2017

2020

STRATEGIC PRIORITIES

PREFACE

When in 2014 the German National Library published its Strategic Priorities for 2013 to 2016, this was the first time since its founding that the library had set out in print its objectives and priorities for its further development over a defined four-year period, covering both sites and all departments. A total of five Strategic Priorities were highlighted, each consisting of four to six main objectives and related sub-objectives, including suggested time frames: this yielded a total of 24 main objectives and 98 sub-objectives, including six (new) sub-objectives, scheduled to run over a period of several years, resulting in a total of 104 sub-objectives.

In the period from 2013 to 2016, 78% of the sub-objectives were met either in full or in part. Various reasons were identified in the cases in which the objectives were not met, the most frequent of which were inadequate human and financial resources, pre-conditions which were not met and changes in the overall framework since the objectives were formulated. Most of the objectives which were not met (either at all or in part) are still relevant, and so they have been included in modified form in the strategic considerations for the next cycle from 2017 to 2020.

Building upon its experience with the Strategic Priorities 2013–2016 and the "German National Library 2025: Strategic Compass" framework document which was published in September 2016, the German National Library is now presenting its priorities for the period from 2017 to 2020. The "Compass" indicated the direction over the next ten years, thereby providing a longer term perspective, whereas the Strategic Priorities 2017–2020, much like a road map, reveal the medium-term objectives which the German National Library intends to use to achieve its long-term goals. Like the earlier version which covered the previous years, the present "road map" is thus intended to serve the German National Library as a navigation tool to help staff identify the milestones in their daily work and at the same time to inform the partner institutions of the library's plans for the coming years.

The Advisory Committee of the German National Library, the Advisory Committee of the German Music Archive and the Administrative Council of the German National Library have now all approved the draft of the Strategic Priorities. We would like to express our sincere gratitude to everyone involved in drawing up the Strategic Priorities 2017–2020.
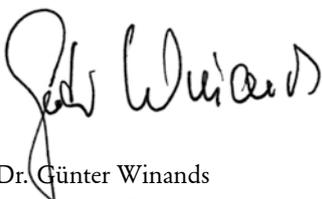
Dr. Günter Winands
Chairman of the Administrative Council
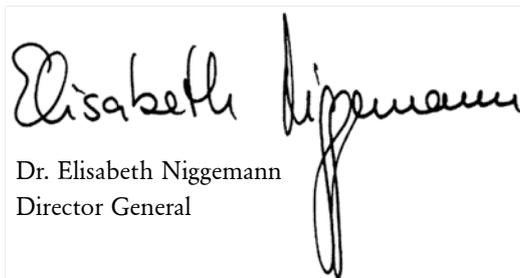
Dr. Elisabeth Niggemann
Director General

FOREWORD

Following the positive reception of the Strategic Priorities 2013–2016, the German National Library now presents the planning of its priorities for the next four years. The objectives for the period 2017 to 2020 adopt the same structure as the "German National Library 2025: Strategic Compass" paper which was published in September 2016. The Compass indicated the direction for the next ten years, thus looking further into the future, whereas the Strategic Priorities 2017–2020 reveal the medium-term objectives which the German National Library intends to use to achieve its long-term goals.

The objectives are set out for each of the four fields described in the Compass which the German National Library is planning to prioritise over the next few years. In addition, this paper contains a further, key section which details the conditions necessary for fulfilling the other objectives: Area 5 – "Encourage & Enable" sets out how the employees should be encouraged and supported in carrying out the Library's tasks and meeting its objectives through personnel, organisational and infrastructural measures.

The Strategic Priorities 2017–2020 serve the German National Library as a basis for planning, and help the employees decide where to focus their attention in their daily work. To highlight the link between the Compass and the objectives, this document uses the same structure as the Compass, quoting the main guidelines at the beginning of each section (coloured panels) and repeatedly highlighting connections to the Compass. Cross-references in the text itself reveal the links between closely related topics.

This paper provides a clear outline of the strategic objectives of the German National Library, thereby giving all cooperation partners and interested professionals an overview of the activities planned in the next four years. The fact that many objectives represent a continuation of existing ones is a clear indication of the long-term thinking and consistency in the way in which the German National Library fulfils its statutory duties.

1

COLLECT & PRESERVE

The extensive collections of text, image or sound recording-based publications issued since 1913 in Germany or in German, constitute a comprehensive, objective, unbiased and permanently preserved representation of a major part of the cultural heritage of Germany based on the library's legal mandate.

