projects such as the Comité des Sages and Europeana, library standardisation and the commitment to copyright issues. The primary focus of the German National Library's work is, however, on collecting and cataloguing text-based and musical publications, making them available for use in the reading rooms and ensuring their long-term preservation.

## Committed and networked

**International Activities |** Projects such as Europeana and The European Library, the further development of authority data standards and the European discussion on copyright highlight how important it is for libraries to collaborate at the European and international levels. The German National Library is also actively involved in the Conference of European National Librarians (CENL), the association of directors of European national libraries, in which 49 libraries are represented from 46 member countries of the Council of Europe. The Director General of the German National Library holds the chair of CENL, and the Library runs the CENL Secretariat. The Library therefore plays a leading role in co-ordinating CENL activities. CENL published a discussion paper on the mass digitisation of content in collaboration with commercial partners in October 2010.

The German National Library is also honouring its non-European network obligations through its involvement in the international library organisation IFLA and CDNL, the Conference of Directors of National Libraries, and on the Board of Trustees of OCLC.

Of special significance here is the appointment of the Director General to the "Comité des Sages" which was appointed by the European Commission to submit recommendations by the end of 2010

on how to accelerate the digitisation, virtual accessibility and preservation of cultural works throughout Europe. The report urges the EU member states to redouble their efforts to make the collections held in their libraries, archives and museums available via the Internet; it also highlights the benefits of facilitating easier access to the cultural objects and knowledge of Europe.

**Europeana** | Europeana went into routine operation in 2010. Containing more than 15 million accessible digital objects from more than 1,500 cultural institutions from all European countries, it exceeded its annual target by a wide margin. Europeana allows searches to be made simultaneously in digital collections held in European libraries, archives and museums. Europeana is backed by the Europeana Foundation, launched in November 2007, which is chaired by the Director General of the German National Library.

**Reading Europe** | The European national libraries have digitised significant works from their respective countries and contributed them to Europeana as a means of showcasing the variety of Europe's literary heritage. Functioning as an aggregator of the European national libraries, The European Library has been presenting these works in its virtual "Reading Europe: European Culture through the book" exhibition. "Reading Europe" features roughly 1,000 works in 32 languages, with approximately 100 works per participating country. The German National Library has contributed a total of 22,000 pages from 104 well-known literary works written by German authors in different centuries. Print editions held by the Library have been digitised; all copyright issues have been strictly observed in each case, not only concerning the authors themselves but also other contributors such as illustrators or foreword writers. They can be accessed via the portal of the German National Library, the Europeana and, for the exhibition, via The European Library.

**DDB** | The committee of the Deutsche Digitale Bibliothek (German Digital Library – DDB) convened on 30 November. The specialist group consisting of federal and state-level delegates co-ordinated by the German National Library was transformed into the DDB competence network with its constituent bodies of general meeting, management board and committee. The German National Library is continuing its work within the DDB competence network. EUR 8 million has been made available to set up the project which is being jointly run by the federal, state and local governments. Technical project management is being provided by Fraunhofer IAIS. Under the leadership of the specialist group consisting of federal and state-level delegates the project has generated a needs analysis, devised a rough draft and received initial data from roughly 30 institutions in a test environment.

**Copyright** | Defining a publication usage regime which meets all the relevant legal requirements is pivotal to the success of digital library projects such as Europeana and the German Digital Library. This is because their purpose is to make cultural heritage from a wide range of fields permanently available to users beyond the confines of the contributing organisations themselves.

The German National Library's involvement takes the form of issuing statements and taking part in hearings on the national discussion regarding the third basket of the Copyright law. On the international level, the German National Library has been involved in discussing copyright issues in connection with digitisation and long-term preservation, web harvesting and, above all, orphan and out-of-print works. The objective of the joint initiative of the VG Wort, the Börsenverein des Deutschen Buchhandels and the library associations is to make such works available and to ensure that appropriate royalties are paid to any rights owners. The aim is to establish a firm legal footing for this groundbreaking model. This is an issue which is of particular importance to the German National Library. It also held meetings with newspaper publishers, for example, with regard to e-Papers.

## Online publications

**Online publications** | Implementation of an OAI interface for submitting online publications created a further possibility besides the existing forms whereby publishers can honour their statutory deposit obligation with regard to online publications and metadata. A so-called "hot-folder" was put into operation as a further interface. Further formats were incorporated alongside ONIX for Books 2.1 which has been in operation since 2009, allowing data to be ingested directly into the catalogue of the German National Library, with notification being provided in MARC21 / MARC-XML or XMetaDissPlus. Roughly 120,000 monograph online publications were submitted in 2010 alone.

The Germany ONIX group – a partnership of the central German catalogue providers, consisting of the VLB (German Books in Print), the book wholesalers KNV, LIBRI and Umbreit, the information provider NewBooks and the German National Library – generated extensive documentation on the notification of e-books in the ONIX data format. "Best Practices ONIX for Books – E-Book Standardmeldung" is a guide aimed at helping users to create and process standardised e-book notifications using ONIX 2.1.

