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Long-term Preservation Policy of the German National Library

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This document sets out the basic principles of long-term digital preservation at the German National Library (DNB). These principles mirror current views and will be continuously and critically monitored to ensure that they reflect any changes and developments in the field of long-term preservation.

The basic principles are intended primarily for internal and external clarification, i.e. as means of establishing benchmarks which the Library can use as orientation in its decision-making and its programme planning. Concrete work processes are documented elsewhere as implementations of these principles. These include processes which are specific to the Library and accordingly are subject to regular change.

Legal mandate

The Law regarding the German National Library (DNBG) from June 2006 entrusted the German National Library with the task of collecting, permanently archiving, fully documenting and bibliographically indexing all German, German-language and Germany-related publications issued from 1913 and making them accessible to the general public. The collection mandate explicitly includes digital media on data carriers and in public networks.

The collection mandate is described in detail in the collection guidelines and the legal deposit regulation. As part of its legal mandate the German National Library deploys long-term digital preservation methods to preserve its digital holdings and to maintain their accessibility and usability on a long-term basis, i.e. for an indefinite period of time and irrespective of technological changes.

→ Law regarding the German National Library:
http://bundesrecht.juris.de/dnbg/index.html
→ Legal Deposit Regulation: http://bundesrecht.juris.de/pflav/index.html
→ Collection guidelines: http://files.dnb.de/pdf/sammelrichtlinien.pdf

International responsibility and cooperation

In view of the quantity and diversity of digital media on data carriers and in public networks, the German National Library is seeking to set up cooperative structures in long-term digital preservation and to organise clear coordination of responsibilities with other memory institutions such as regional libraries and archives. As the central archiving library for Germany, the German National Library has also assumed international responsibility by leading the nestor administrative office, developing long-term preservation services for third parties and engaging in research and development and standardisation activities. In order to avoid stand-alone solutions and to encourage synergies, it promotes close coordination and cooperation with partners at the national and international level in the (further) development of long-term preservation solutions.

The principles of long-term preservation

1. **Equal treatment:** All media which have been collected or created (in the form of digitisation, for example) by the German National Library are accorded the same value in terms of their suitability for long-term archiving. The same goal applies for all media regardless of their content and technical complexity: that of ensuring their long-term accessibility and usability. In exceptional cases there may be deviations to this with regard to the time of processing.

2. **Use of automated processes:** The German National Library makes use of largely automated procedures for the depositing and further processing of digital media. Manual corrections are only carried out in exceptional cases.

3. **Care:** Potential sources of error are minimised by the design of the deposit and processing systems (standardised deposit interfaces, defined minimum standards for objects and metadata, format validation, monitoring, etc.). Any errors which occur are logged.

4. **Integrity**: The German National Library deploys appropriate measures for ensuring the integrity of the archived media. These include regular checking and early copying from data carriers before any data is lost. Minimum requirements are stipulated for storage environments.

5. **Authenticity:** The German National Library preserves its digital media in as authentic a state as possible. Before each preservation measure is carried out it must therefore be weighed up how much of the content's "look and feel" can be preserved for a justifiable amount of effort.

6. **Accessibility:** The German National Library ensures the permanent accessibility and usability of the archived media in the reading rooms of the Library. If copyright holders grant the Library the right to make their works freely accessible via public networks after being deposited, the German National Library decides in which display/reproduction environments the archive objects will remain permanently accessible and available based on cost-effectiveness criteria.

7. **Completeness:** The German National Library only archives complete objects. This means that intrinsically dynamic objects (such as websites, research data) are "completed" (i.e. made static) upon being deposited with the German National Library.

8. **Unique identifiability:** All archival objects are uniquely identified and rendered permanently accessible by means of a persistent identifier (URN). All new versions of an object (i.e. new intellectual units) are given new URNs. The identifier refers to the content and not the technical form. The last / most recent representation is accessible via the same identifier following a migration cycle.

9. **Active and anticipatory measures:** Digital preservation is an ongoing, never-ending process which continually requires new action to be taken. Technical metadata which are relevant for later preservation measures are recorded at the time of ingest and saved together with the objects to universally acknowledged standards. Even though technical formats may appear to be stable, all types of collected media must continuously be checked with regard to their future accessibility.

10. **Preservation measures for groups of holdings:** The German National Library makes use of the two most common preservation strategies, emulation and migration, depending

on the type of media and the file format concerned. Preservation measures are planned and assessed for entire groups of holdings, and not for individual objects. All preservation measures carry their own risks and costs, meaning that the corresponding projects are only initiated, planned and documented as required.

11. **Trustworthiness:** The German National Library qualifies as a trusted repository. It is currently undergoing the process of obtaining DIN 31644 certification, involving regular conformity assessments.

12. **Standards compliance:** The German National Library organises its long-term preservation processes on the basis of common standards and recommendations (OAIS, DIN 31644, nestor Guideline for Preservation Planning...). It regards standards compliance above all as a means of ensuring that the corresponding processes remain future-proof and that the German National Library retains its ability to function as a cooperation partner. For this reason the German National Library plays an active role in the development of national and international standards.

13. **Ongoing development:** The entire long-term preservation infrastructure (systems, processes, personnel) is subject to ongoing development. The German National Library always strives to have its long-term preservation activities informed by the current state-of-the-art. It therefore monitors the latest developments at the national and international level and conducts its own application research and development.

Roles and responsibilities

The activities of the different organisational units involved in the preservation planning of physical media and in ensuring the long-term accessibility of digital resources are concentrated in the "Collection Care" division. Different areas of the German National Library need to address long-term digital preservation issues. The main areas affected are in the IT department. Long-term digital preservation falls within the IT department's field of responsibility. Further departments also contribute to the corresponding processes.

There are dependencies and interdependencies between the long-term preservation, online publications, automatic cataloguing, URN service and URN strategy fields (http://www.persistent-identifier.de/?link=3352). The organisational structure provides for close coordination.