1.1 Collection building

"Neutrality and completeness remain the basic principles of collection building."

"The aim is to capture the diversity of the Web and to document its development."

"Selection and quality assurance are subject to an open and transparent process."

"We create international approaches for international production."

The comprehensive collection of all physical publications remains an important objective for the German National Library. Therefore, it will continue to prioritise the plugging of gaps in its holdings and support this by establishing effective methods for the automated detection of any omissions.

At the same time, expanding the digital collection will remain a major challenge in the coming years. Many issues need to be resolved, especially in the field of web harvesting. The emphasis here is not only on creating an effective infrastructure, but also (and above all) on finding answers to substantive-conceptual questions: What is meant by 'completeness' here? How much of what content of the Germany-based or German-speaking Web should the German National Library be collecting and archiving in order to preserve the digital cultural heritage? To answer these questions, the German National Library has to maintain an ongoing dialogue with representatives from the fields of science, politics, culture and society (› 4.6).

The German National Library is also faced with the question of whether the collection processes for physical and digital media works can be combined, and if so, how: When is the collection of different editions (manifestations) of a work required and desirable? In which cases can this be dispensed

with? The aim here is to develop a transparent yet pragmatic collection strategy which is supported by optimised workflows.

Objective 1: The collection guidelines should be updated.
- Re-evaluating the collection activities against the background of the shifting publication landscape and new publication processes. One of the goals is to coordinate the collection of physical and digital publications and thereby define which content is collected in which manifestation(s).

Objective 2: Progress in collection building should be evaluated systematically.
- Expanding automated identification of new publications and gaps in the collection through automated comparison with external data sources
- Defining the collection objectives in response to the identified gaps, and setting up a suitable monitoring system

Objective 3: The proportion of gaps in the physical media collections should be actively reduced through increased collection effort.
- Optimising the acquisition processes in order to free up resources which can be used to expand the active collection of physical media works
- Systematic processing of collection gaps

Objective 4: The acquisition of non-physical media works should be increased and extended to include other forms of publication.
- Stabilising and expanding the collection and processing infrastructure for digital publications
- Achieving a substantial increase in digital publications issued by publishers or scientific institutions
- Launching the collection of online publications from large self-publishing platforms in the non-scientific field
- Launching the collection of online music publications

Objective 5: The collection of web pages should be consolidated.
- Conceptually refining collection strategies (selective harvesting of particular topics and events, determination of the frequency of regular ".de" crawls, inclusion of dynamic resources, handling of social media)
- Stabilising workflows

1.2 Long-term preservation of physical media

"We develop procedures and standards for the preservation of media from the 20th and 21st centuries."

"Our goal remains preservation of the original publication and the original use experience."

"The systematic description of the condition and the usability of the holdings is to be greatly expanded."

The workflows associated with preservation planning must be continuously developed in order to preserve the originals and the original use experience for future generations. In particular, the latest standards should be integrated into the workflows. This includes systematically analysing the condition of the entire holdings, increasing conversion output levels and establishing prevention-related standards.

In accordance with the recommendations of the Coordination Office for Preservation of the Written Cultural Heritage (Koordinierungsstelle für die Erhaltung des schriftlichen Kulturguts, KEK), the focus for storage is to be shifted increasingly to the preservation of originals. This requires modification of the stack management at both locations and of the workflows for resource use and loans. For workflows which are indirectly associated with preservation planning (such as retrospective acquisition), the preservation aspects must be defined and integrated. Preventive measures such as collection cleaning must be systematised and turned into standard workflows. This also includes qualitative evaluation of the measures and their further development. Overall, quality management plays an important role in preservation planning. Here it is necessary to integrate new standards and to establish and develop additional standards for preserving the resources of the 20th and 21st centuries.

Objective 1: The description of the condition and the storage conditions of the resources should permit the carefully planned use of preservation measures.
- Introducing systematic stack mapping

Objective 2: The conversion output should be increased for damaged and vulnerable resources, especially audiovisual resources.
- Adapting preservation-related workflows to achieve higher and extended conversion output (AV resources)

Objective 3: The number of vulnerable resources should be reduced through carefully planned mass deacidification.
- Participating in the evaluation of deacidification methods

- Adjusting the deacidification strategy based on the results of the condition analysis
- Continuing the mass deacidification of selected resource groups

Objective 4: Standards should be established and continuously refined in preservation-related workflows and in workflows with resource-preserving aspects.
- Optimising resource storage at both sites with regard to the preservation of originals and the horizontal storage of large formats
- Establishing the collection cleaning workflow, including qualitative evaluation measures
- Integrating resource protection aspects into the workflow for retrospective acquisition

1.3 Long-term digital preservation

"We develop procedures and standards for the preservation of media from the 20th and 21st centuries."