For journals, a cataloguing record conforming to the ZDB rules is created for each title. Issues or articles assigned to this are then identified in the catalogue by the metadata supplied. The German National Library informed publishing houses and service providers about the requirements and technical options for the submission and provision of online publications at information sessions held during the Frankfurt Book Fair and at individual regional events.

**e-Paper** | An automatic workflow for the collection, cataloguing, provision and archiving of layout-faithful digital versions of printed daily newspapers was developed and put into routine operation in the e-Paper project launched in December 2009. Ever since, the issues of roughly 300 e-Paper titles are being collected, recorded in the catalogue of the German National Library and made available in the reading rooms in Leipzig and Frankfurt. The previous practice of microfilming newspapers can now be dispensed with in cases where a corresponding e-Paper can be collected which is identical in content and layout to the printed edition.

**Online university publications** | The groundwork was laid in 2010 for the changeover in the procedure for submitting online university publications. The new system permits the direct import of metadata into the catalogue of the German National Library and immediate archiving of the documents. 91 university libraries are now involved in the submission procedure. The collection increased by 13,000 to roughly 98,000 dissertations. The upgrading of the XMetaDiss metadata format to XMetaDissPlus, carried out in conjunction with the Bibliotheksservice-Zentrum Baden-Württemberg (Baden-Württemberg Library Services Centre – BSZ), also saw the end of the restriction of the format to dissertations and post-doctoral theses. In the future it will be possible to process all online publications using this format.

**Web harvesting** | In October a cross-departmental project was launched aimed at developing a system which covers all the steps involved in handling websites, from selection, collection and archiving through to provision. In the first phase, processes and tools for all stages of the procedure will be chosen on the basis of the tested workflows of selected national libraries. The most frequently used tools will subsequently be evaluated in test installations.

## Cataloguing

**Cataloguing** | In order to provide faster access to an even greater range of cataloguing data, and to offer a larger variety of search options for end users, the further development of the cataloguing

is concentrating on automatic processes, on optimising existing processes and on maintaining authority data. Since the start of the year metadata for online publications supplied by the submitter have been ingested directly into the Nationalbibliografie and enriched with machine-generated cataloguing data. Text books are now only classified by one subject class and the Regeln für den Schlagwortkatalog (Subject Cataloguing Rules, RSWK) has been used in its reformed form since the second quarter of 2010. Subject heading strings have replaced subject heading chains. In addition, roughly 120,000 titles in series A, B and H of the Deutsche Nationalbibliografie have been catalogued using DDC notation.

The subject cataloguing department has been working together with its library partners since the beginning of the year on a new system for subject cataloguing in the STM (science, technology, medicine) disciplines. Subject cataloguing of medical dissertations can be dispensed with from January 2011, however subject indexing is to be continued for STM publications and increased attention will be paid to SWD (Schlagwortnormdatei, Subject Headings Authority File) management in this area. Greater differentiation within individual subject classes of the Deutsche Nationalbibliografie has also been agreed with the national libraries of Austria and Switzerland in order to offer improved search possibilities; this will be applied from the 2011 bibliographic year.

The German National Library has been responsible for the ongoing data management of DDC German since 1.10.10. Roughly 2,200 classes were either changed or created in the year ended. MelvilSearch data has been under a Creative Commons licence since the start of 2010. It may now be used and forwarded free of charge for non-commercial purposes on condition that OCLC is cited as the rights owner and that the data content is not processed or changed.

**Petrus |** The PETRUS project (process-supporting software for the digital German National Library) was launched in 2009 with the objective of achieving results using machine-based methods which are as close as possible to those obtained with conventional cataloguing techniques as a means of handling the growing volume of cataloguing work carried out by the National Library. New work processes and quality criteria are being developed for cataloguing and subject cataloguing. Machine-based processes are being implemented which generate most of the cataloguing data automatically.

One of the main focuses of the work in 2010 was evaluation of the software-based methods and processes: for the recognition and ingest of existing cataloguing data, for the automatic linking of title data and authority files, for publication categorisation within the subject classes and for the automatic issue of subject headings based on the Subject Headings Authority File (SWD). The procurement and adaptation of any technologies still required and implementation of the first automated cataloguing processes are planned for 2011.

**Transfer of external data from Phononet to the Deutsches Musikarchiv |** The "Transfer of Phononet external data" project involves the transfer of data from the largest provider of external music data to the catalogue system of the German National Library as the basis for acquisition. The first stage saw the development of a possible data model designed to facilitate the transfer of track data alongside the title data of the CDs. The system is to be put into productive use in 2011.

## Standardisation

**RDA |** The German National Library has subjected the new RDA (Resource Description and Access) cataloguing code and the browser-based RDA Toolkit to functionality and cataloguing tests. The library is also a member of the European RDA interest group (EURIG). Key parts of the planned regulations and some of the main principles of RDA have been translated into German. The Office for Library Standards has drafted plans for modular RDA training courses. One of the first modules

announced on the website of the German National Library and in the virtual training environment Moodle is a one-day FRBR course comprising theoretical, practical and web-based components.

