

## Response of the German National Library to the Bibliographic Framework Transition Initiative General Plan announced by the Library of Congress in October 2011

The German National Library supports the Bibliographic Framework Transition Initiative announced by the Library of Congress. We appreciate the initiation for a new metadata-infrastructure and standard framework and we wish to thank the Library of Congress for taking on this responsibility. We do think we will be able to bring in some contributions for the benefit of the information community as a whole.

Among these are experiences and expertise in the fields of authority data, data modeling, transitioning from one format to a different one, and clearer distinctions between cataloging format, storage format, and communication format.

### Project GND – Gemeinsame Normdatei

Over the last three decades large authority files have been developed in the German-speaking countries, supervised and maintained by the German National Library in collaboration with the library associations and numerous other institutions: the Corporate Body Authority File (GKD), the Name Authority File (PND), the Subject Headings Authority File (SWD) and the Uniform Title File of the Deutsches Musikarchiv (DMA-EST file) all of which have evolved over time using different data models and formats which no longer meet current cataloging and communication requirements.

The objective of the GND project is to combine these files to form a modern, web-compatible authority file which is capable of interweaving the wide range of resources and information held by libraries and other cultural institutions in the German-speaking countries and making these accessible to users. The "functional" differentiation into authority data for descriptive cataloging and subject cataloging has been abandoned in favor of an object-based approach. The GND will be exchanged in the MARC 21 Authority Format. The cataloging format is based on MARC 21 structures with enhancements to increase alignment between authority records. For users, linking of authority records into their own systems could be the solution for a better and more precise search and navigation in the future.

Like the present authority files, the GND will be managed cooperatively by the authority file contributors and held at the German National Library.

### Model-based approaches for next-generation-cataloging

Going beyond their current national rules for descriptive and subject cataloging (RAK, RSWK), German libraries have been applying for years explicit linking between records to make the valuable information assets that libraries create and curate highly re-usable.

For an enhanced reuse of data, German libraries established a cooperative management and maintenance of authority files and a German Union Catalogue of Serials. The German community attaches great importance to the linking of bibliographic resources with authority data as well as to the alignment of bibliographic resources that are related with each other. The linking is usually done by applying record control numbers, and Uniform Resource Identifiers (URIs).

Significant use cases for bibliographic resource alignment can be found in hierarchical representations, such as:

- a) single parts to a multipart work;
- b) volumes to the series in which they are published;
- c) articles to their issue, and furthermore an issue to its associated serial.

For an internationalization of our national cataloguing standards, the Office for Library Standards takes an active part in the development process of the new standard Resource Description and Access (RDA). In preparation for our announced implementation of RDA in summer 2013, DNB puts research efforts in the field of data analysis and data modeling, with a view to data compatibility aspects regarding the current practice and the representation in RDA. As a consequence, we have also developed models which point out solutions for the representation of hierarchical data structures applying RDA as the cataloguing standard and the underlying FRBR classes according to implementation scenario 1.

To share the arising benefits from hierarchical constructs with the international community, we would like to contribute our experience in this field to bring forward the development of future data format solutions, beginning from an abstract model point of view.

## Transitions and roles of formats

In collaboration with many national and international partners, German and Austrian libraries moved to the MARC formats. We have been able to rely on the Library of Congress and particularly on the colleagues at NDMSO, and on the worldwide MARC community whose part and partners we are today. Our experiences in the process of transitioning from one format to a different one may be helpful to the community as a whole, as some steps that we had to make and some packages that we had to work our way through may now return on a broader, i.e. a global level. As MARC is conceptually and structurally different from our former MAB format, we did not just have to modify some details, but had to rethink, rewrite and reprogram a lot in order to reach the goal. Trying to find a balance between the existing data, the models behind, the functionalities of our systems and the new circumstances sometimes has been like squaring the circle. Some compromises had to be made. Thus, the more important it seems to us now that we can bring in our expertise into the transition process, defining a new set of standards and then building bridges from the existing ones into this new "framework".

In Germany and Austria, we have a variety of library systems. Many of them have their own internal formats, for cataloging and storage purposes. Only on the level of data exchange or communication standardization takes place. We esteem this as advantageous. Cataloging and storing is done rather independently of the standard in which the systems can communicate to one another. Relatively few experts have to understand the details of an exchange format, most of them are standards experts and technicians. The system providers are free to design cataloging interfaces and representation forms for end users. In this respect, we are glad to see that in the General Plan there is a tendency to decouple input screens, internal storage, and displays from the communication format. As a result, the writing of mappings and crosswalks is indeed a major task in IT departments of German and Austrian libraries, primarily not for research reasons, but as a description for powerful and flexible conversion programs.

We look forward to ongoing cooperation with the Library of Congress and all the partners during the upcoming process with enthusiasm.