"We are committed to the development of common, trustworthy archive infrastructures."

Even before the Law regarding the German National Library came into force in 2006, the German National Library had laid the conceptual and technical foundations for the long-term digital preservation of its holdings in a number of projects. Since then it has steadily expanded these in cooperation with national and international partners. The productive usage of the digital repository, the establishment of the nestor competence network and the provision of a long-term preservation service for others (AREDO) represent key milestones which have been reached along the way. Further expansion is planned (within the legal and budgetary limits).

The focus is now on the preservation and the continuous development of the infrastructure and the maintenance and improvement of the workflows which have been introduced. The diversity of the media works must be taken into account here. Furthermore, processes and workflows need to be developed to transfer all digital data to the preservation repository which is held by the German National Library but has not yet been transferred. It is also important to trial theoretically conceived preservation methods (such as migration and emulation) and to integrate them into the infrastructure and workflows of the National Library.

Objective 1: The infrastructure for long-term digital preservation should be expanded to meet requirements.

- Replacing the existing digital repository DIAS with a technically and functionally advanced successor system in order to meet the quantitative and qualitative demands
- Supporting the digital preservation workflows with a suitable local storage infrastructure to ensure efficient integration in the processes of the German National Library
- Establishing a monitoring and controlling system for long-term digital preservation in order to make a suitable and timely (proactive) response to changing circumstances

Objective 2: The processes for archiving digital publications should be expanded.

- Developing and integrating long-term preservation functionalities in other processes for the handling of different publication types, thereby making long-term preservation an integral part of the automated workflow
- Developing processes and workflows for ingesting all digital resources into the preservation repository in order to allow full synchronisation between our locally archived resources and those in our preservation repository
- Expanding access processes to include the preservation repository as part of comprehensive contingency management
- Integrating the provision of multimedia objects with their own emulation environments (adoption of the EMiL project results)
- Implementing a sample file format migration project in order to test theoretical processes in practice

Objective 3: Partnerships for meeting the challenges of long-term digital preservation should be expanded.

- Re-using new long-term digital preservation processes via AREDO on a cooperative basis
- Stabilising and developing nestor as a national competence network for long-term digital preservation
- Collaborating on the development and establishment of an international technical registry on integration in long-term preservation processes

2 | DOCUMENT & DISSEMINATE

The German National Library is a major global centre for bibliographic information. Its reliable, digitally cross-linked, freely and readily usable data promote the visibility of culture and knowledge in the information age.

2.1 Cataloguing all collected media works

"We ensure that the documentation of our holdings is up-to-date, comprehensive and reliable."

"Cataloguing means linking: our data constitute an information network."

"We link our data nationally and globally."

"We make use of the possibilities offered by automatic procedures."

"We are expanding our capabilities in the area of bulk data evaluation and harmonisation."

"We are pioneers in the field of modern cataloguing."

All media works collected by the German National Library should be catalogued in a way that adequately meets the requirements for searching, finding and exploring resources and information, and that fulfils the legal mandate to create the Deutsche Nationalbibliografie. Both clients (for whom the German National Library provides data in its function as a service provider) and end-users of search front-ends should be satisfied with our cataloguing. The cataloguing should be precise, and sustainable with regard to the Deutsche Nationalbibliografie.

In order to catalogue the growing number of media works, external data should be used increasingly, as should automated and (only where necessary) intellectual methods. Automated processes should be moved up to the beginning of the cataloguing process. An important objective in the coming years is the new and further development of such processes. At the same time, the German National Library faces the challenge of combining intellectual and automated cataloguing in order to develop a consistent and integrated operational process system that can be used for the acquisition and cataloguing

of all types of media works. The cataloguing process should be made more modular by 2020, thereby allowing it to be adapted flexibly, and descriptive and subject cataloguing to be harmonised. The basis of all cataloguing processes is the use of the Integrated Authority File (› 4.2).

In the long-term the German National Library should work towards cooperative cataloguing for the German-speaking countries – including jointly maintained databases and combining processes (› 4.6).

Objective 1: Substantive progress should be made in setting up a modular, integrated workflow for all media works.