**Authority files** | The objective of the "Gemeinsame Normdatei (GND)" project is to combine the Corporate Body Authority File GKD (Gemeinsame Körperschaftsdatei), the German Personal Name Authority File PND (Personennamendatei) and the Subject Headings Authority File SWD (Schlagwortnormdatei) and the Uniform Title File of the Deutsches Musikarchiv, which are currently held separately, into a single universal authority file, the GND. Like the current authority files, the GND will be managed co-operatively by the authority file participants and held at the German National Library. All library networks in the German-speaking countries and the German Union Catalogue of Serials (ZDB) are involved in the GND project alongside the German National Library. The German National Library is also responsible for project implementation in terms of conceptual planning and generation of the common authority file of the German speaking countries, plus co-ordination with the library networks. Together with the project partners it has co-ordinated certain system-specific aspects, updated the format draft, formulated interim rules and agreed a joint schedule for the future implementation of the project.

The GKD was the last of the authority files to be adapted for online communication. This involved the introduction of a new update interface (ONS), changes to the data format and adjustment of the editing process. The last offline transfer input to the GKD was effected in mid-July 2010.

## Digital services

**Catalogue enrichment** | The catalogue enrichment service, carried out weekly, digitised a total of 59,000 tables of contents of new publications in the bibliography series A and, retrospectively, a further 66,000 tables of contents, mainly of monographs from the 1913 to 1918 years of acquisition. For the first time, catalogue enrichment of the complete bibliographic years 2008 and 2009 was offered as separate data packages with the metadata and the corresponding tables of contents. The German National Library also acquired roughly 88,000 tables of contents from library alliances to supplement its own data, meaning that it was able to offer roughly 400,000 tables of contents via its catalogue by the end of the year. The collaboration with MVB Marketing- und Verlagsservice des Buchhandels GmbH saw the number of content descriptions provided by publishers increase by 60,000 to a total of 320,000 texts.

**Bibliographic data** | Since the start of 2010 the German National Library has gradually been moving towards providing its bibliographic data free of charge for downloading, re-use and processing. The first step in this direction was taken on 1 March 2010 with the free provision of authority and catalogue enrichment data. The conditions of use for the free re-use of the data are based on the Creative Commons and similar licensing codes.

**Deutsche Nationalbibliografie** | From the start of the 2010 bibliographic year, the Deutsche Nationalbibliografie has been issued as a free online journal in PDF format in a layout similar to that of the previous printed and CD-ROM versions. It can be accessed via the universally accessible database which the German National Library uses to fulfil its legal brief of recording all new publications. In addition, the PDF files can also be purchased and downloaded via the WWW or from the FTP server of the German National Library, or dispatched in hard copy by post. The classification into series A, B, C, H, M and T and the new publication service remain unchanged; the frequency of publication will also not be altered.

The newly introduced Series O currently contains all digitally-based online publications, including journals and print-on-demand publications. The record files for Series O monographs are generally generated by the submitters themselves. Titles in Series O are classified into DDC subject headings

and contain rights data. Here, too, automatically generated cataloguing data is gradually being supplemented. The series is provided in MAB and MARC 21 formats on the server each month free of charge. There are no plans for a printable version.

**URN Service |** A Uniform Resource Name (URN) provides unique and permanent identification of objects, independently of their storage location. This is an important factor in ensuring their long-term accessibility. If the storage location of the publication alters, e.g. as the result of a server change, the access address (URL), lodged in a URN, can be corrected. As a result the URN retains its validity and continues to refer to the corresponding publication. Citing a URN is therefore a reliable method of providing long-term reference to a digital object. The URN service of the German National Library was set up in 2001 and has been continually improved ever since. The German National Library issues and manages URNs in the "urn:nbn:de" name space and offers a URN resolving service for Germany, Austria and Switzerland. Roughly 3.7 million URNs are currently registered with the German National Library; approximately 2.2 million URNs were added in 2010.

**Portal development |** Since the middle of the year it has been possible to download the authority records in Linked Open Data format via the catalogue and service portal of the German National Library. Since the middle of the year interested users have also been able to compile the Nationalbibliografie volumes by subject group and period, as required. This means that several Nationalbibliografie volumes can be requested simultaneously on different topics and for different periods via a calendar function and then re-compiled. The electronic circulation system has been integrated into the catalogue interface.

## Library Use and stock preservation

**Library Use |** The reading rooms of the German National Library in Leipzig, Frankfurt am Main and Berlin were open on 294 days in 2010. More than 650,000 media units were made available for use during this time and responses made to over 11,700 written requests. The collaboration set up between the Stadtbücherei Frankfurt am Main, the Universitätsbibliothek Johann Christian Senckenberg, the HeBIS-Verbundzentrale and the German National Library to answer inquiries submitted via the "InfoPoint" digital information service was continued.