- Merging intellectual descriptive and subject cataloguing processes
- Providing automated support for intellectual cataloguing operations
- Changing suitable groups of objects over to fully automated or external data-based cataloguing
- Integrating other external data to enrich bibliographic data and to support automated processes
- Merging and combining automated and intellectual processes in an integrated workflow

Objective 2: Cataloguing results should be optimised using automated methods.

- Continuously refining the text structure recognition method to support descriptive cataloguing
- Establishing a procedure for the use of text structure information in automated subject cataloguing
- Refining the methods for automated indexing and classification, and extending them to include physical and non-physical media
- Expanding the procedures for parallel linking, work clustering and authority data linking
- Establishing terminology management

Objective 3: The cataloguing methods and tools should be adapted to the new requirements.

- Setting up a technical environment for the evaluation of new procedures and processes
- Further development of methods and tools for the systematic analysis, bundling and merging of data
- Developing methods and tools for the systematic integration of external data sources, and for the integration of relevant information within the Library's own data holdings
- Expanding the cataloguing environment to include assistance functions that enable efficient and effective quality assurance and data linking
- Establishing a quality management system for continuous monitoring of operational processes and cataloguing

2.2 Globally disseminating the data of the German National Library

"We know our users' requirements."

"The usability of our data is our overriding priority."

"As a data hub, we ensure a permanent supply of up-to-date bibliographic information."

The data of the German National Library plays an important role in the provision of information in the German-speaking countries and for the global identification of publications from Germany and/or in German. To ensure broad usability and to increase the range of its data, the German National Library should become more sensitive to usage contexts and the needs of its data clients. The data services and cataloguing processes should be optimised based on these practical findings. Parallel to this, the efforts to disseminate the national bibliographic and authority data should be continued beyond the library context. A special priority here is further optimisation of the services and data used by search engines and Semantic Web applications.

Objective 1: The German National Library should have an up-to-date and comprehensive overview of the use of its data and the wishes and requirements of its data clients.

- Conducting market and usage analyses for the data and data services of the German National Library
- Making regular systematic surveys of user feedback on specific services and target groups
- Developing methods and tools related to customer management, introducing a professional system for first-level support

Objective 2: The data services should be optimised to enable their use by search engines.

- Offering search engine-optimised formats and dataset descriptions

Objective 3: The Linked Data Service should be technically refined and provide access to the entire data holdings.

- Integrating the data of the German Music Archive and the special collections in the Linked Data Service
- Expanding the technical environment and the interfaces

3 PRESENT & INSPIRE

The German National Library negotiates with rights owners to obtain rights or licenses for the worldwide use of its holdings. It uses innovative methods to explore the diversity of its holdings and makes these available for use within the reading rooms and – where possible – also outside of the library.

3.1 Search, Find, Explore

"Up-to-date and complete, any time, anywhere: we are modernising online access to the Deutsche Nationalbibliografie."

"Nudging providence in the right direction: we provide access for explorers."

Over the next few years, the main "Search, Find, Explore" objective of the German National Library will be to turn the existing system into a flexible, multi-dimensional service that can quickly adapt to new trends and user expectations: a service which perfectly presents the data and thus the search results for different purposes, and which provides the different target groups directly with the information they need. A range of search result visualisation forms should permit users to obtain views of the resources which reflect different aspects and enable them to explore certain topics more deeply and quickly than was previously possible. They should also help users to find relevant information which they were not explicitly looking for.

Objective 1: Online searches should meet users' expectations of a modern catalogue while reflecting the growing diversity of the resources.
- Implementing usage and application analyses as a basis for designing and prioritising the search functionalities
- Modernising the portal and indexing infrastructure in order to facilitate maintenance and expansion
- Optimising and expanding the general search functions, e.g. by harmonising the metadata for search
- Optimising and expanding the user interfaces, including support for different display sizes
- Improving search assistance, particularly for dependent works and web pages

- Offering supplementary information from external sources such as track and article information, author profiles, cover images

Objective 2: Experimental applications developed in cooperation with third parties should offer opportunities to explore thematically-related parts of the collections.
- Developing and evaluating prototypes in collaboration with research institutions and innovative IT companies.

3.2 Digitisation and digital use

"Digitisation, licensing, open access: The access we provide to our resources is as open as is legally possible."

One purpose of digitisation is to protect and preserve the original text, image and audio files of Germany's cultural memory. This is necessary whenever works are structurally damaged or particularly vulnerable due to material-specific peculiarities. The provision of digital reproductions allows the originals to be protected against further damage and their content to be permanently safeguarded against possible loss. A further purpose of digitisation is to radically improve the visibility, access to and usage possibilities of the resources for academic, research, education and culture purposes as well as for the general public in Germany and abroad.

Objective 1: The originals should be protected more effectively through digitisation.
- Digitising at least 50,000 damaged and vulnerable printed works
- Digitising all compact cassettes held by the German National Library
- Expanding the digitisation workflow to include at least one further type of medium
- Evaluating and (if necessary) implementing new methods for contactless mass digitisation of vulnerable mechano-acoustic sound carriers

Objective 2: The media holdings should become more visible and more accessible through digitisation.
- Introducing "Digitisation on demand" as a new end-user service
- Digitising selected resource segments for science and research, and for other interested parties
- Continuing the digitisation of tables of contents of all new acquisitions of the German National Library as a catalogue enrichment service

- Resuming retrospective digitisation of tables of content of selected resources
- Digitising the tables of content of selected historical journals for automated cataloguing and national bibliographic indexing of articles

Objective 3: Provision of the digital objects should be as comprehensive and user-friendly as possible.
- Continuously optimising the digital provision environment, e.g. improving usability, supporting additional media types and extending the possibilities of use in relation to copyright and license rights
- Setting up selective accessibility for regional legal deposit libraries to the e-paper holdings and other digital collections of the German National Library based on their respective collection profiles

3.3 On-site services

"We create places for encounters, for research, for learning and inspiration."

"In response to changing usage patterns, we are creating better opportunities for working with digital content."

More and more content is being requested in digital form, and users are placing increasingly exacting demands on the work facilities provided at the library itself. These include the possibility for intensive work either alone or in groups, the deployment of users' own devices for working with digital publications and also non-cash payment options.

Objective 1: The quality of experience of using the reading rooms should be increased.
- Transforming the reading rooms by setting up separate work areas for individuals and small workgroups

Objective 2: On-site access to the digital resources should be facilitated for users (including with their own devices). All legally permissible forms of the particular media work (copies, scans, prints or downloads) should be offered.
- Evaluating different possibilities, taking into account legal, technical and economic aspects, followed by implementation of the most appropriate solutions

Objective 3: A uniform billing and payment system should be introduced.
- Procuring a suitable system and integrating it in the existing workflows

3.4 Arts and cultural mediation and research support

"We develop long-term presentation concepts for our collections and topics."

"We develop services for the automated analysis of the digital resources and all metadata."

The German National Library plays an important role in providing cultural information with its comprehensive holdings of general texts and music, but also with its special collections in the German Museum of Books and Writing and the German Exile Archive 1933–1945. Its exhibitions at the Leipzig and Frankfurt sites enable visitors to experience culture and science at first hand. These also address current issues and strengthen the educational function of memory institutions. Such on-site services are supplemented by virtual exhibitions which can be accessed worldwide.

Universities and other research institutions are important partners in providing the information. The German National Library raises the profile of the work it performs under its legal mandate and of its social impact by feeding its resources into research work and engaging in collection-related projects.

Objective 1: The exhibitions of the German National Library should address current topics and help visitors experience history directly.
- Embedding exhibition topics in research and other contexts through exhibition-related partnerships with academics and people working in the cultural field
- Staging at least twelve exhibitions between now and 2020 and exploring topics in greater depth through events and conferences
- Developing a permanent exhibition on the subject of exile 1933–1945 from holdings of the German Exile Archive 1933–1945 for display at the Frankfurt site
- Testing a new information presentation format in addition to the classic exhibition catalogue

Objective 2: Targeted educational programmes should be expanded.
- Creating stable education networks and intensifying contacts with different types of school
- Establishing academic partnerships
- Expanding educational formats for students and continually updating them in cooperation with the tertiary education partners
- Standardising existing educational formats

Objective 3: A range of research partnership projects should be conducted and initial experience gained in "Digital Humanities".

- Expanding contacts with partners in the field of Digital Humanities
- Developing research partnerships (› 4.6)
- Applying digital humanities tools to the resources of the German National Library

Objective 4: New approaches to virtual exhibitions should be evaluated in cooperation with the Deutsche Digitale Bibliothek (DDB).

- Launching a new virtual exhibition in cooperation with the DDB
- Evaluating the newly created virtual exhibition with a view to a permanent partnership with the DDB

4 INTEGRATE & ORGANISE

The German National Library cooperates with other conceptually and technologically leading institutions and jointly initiates and coordinates innovations aimed at forging ever closer global cultural, scientific and educational networks.