The scope of the Frankfurt site of the German National Library was expanded in January: the library of the Deutsche Filminstitut DIF e.V., which was hitherto housed in the Deutsches Filmmuseum in Frankfurt, became homeless due to renovation work on the museum building. The as yet temporary relocation of the museum's staff to the German National Library allowed the collections of the film library to be kept accessible for users while profitably supplementing the range of services offered by the German National Library.

The electronic circulation system heralded the launch of several new functions for users, including a full overview of all lending transactions, reservations and renewals.

Library use was maintained despite the construction work on the annex building in Leipzig, and temporary restrictions were absorbed by the relocation of functions to other areas. At the same time the Technology reading room was modernised and user support concentrated at the central Info counter.

**Stock preservation |** Work on stock preservation plans was continued and intensified in certain areas by the Archiving / Stock Preservation department in the spring. The main areas of work included the execution of risk analyses in Leipzig and Frankfurt am Main, the definition of standards, the use of procedures to protect materials (stock protection), and aspects of digital

preservation. The overall objective is to draw up plans for expanding stock preservation as a core responsibility of the German National Library. Concrete results are expected in spring 2011.

More than 39 tonnes of library materials were preserved in 2010 under the Federal "Agreement on Conservation Services to Preserve Books and Archival Papers" by means of mass deacidification.

The annual national day of action for stock preservation held by the "Schriftliches Kulturgut erhalten" alliance was prepared by and held in the German National Library in Leipzig; in 2010 the motto was "A mass of culture. Quantities of quality." A varied programme – consisting of talks, presentations, workshop visits and guided tours, a panel discussion on "Preservation of originals in the digital era", and services provided by the Deutsches Buch- und Schriftmuseum for children – involved many partner institutions. A concern shared by all is the necessity of raising public awareness about stock preservation in libraries and archives.

**Deutsches Musikarchiv Data Carrier Migration** | The approximately 500,000 CD recordings held by the Deutsches Musikarchiv in Berlin, the earliest of which date from 1983, represent the only central collection of all CD recordings published in Germany. Physical damage and chemical processes inherent in the CD materials make it necessary to migrate them to a secure mass storage environment. Sample examinations conducted in 1994 and 2007 showed a significant increase in reading errors, ranging from loss of information through to inability to play.

The CD content is migrated using systems which permit precise error detection and logging and therefore documented quality management; this is carried out by the IT department of the German National Library. All the information recorded on the CD (audio, subcode, multimedia data) is saved. Trial migration of a total of 12,500 CDs was carried out in early 2010. Generation of a digital image of the CD was also tested, involving digitisation of the entire accompanying material. Adjustments to the migration system were carried out in summer 2010 and a further 6,000 CDs migrated.

## Annex building

**Annex building** | Stack rooms for the stocks of the German National Library went into operation in the three basement and four upper floors of the Leipzig annex building in mid-2010. A total of 80 kilometres of stocks have therefore now been shelved in the new stacks, freeing up space both in the book tower and in the main building through optimised organisation. A new function room has been furnished within the main building for public readings, talks and conferences at the crossover to the annex building. An exhibition area for historical music reproduction equipment and other exhibits is located nearby.

**Deutsches Musikarchiv** | The Deutsches Musikarchiv moved from Berlin to Leipzig in the autumn, recommencing its operations in the refurbished rooms of the building which had previously been used by the DBSM. Its stocks, occupying 11.5 km of shelf space, were relocated to the stacks in the new building. The reading room created in the western courtyard has been completed, apart from the installation of the sound technology and the fittings.

**Deutsches Buch- und Schriftmuseum** | The Deutsches Buch- und Schriftmuseum moved into its new offices in the annex building in June 2010 and put its collections into the new stacks. The new reading room has been completed and also the technical infrastructure has been built into the future exhibition areas of the museum.

The preparations for the official opening of a museum gallery dedicated primarily to the Library's work with children and young people are at an advanced stage. The light, modern and generously

proportioned reading room which houses the museum's own specialist library featuring roughly 82,000 media units and where the museum's own collection of roughly 1 million items can be used has been completed. The usage plan has been finalised and the content-related preparations including the exhibit plan for the first presentation have been completed for the vault, which will be used to exhibit special groups of items from the collections of the German National Library and external partners. For the first time the museum's collections have now found self-contained, clearly organised and appropriate display facilities in the new stacks which offer excellent conditions for preservation.

The curatorial preparations for the planned permanent exhibition "Schrift – Buch – digitale Netze. Eine kurze Mediengeschichte der Menschheit" are now complete and are gradually being adapted to the precise specifications of the display cabinets. The basic plan for the use of media in the new exhibition area has also been approved. The intention here is to provide an overarching framework which links everything from early history to the present day, raising interest in the history of media and stimulating reflection on their future in society.

## Projects

**ARROW** | The purpose of the ARROW (Accessible Registries of Rights Information and Orphan Works towards the Europeana) project is to facilitate identification of the rights owners of out-of-print and orphan works; an internal prototype has now been put into test operation. It contains the core functions of the automatic rights clarification process and the planned "Register of orphan works". The German National Library also continued its efforts to clarify the individual rights owners of titles entered in the "Best German Book Design" competition as test cases. The results are to be compared with the automatic results yielded by the ARROW system in order to assess its functional performance and reliability.