4.1 Standardisation

> **"We define the main areas of standardisation work and function as a competence centre (and are regarded as such) in the fields of cataloguing, collection care, licensing, data formats, data interfaces and long-term preservation."**

Standards and norms are important prerequisites for partnerships to work efficiently and for networks of all kinds to function correctly. However, the necessity to create uniform standards and regulations does not end at national or linguistic boundaries. It is only international co-operation which allows individuals searching for information to access the full range of library work. Besides responding to users' needs, the German National Library must also monitor international developments and collaborate intensively on developing and updating standards in its ongoing standardisation work for the German-speaking countries.

Objective 1: The cataloguing rules should be flexible and universal, and support modern cataloguing.
- Participating in the continuous development of RDA
- Developing a subject cataloguing code on behalf of the Committee for Library Standards and in cooperation with the library partners

Objective 2: Standards for bibliographic formats and interfaces should be updated and optimised for practical use in the German-speaking world.
- Continuing national and international standardisation work (W3C, MARC Advisory Board, Data Format Expert Group, DINI-AG-KIM, BIBFRAME Initiative)

Objective 3: The approach for meeting the challenges of digital change should be coordinated nationally and internationally.
- Organising and supporting committees and conferences on long-term digital preservation (›1.3), web archiving, persistent identification (›4.4), and on the digitisation and preservation planning of 20th/21st century media

4.2 Integrated Authority File

> **"Our authority data service builds bridges between the data of the different cultural sectors."**

Co-operatively maintained authority data forms a reliable backbone for the development of a semantic culture data network. This is because it combines the resources and databases of a variety of cultural institutions. Currently, however, the Integrated Authority File (GND) is still predominantly focused on library-based applications and is not yet ready – organisationally or technically – for large-scale expansion. Changing this and advancing the opening up and expansion of the GND is the leading issue of this strategy cycle.

Objective 1: The GND should be organised on a more professional basis by the German National Library and its partners, and be opened up to participation by all types of cultural institution.
- Concluding a cooperation agreement with all existing GND partners, and adopting the GND guidelines and the 2017–2020 development programme
- Supporting the establishment of at least two GND agencies for museums and archives

Objective 2: The visibility and usability of the GND should be improved for the general public.
- Establishing a central Web entry point with an end-user application for data searches (including the display of linked databases and collections)

Objective 3: The infrastructure of the GND should be modernised.
- Creating a modern infrastructure for the maintenance and administration of the GND for the German-speaking countries which focuses on cooperation and the interlinking of information and optimally supports the creation, maintenance and provision of external and internal links
- Modernising data synchronisation between the German National Library and the GND partners

Objective 4: The GND should be integrated in international developments.

- Continuing and expanding cooperation with other authority files, such as Open Researcher and Contributor ID (ORCID), International Standard Name Identifier (ISNI)
- Intensifying the data exchange with other authority files
- Actively participating in the ongoing development of the Virtual International Authority File (VIAF)

4.3 German Union Catalogue of Serials

"Our partner institutions should be able to collaborate even more closely in the environment we provide. In return, we benefit from the expertise they contribute and the growing knowledge base."

The German National Library and the Staatsbibliothek zu Berlin are responsible for maintaining and developing the German Union Catalogue of Serials (ZDB). Especially in times of change in the library landscape, it is important to stabilise the role of the ZDB as a national documentation instrument and to establish it as the basis for possible further services, including outside the library realm.

Objective 1: The role of the ZDB should be stabilised and reinforced in times of change in the library landscape

- Improving the documentation of the ZDB in terms of licensing data, and data packets, archive holdings and open access information
- Stabilising and optimising the ZDB services for networks and libraries
- Increasing the attractiveness and the visibility of the ZDB nationally and internationally, in particular for academics and researchers

4.4 Persistent identifiers

The Uniform Resource Name (URN) service operated by the German National Library offers cultural and scientific/academic institutions in Germany the possibility of giving digital archive objects a unique, standardised identifier and of keeping them permanently addressable. To ensure the dependability of this important infrastructural function, a clear focus of the present strategic cycle is on regular technical modernisation of the URN service, coupled with an initiative to intensify national and international cooperation. Accordingly, the German National Library in cooperation with the Deutsche

Digitale Bibliothek will set up pilot operation of a persistent identifier service for cultural objects of all kinds.

Objective 1: The URN service should be modernised.