**CONTENTUS** | CONTENTUS is a part of the THESEUS project, a research programme financed by the Federal Ministry of Economics and Technology aimed at developing a new Internet-based knowledge infrastructure as a means of improving the use and exploitation of knowledge in the Internet. Together with partners from research and industry, the German National Library is developing new technologies for the purpose of setting up digital libraries and digital broadcast archives. A newly developed and fully-functioning demonstrator provides evidence of the progress the project made in the last year. Of particular significance here is the new user interface, designed on the basis of information obtained in user interviews. Its potential use within the German Digital Library was the main focus of possible deployment for CONTENTUS technology. The German National Library is also working on a further THESEUS project: the objective of the researchers involved in ALEXANDRIA is to improve the networkability of the knowledge available in Web 2.0 and to make it more accessible. A knowledge platform is being developed which not only collects information but also helps to handle the volume of data which is growing daily.

**CrissCross/MACS** | The CrissCross project, with its goal of improving the access to heterogeneously catalogued documents for library users, was successfully concluded at the end of September 2010. In the project, the majority of the headings in the Subject Headings Authority File (SWD) were enriched with Dewey Decimal Classification (DDC) notations, considerably improving the headword access to the DDC. In continuation of the MACS project, links to the equivalents in the authority files of the Library of Congress Subject Headings (LCSH) and the Répertoire d'autorité-matière encyclopédique et alphabétique unifié (RAMEAU) were created for the 50,000 most commonly used subject headings. The project results were published as linked open data and are now accessible for further research and other purposes, especially in the semantic web context. Also planned, and in part already realised in prototype form, is integration of the data in the portal of The European Library and use within the Europeana.



**Digital Preservation for Libraries (DP4lib)** | The aim of the two-year DFG Digital Preservation for Libraries (DP4lib) project is to evaluate the possibilities for setting up and running a joint service portfolio for long-term preservation and also for establishing a prototype for a basic service portfolio. Partial integration of these services in the productive business processes of the German National Library is also planned.

**IMPACT** | The main objectives of the EU-funded IMPACT (Improving Access to Text) project, launched in 2008, are to establish a competence centre for the mass digitisation of historical sources and to improve optical character recognition of historical texts. 26 national and regional libraries, research institutes and companies are involved in the project. One of the tasks of the German National Library in this project – the development of a helpdesk system which forwards incoming e-mail inquiries to the relevant experts and simplifies their processing – was concluded in 2010.

**KEEP** | The EU-funded KEEP (Keep Emulation Environments Portable) research project consists of a consortium of 11 European partners headed by the French national library. The aim of KEEP is to devise ideas and systems connected with the long-term preservation and provision of digital content. In contrast to the commonly adopted approach of migration, the focus in KEEP is on the use of emulation to ensure the preservation and accessibility of digital data. The German National Library's role in the project is to explore the issue of content transfer from different digital data carriers and their corresponding image file formats in cultural institutions such as national libraries and also museums as a first step towards emulation.

**KIM** | The "Kompetenzzentrum Interoperable Metadaten" (KIM) is supported by the DFG and is scheduled to run from 2006 to 2011. The project partners are the Niedersächsische Staats- und Universitätsbibliothek Göttingen (SUB) (project management), the Max Planck Digital Library and the German National Library. The partner in Austria is the University of Vienna, and in Switzerland, ETH Zurich. Optimum (re-)use of metadata for digital information environments in which heterogeneous information is brought together and networked requires interoperability of the data which is used and the metadata formats. KIM is therefore overseeing the development of metadata standards and introducing these into the German-speaking metadata community. KIM also supports the generation of metadata profiles and interoperable format design by offering training and consulting services. KIM has set up an information platform for national and international metadata standards which features translations, information and also the blog-based KIM DINI Technology Watch Report. This project is currently being transferred to a permanent form and amalgamated with the DINI International Standardisation Working Group, headed by DINI.

**KUR** | The investigation sponsored by the Kulturstiftung des Bundes and the Kulturstiftung der Länder ended in December 2010 with a final meeting in Frankfurt am Main. The aim of the project was to evaluate the long-term effectiveness of deacidification processes on the basis of scientific investigations. Most papers processed industrially between 1850 and 1980 contain lignin-based fibres (mechanical wood pulp) and acid substances. As a consequence the paper loses its stability over time, becoming brown and brittle and eventually unusable. For this reason deacidification procedures have been used since the 1990s in libraries and archives to neutralise any acid and to create an alkali reserve. The investigations have revealed that the vast majority of pH values measured after completion of the deacidification process were in the stipulated range. The alkali reserve remaining in the neutralised paper also meets the requirements in most cases. During examination of the degeneration of paper as a result of acid-related hydrolysis it emerged that the lower the level of damage before the start of treatment, the greater the effect of the deacidification process. In ideal circumstances, deacidification can slow down the decay of the paper by a factor of roughly three.