- Establishing a stable and scalable technical infrastructure for urn:nbn:de
- Reactivating and refining a structure for proactive communication with the URN partners
- Establishing a URN cluster together with national and European partners

Objective 2: A prototypical cross-discipline persistent identifier service should be established in collaboration with the Deutsche Digitale Bibliothek (DDB).

- Pilot operation of a cross-discipline persistent identifier service together with one or more partners in the DDB network

4.5 Deutsche Digitale Bibliothek

"The cooperation with the DDB will help preserve and guarantee the availability of digital services offered by German cultural institutions, and to make these available to users in a comprehensive service."

The German National Library is involved in the cross-discipline "Deutsche Digitale Bibliothek" (DDB) project as technical coordinator of the competence network and operates the central service point of the DDB. The successful work is to be continued. The German National Library will continue to work to ensure that the services of the DDB are put onto a stable footing by 2020 and that a permanent, effective organisational form is successfully established. Achieving these goals is the basis for the joint development of services and technology and their use in the German National Library as well as the interlinking of information structures (e.g. URN, GND, data management).

Objective 1: The German National Library should intensify its work in the DDB, the strategic projects of which should be developed and implemented with the support of the German National Library.

- Delivering building blocks for the construction of a new, sustainable basic architecture (› 4.6, › 4.4)
- Supporting the DDB in the construction and establishment of an aggregator network
- Developing a target group-specific user and service model together with the DDB

Objective 2: The intensive support of the German National Library should help the DDB obtain a stable and effective organisational form.

- Establishing a permanent organisational model for the DDB
- Concluding a contractual basis for the ongoing cooperation between the German National Library and the DDB

Objective 3: The German National Library should use the DDB as a propagator and a platform for developing and establishing cross-discipline services.

- Expanding the GND to all cultural disciplines (›4.2)
- Developing and establishing a discipline- and material independent PI service for cultural objects (›4.4)

Objective 4: The German National Library should use the services and technologies developed jointly with the DDB for its own work.

- Developing virtual exhibitions with the aid of the DDB services (›3.4)
- Re-using approaches for visualising and browsing the collections of cultural institutions

4.6 Shaping the future together

"We participate in socio-political debates on legal and cultural policy issues."

"We create international approaches for international production."

"Cross-discipline collaborations prevent gaps in the 'cultural memory'."

"We attach importance to joint cataloguing processes."

"We regularly collaborate on research in this field and share our experience and developments with our partner institutions."

To reflect its mission and its implementation against the backdrop of social change, the German National Library should seek dialogue with representatives of other cultural, scientific, political and social institutions. Various estimates and forecasts help the German National Library find answers to open questions. The search for new forms of cooperation with libraries and other cultural institutions is of particular importance. The German National Library is exploring the practical aspects of relevant future topics by taking part in collaborative projects.

Objective 1: Agreement should be found on a modern interpretation and implementation of the legal mandate of the German National Library in times of digital change.

- Discussing trends and developments in the publishing and music market, and their possible implications for the work of the German National Library
- Specifying the collection mandate for different types of web pages

Objective 2: Coordination and cooperation with national and regional libraries should be intensified.

- Establishing partnerships for the collection of web pages across state and federal borders
- Establishing partnerships for the collection of content offered on international platforms (for example, music)

Objective 3: The foundations should be laid for joint cataloguing processes with other institutions.

- Virtually merging heterogeneous data holdings, the contents of which partially overlap or complement each other
- Combining bibliographic information on works and editions via culturegraph
- Gradually establishing infrastructure and processes that enable central pooling and exchange of up-to-date bibliographic data

Objective 4: Through research partnerships the German National Library should gain expertise in handling important issues of the future and new technical possibilities.

- Participating in research partnerships in various fields such as
  - "Web archiving on demand" as a tool for scientific citations
  - Mass deacidification methods
  - Visualisation of semantic contexts
  - Digital Humanities

5 | ENCOURAGE & ENABLE

The German National Library should be an attractive employer that inspires its employees to develop their skills, promotes innovation and orients its organisation technically, operationally and structurally to the needs of the future.

5.1 Supporting and involving employees, recruiting specialists

Responding to the tasks and changes over the coming years will present challenges to all employees of the German National Library. Only with a willingness to depart from familiar paths and to venture into new areas will the Library succeed in uniting its staff members in order to achieve the objectives. The German National Library should provide the best possible basis for employees and support them in the change processes, making use of their individual knowledge and skills. This includes increasing the involvement of employees by testing new communication formats, as well as digitalising administrative processes as a means of simplifying and expediting them. Tried and tested formats for the involvement of employees in evaluating all of these activities, such as the regular employee survey, should be continued.