**Linked Data II** | The preceding project aimed at setting up linked data services was brought to a successful conclusion at the end of June 2010. Its objectives were to gather initial experience in publishing the German National Library's data as linked data, to forge and maintain contacts in the semantic web community and to set up an initial public beta service. In the follow-up project the

database was extended to include the results of the CrissCross project, the technical infrastructure was overhauled in terms of its scalability, modularity and possible automatic update mechanisms, and additional access interfaces were provided by the end of the year. There are direct links to the CONTENTUS and CrissCross projects. The service itself and the data are being used in further institutions and organisations such as the Deutsche Zentralbibliothek für Wirtschaftswissenschaften – Leibniz-Informationszentrum Wirtschaft, the Mannheim University Library, the Braunschweig TU and the 160+ German museums involved in the museum-digital project.

**LuKII** | LOCKSS and KOPAL Infrastructure and Interoperability (LuKII) is a project funded by the Deutsche Forschungsgemeinschaft (DFG) and carried out by the Humboldt-Universität zu Berlin (HUB) in partnership with the German National Library. HUB carries overall responsibility for the project. The aim of the project is to achieve interoperability between the distributed LOCKSS (Lots of Copies Keep Stuff Safe) archive system and the archive system set up by the BMBF-sponsored kopal project. The LOCKSS system, which is well established within academic circles in the USA in particular, features open-source software which permits low-cost storage with built-in redundancy for all networked LOCKSS partners in the form of a peer-to-peer network. Universität Regensburg, Bayerische Staatsbibliothek, Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, Forschungszentrum Jülich, SUB Göttingen and Hochschulbibliothekszentrum des Landes Nordrhein-Westfalen will also be involved in the German LOCKSS network. The project is also being given active support by the Library of Congress and Stanford University. In the current phase of the project, a LOCKSS box was installed in the German National Library and integrated in a LOCKSS network which is only accessible by project partners. A special wiki was set up for project documentation and communication. Initial conceptual planning has been carried out to define the interaction between LOCKSS and kopal.

nestor | The brief of the "Network of expertise for the long-term storage and accessibility of digital resources in Germany" – nestor – is to communicate how important long-term digital preservation is for society, science and business, and to bundle expertise in this field. The overall objective here is to create the conditions needed for archiving the digital cultural heritage of Germany on a long-term basis.

The work of nestor has been jointly shouldered by the partners in the form of a co-operation association since 1 July 2009. Four new partners have joined nestor since then. The association is open to further members, especially institutions whose remit includes long-term preservation. The nestor administrative office is run by the German National Library. There are currently five nestor working groups: Media WG, Co-operation and Networking WG, Digital Preservation WG, Legal WG and Emulation WG. Participation in the working groups is not dependent upon membership of the co-operation association. nestor is collaborating with universities and universities of applied science affiliated with nestor by a Memorandum of Understanding for initial and further training in the field of long-term digital preservation. A revised version of the nestor manual was published in August 2010.

ODE | The EU-funded Opportunities for Data Exchange (ODE) project is related thematically to the PARSE.Insight project which the German National Library was also involved in. The purpose of ODE is to devise decision-making tools for the establishment and alignment of infrastructures which permit permanent access to research data.

PARSE.Insight | In the EU-funded PARSE.Insight (Insight into issues of Permanent Access to the Records of Science in Europe) project, which was concluded in June, nine partners from five European countries assessed the current state of long-term preservation of scientific data and publications in Europe. Researchers, publishers and data managers throughout Europe were surveyed: on the current situation and future of digital archiving in research, on the interdisciplinary use of research data, on the expected support and on the different areas of responsibility in the archiving process. The case studies in the humanities and social sciences were co-ordinated by SUB Göttingen and the German National Library. Over 3,500 individuals submitted

responses to the survey questions. A roadmap for a European research data infrastructure has been developed based on the results. An interactive map showing the geographic locations of organisations involved in long-term preservation was also created. All of the project results are available for downloading.

**PersID** | Contributing experience from its own URN service, the German National Library has been involved in a project aimed at standardising and integrating persistent identifier (PI) solutions in Europe since October 2009. The objective of the PersID project is to set up a pan-European infrastructure for persistent identifiers.

**Retroconversion II** | The Retroconversion II project was conducted from 2008 to 2010 following conversion of the 1913 to 1973 Alphabetical Catalogue in 2005. It focused on the titles of the sound recording and sheet music collections plus selected catalogues of the Deutsches Buch- und Schriftmuseum and the Deutsches Exilarchiv. Previously these catalogues were the only instruments documenting the works indexed in them. The data of roughly 1.1 million titles were checked in the Retroconversion II project. A total of 661,000 new additions and local holdings, 524,000 new entries and links with the PND, GKD and in some cases the SWD were added. Incorporation of the data in the catalogue of the German National Library makes it significantly easier to find the titles.

**SHAMAN** | The four-year SHAMAN (Sustaining Heritage Access through Multivalent Archiving) project, involving 16 partners from seven European countries, lays the foundations for the grid-based networking of long-term preservation systems. This is aimed at facilitating co-operative, distributed and efficient execution of resource-intensive and complex digital preservation tasks. A software demonstrator developed by a group headed by the German National Library was presented at the end of April 2010. Three evaluation events were conducted with the software demonstrator to an audience of potential users of preservation repositories (in Frankfurt at the German National Library, in Vilnius and in Glasgow) to assess the technologies and scientific approaches developed in the SHAMAN project.

## Acquisitions, exhibitions, events

**Outstanding acquisitions** | Numerous acquisitions were added to the collections of archival papers and exile publications of the Deutsches Exilarchiv 1933–1945. Thirteen new complete and partial literary estates of German-speaking emigrants and two partial archives of exile researchers were added to the Archive; supplements were also made to existing collections. These include the partial literary estates of the author David Luschnat, the literary estate of the lawyer and publicist Adolf Moritz Steinschneider and other members of his family, and the estate of the politician and SPD (SoPaDe) chairman Hans Vogel.

Principal amongst the acquisitions of individual manuscripts are three letters from Thomas Mann and manuscripts of introductory lectures given by Otto Klemperer to students and children in 1936/37 during his period as conductor of the Los Angeles Philharmonic Orchestra.

Foremost among the exile publications are the "Propaganda and the Nazi War Film" study by Siegfried Kracauer and thirteen editions of the Otto Lehmann-Russbuehdt "Rundbriefe", a programme with an insert containing a very rare schedule for a production of Bertolt Brecht's "Les Sept Péchés Capitaux" from 1933, an edition of Bertus Aafjes' "Het gevecht met de muze" featuring coloured drawings subsequently added in 1944 by the illustrator Bertram Weihs, and the brochure "Are Refugees 'Enemy Aliens'?" by Thomas Mann and Bruno Frank, containing both statements made before the "Congressional Committee Investigating National Defense Migration", the so-called Tolan Committee.

Additions to the library and the historical archives of the Börsenverein include the handwritten chronicle of the Kurt Desch publishing house, the publication issued to commemorate the 50th anniversary of the J. Bielefelds publishing house, supplements to the archive of the Saucke bookshop and fragments of the archive of Hermann Schroedel Verlag KG, Hannover. Roughly 200 older titles from the private collection of the antiquarian bookseller Jens Koch and the personal copies of the catalogues of the antiquarian bookseller Carl Wegner, Berlin, were added to the collection of antiquarian book and auction catalogues.

Some of the acquisitions of the Deutsches Musikarchiv were supported by the Gesellschaft für das Buch; these include 80 phonographic rolls and rare shellac discs dating from 1897 onwards.

In 2010 the Deutsches Buch- und Schriftmuseum once again made targeted additions to its collections in the form of purchases and gifts. Besides the acquisition of individual pieces of particular interest and value, four complex additions are worthy of special mention. Their significance cannot be inferred from the size of the bundle of documents alone. They will significantly raise the overall profile of the museum's collections and extend the study possibilities in key thematic areas:

the Simon coloured paper collection consisting of 410 samples of handcrafted coloured paper dating from 1700 to 1850; 4,000 original watermarks and 1,000 further representations of watermarks on machine-made paper documenting the zenith of machine-made paper watermarks from 1885 to 1970; 8 original picture book illustrations by Eugen Oßwald for the "Bremer Stadtmusikanten"; materials relating to Korean type and printing technology including various raw materials and accurate reproductions plus a facsimile of the famous "Jikji" the oldest Korean book, produced in 1377 in movable type. All the work stages are documented, from the manufacture of the matrices, wax type-casting and sand-casting through to ready-mounted type sets. The objects provide an insight into the Korean technology which was developed roughly 80 years before Gutenberg's European innovation.

Individual acquisitions for the Klemm collection, for the specialist library, for the archival papers and documents on the history of books and paper, on the coloured paper collection, the graphic collection, the collection of art prints and the cultural history collection complete the acquisitions.

One of the events called "Salon bei Hinrichsen" organised by the Ephraim Carlebach foundation attracted attention to the Anne-Frank-Shoah Library in February 2010. Besides ongoing efforts to increase the collection, a number of projects and educational courses were carried out in collaboration with Leipzig schools, including full-day teacher training carried out in conjunction with the Leipzig educational agency aimed at conveying the significance of the Holocaust, the history of Jewishness and Anne Frank.

The Collection of Exile Literature and the Anne-Frank-Shoah Library were presented at the annual conference of the Jewish Collections Working Group.

Former Leipzig Jews who were invited by the city to take part in a visit programme, most of whom were accompanied by their spouses or children, discovered how Jewish history is presented and found out about the wide range of research and educational activities involved.

Major additions to the Leipzig Exile Collection include a copy of Thomas Mann's "Thamar" signed by the author and "Ten Poems" by Emily Dickinson, only 55 copies of which were ever produced and which feature calligraphy by the book designer Susanne Heymann.