Objective 1: Employees should be offered targeted and continuous support in responding to the digital transformation.
- Specifying the requirement profiles of key positions for dealing with the strategic challenges of the future
- Identifying the fields in which employees should be encouraged
- Deriving a training programme and suitable training measures in the annual training plan

Objective 2: The German National Library should be able to attract, develop and retain specialist employees
- Recruiting specialists through intensified partnerships with universities and other institutions which have relevant syllabuses and objectives

Objective 3: Cross-discipline exchange and participation in improving our work processes should be supported organisationally and technically.
- Introducing new formats for cross-discipline exchange on areas of improvement
- Reconstructing and modernising the intranet, and expanding it to become the main cross-site internal information source

5.2 Making the organisation more flexible, and promoting ongoing innovation

The strategic challenges facing the German National Library require not only a readiness to embrace change among the employees, but also a more flexible organisation which allows the Library to act and react quickly.
This includes ensuring efficient operational processes as well as supporting and simplifying processes through electronic workflows. Innovative approaches must be tested and evaluated. Accordingly, the German National Library should develop a "positive error culture".

Objective 1: Continual monitoring of our operational processes should be established for quality assurance and process optimisation.
- Setting up a reference project (processing of incoming media)

Objective 2: Parts of the administrative processes should be digitalised.
- Implementing organisational and technical requirements of the Federation with regard to e-Government and digital administration
- Shortening decision-making processes and providing fully integrated media support for them through electronic workflows, for example in procurement procedures, invoice processing and travel management

5.3 Ensuring a good infrastructure and basic services

Increasing digitalisation is resulting in more exacting information technology requirements. This applies equally to all levels of provision: the technical infrastructure, the software systems which use it and all support services for the different domains and the central administration.
The German National Library must continuously monitor and assess the relevant trends in this market, given the ever shorter innovation and product life cycles and radical changes in the IT market in terms of suppliers, products and service models.

It is important to promote and implement new developments, but also to develop and optimise existing aspects under changing conditions.

Objective 1: The technical infrastructure should be put onto a firm technical and operational basis.

- Testing and evaluating the suitability of innovative products and solutions to support technical processes
- Providing an efficient storage solution which meets requirements
- Providing effective network support
- Implementing a cross-site IT contingency plan, taking into account technical and economic aspects

Objective 2: The software systems should be developed and (where appropriate) merged to meet user and operational requirements.

- Further development and (where appropriate) integration of existing software systems; avoidance of island solutions
- Seamless migration of old systems into new ones
- Establishment of scalability and the independence of individual sub-components from the remaining components

Objective 3: The basic services and the individual domain and central administration applications should be put onto a stable footing in the long-term and maintained at the operational-technical state-of-the-art.

- Providing a stable, long-term infrastructure (until 2025 at least) for the cataloguing system and the software modules used for it (currently CBS, Bibserv, WinIBW). The software and technology of this should be state-of-the-art
- Optimising and developing existing functions through standardisation of technical data interfaces, of web forms and internal formats
- Developing the infrastructure, the tools and methods for the analysis, comparison and processing of data and metadata (data warehousing)
- Optimising the import, processing and export processes of data formats as well as expanding the range of supported formats
- Establishing further partnerships with CBS partners
- Establishing and developing stable and secure IT processes and applications in human resource management
- Establishing IT applications for safeguarding administrative procedures, such as electronic files

5.4 External communication, marketing

In the digital age, a technically modern and attractive website represents an indispensable communication channel. Modernisation of the website of the German National Library is

therefore a high priority. At the same time, the services offered should be tailored to meet the specific needs of different target groups.

Objective 1: The communications and services provided by the German National Library should meet the specific needs of different target groups more effectively.

- Conducting a systematic analysis of the requirements of the cultural and scientific sectors
- Creating target group profiles for communication and other services provided by the German National Library
- Carrying out regular user surveys

Objective 2: Creating a modern and appealing website for the German National Library.

- Giving the website a target group-oriented relaunch
- Optimising it for use on mobile devices

Objective 3: The topics addressed by the German National Library should appeal to the general public, as well as the national and international scientific community. It should also expand its networks.

- Participating in specialist events and publications
- Developing methods and formats for dialogue with experts, the government and other relevant social groups