**Exhibitions** | The objective of the "Rudolf Olden. Journalist gegen Hitler – Anwalt der Republik" exhibition, compiled from the partial estate of Rudolf Olden, other personal collections and also from loans from public institutions such as the Bundesarchiv, the Deutsches Literaturarchiv and the

University of London and private individuals, was to paint as comprehensive a picture as possible of the life and work of the pugnacious jurist, journalist and secretary of the Germany PEN club in exile and to remind the general public of his significance for the German democratic tradition. Rudolf Olden's biography was presented within the context of the times he lived through, stretching from the Empire and the First World War through to the Weimar Republic, National Socialism and the start of the Second World War.

Besides his biography, presented in documents and pictures, the accompanying book contains essays from renowned Olden researchers covering key aspects in the life and work of this extraordinary character. The opening of the exhibition, attended by Rudolf Olden's daughter, Mary E. (Kutzi) Sufott, now a resident of Jerusalem, the President of the German branch of P.E.N., Johano Strasser, and the publicist Michel Friedman, attracted a great deal of public attention. The accompanying event held in memory of the book burning, featuring Frido Mann and the violinist Vesselin Parashkevov, was also well received.

Different aspects of the work of the German National Library were also highlighted in two other exhibitions in Frankfurt:

The "Tende Stroemfeld Simonetta" exhibition and an opening ceremony attended by Roland Reuss and Klaus Theweleit and many others were organised to commemorate the 40th anniversary of the Stroemfeld / Roter Stern publishing house.

The "'...ein sehr lebhaftes Vielerlei'. Der Theatermann und Schriftsteller Rudolf Frank" exhibition was devoted to a further exile-related topic. The historian and publicist Alfred Grosser was the main speaker.

No exhibitions were organised at the Leipzig site this year due to the work on the annex building. Preparations for the new permanent exhibition of the Deutsches Buch- und Schriftmuseum went ahead, however. This will explore the three media innovations of handwriting, book printing with movable characters and cyberspace from a cultural history perspective.

**Events |** Public readings and lectures are held each year by the library and 2010 once again featured numerous interesting visitors at our sites: Heike Groos, Peter Härtling, Michael Krüger, Sabine Küchler, Ernesto Mallo, Frido Mann, Eva Menasse, Avi Primor, Jeremy Rifkin, Denis Scheck, Jan Seghers, Martin Walser and the actors Heikko Deutschmann, Hannelore Elsner, Lutz Görner, Burghart Klaußner, Dieter Mann, Felix von Manteuffel and Miroslav Nemec.

The German National Library took part for the first time in the Luminale, the biennial festival of lighting culture held in Frankfurt am Main. Each night the interactive laser sculpture by Rainer Plum drew numerous Luminale visitors to the Rotunda of the Frankfurt building.

The inaugural "Frankfurt liest ein Buch" event in the German National Library was very well received, as was the entire campaign, which is now to be held annually. The opening ceremony, at which nine well-known Frankfurt personalities gave readings from "Kaiserhofstrasse 12" by Valentin Senger, also featured performances by the jazz musician Emil Mangelsdorff and a speech by Arno Lustiger.

In October, Bear Family Records and the company founder Richard Weize invited guests to a ceremony held at the Deutsches Musikarchiv to commemorate publication of the first eleven CDs of the most extensive documentation to date of the German "Schlager" (1926 to 1970). This was the last event to be held at the Berlin premises. Musical entertainment was provided by Angela Winkler and Götz Alsmann.

The theme of the 2010 "Long Night of the Sciences" in Leipzig was "Energy". A reading entitled "Criminal Energy" by forensic pathologist and author Professor Dr. Wolfgang Dürwald, the Leipzig detective novelist Henner Kotte, Axel Thielmann, numerous guided tours and a lecture on the use of geothermal heat in the Leipzig annex building of the German National Library attracted roughly 700 visitors to the library.

Roughly 3,000 librarians and information specialists met in Leipzig from 15 to 18 March 2010 to attend a congress entitled "Menschen wollen Wissen! Bibliotheken im 21. Jahrhundert: international, interkulturell, interaktiv". The Leipzig Congress for Information and Libraries was held for the fourth time in the run-up to the Leipzig Book Fair. The event was locally organised by the Leipzig committee headed by the German National Library. The comprehensive and engaging programme gave the congress participants the opportunity to expand their professional know-how. The Guest of Honour was Spain which presented its library system in talks, panel discussions and an exhibition.

## Friends

**Gesellschaft für das Buch** | Founded in 1988, the Gesellschaft für das Buch e. V. acts as a society of friends dedicated to supporting the German National Library in its varied activities and to raising public awareness of the significance of the German National Library and therefore to reinforcing the international role of the Library as a national centre of book culture. One of the principal roles played by the Gesellschaft für das Buch – in co-operation with the German National Library – is to nurture European cultural and intellectual life. In 2010 it supported the exhibition devoted to the jurist, publicist and secretary of the Exile PEN organisation Rudolf Olden, a major evening event to celebrate the 100th birthday of Ulrich Becher, and the action day for the preservation of written cultural heritage. The collection of the Deutsches Musikarchiv was further enriched by the purchase of phonograph rolls, including some very rare examples, with the support of the Gesellschaft für das Buch.