Die Zeitschriftendatenbank the German Union Catalogue of Serials: the ZDB

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Abstract:

The German Union Catalogue of Serials, the ZeitschriftenDatenBank in short ZDB, looks back on a history of more than thirty years, a history which has been a rather successful one. During these thirty years ZDB has developed from an automation project supported by only a few libraries to a national network with an extensive and reliable database, now firmly established in Germany.

According to the subject of today’s Serial Section Session I will start with some explanations about the ZDB itself, its technical and organizational structure and the included materials. Further, I will give some figures and explain how our bibliographic control works. A matter of interest will also be the prospective cooperation with international partners and the question whether ZDB is going to harmonize their rules with international ones.

The ZDB

The ZDB is the national union catalogue for shared cataloguing of serials of any type. It comprises

- journals, newspapers, series, databases (continuing integrating resources)
- of all periods, countries and languages and
- of different physical formats (paper, microfilm, electronic publication).

The ZDB has become the basis for serials information in regional library networks and local OPACs and beyond this the basis for interlibrary loans and document delivery in Germany, and beyond.
The responsibility for the ZDB has always been divided into technical and editorial management. Since 1999 Die Deutsche Bibliothek in Frankfurt am Main (DDB) has been the host of the database, being responsible for system maintenance and data distribution services, whilst the editorial work and also the task of further development lies with the Staatsbibliothek zu Berlin – Preußischer Kulturbesitz (SBB).

Today the ZDB contains more than 1,1 Mio. serial titles including
- about 420,000 current serials
- more than 60,000 newspapers and
- 22,000 electronic journals.

There are 5,8 Mio. holdings records, belonging to 160 member libraries representing in total 4,300 libraries. There is only one important library still missing: The membership of the German National Library, Die Deutsche Bibliothek is currently under preparation.

Workflow
Perhaps you are already aware that according to Germany’s federal system the cultural policy and thus also the library responsibilities are widely looked after by the federal states. That implies for instance that six different regional networks have been developed for cataloging monographs. Only the ZDB itself has always worked as a national network.

Some sentences to explain our workflow:
Every ZDB member or participating institution catalogs new title records and the holdings information online in the central cataloging database directly. So it is possible to gain the largest benefit from shared cataloguing. (In 70-80% of all cases you already find a title record and you only need to add your holding information to that title.)

In order to preserve the consistency of the data every title record older than two weeks must only be changed or edited by the Editorial Department for Titles or as for name authority data by the Editorial Department for Corporate Bodies. The requests for changes should be directed to the editing teams. In this way the ZDB is used as an authority file for serials. The responsibility for the holdings records, however, remains with the ZDB members.

Multifile System
The ZDB has been operated since its early beginnings as a multifile system. This means: apart from the ZDB but linked and closely belonging to it there is the file for corporate bodies, for which the Staatsbibliothek is also responsible as one of four partners. Besides SBB the Bavarian State Library, the German National Library and recently the Austrian National Library are responsible for editing corporate records.

This database forms the national authority file for corporate bodies.
In addition holdings information of various libraries belonging to a title record are directly linked to that title by means of the library file.
And occasionally – but as a great exception - there are also a few personal names which come from a ZDB-own file linked to the title record.

The great advantage of this multifile system lies in the possibility that corrections in one of the files immediately become part of the linked records. Thus the correction of a corporate author's name is valid not only in its own record, the authority record, but also in all linked title records.
Data distribution services
All the new title records and all the new holdings which have been cataloged in the ZDB are supplied weekly from Die Deutsche Bibliothek to the data recipients, the regional library networks.
Besides the new records all the edited title records and the new or newly edited corporate author records are also distributed. The data are placed on the file server of the German National Library to be collected by the networks via FTP.
This weekly data service makes it possible to guarantee the consistency of data between ZDB, the regional networks and local OPACs.
All the data services are delivered in MAB2, the German Exchange Format.
Twice a year the database members can obtain their library's selected data and they are able to access data via Z39.50 and soon by WWW based interfaces (such as SRU, SOAP, OAI).

E-Journals
With more than 21,000 e-journal titles the ZDB is one of the largest databases world-wide for this material. The e-journal titles are cataloged within the ZDB, building separate entries for printed and electronic editions of a journal, links between printed and electronic editions are provided. The online access to e-journals is made possible by hyperlinks in ZDB-OPAC and CD-ROM. Since these links only work if the electronic publication is free-chargeable and till now the ZDB lists only a few licence-related details, we work together with the so-called EZB, the Electronic Serials Database in Regensburg. There the access rights of libraries are administered.

ZDB and EZB have harmonized their workflows in such a way that any duplication in cataloguing work is avoided and that the users can get the necessary access information starting with the ZDB-OPAC, where most of the e-journals are linked by a special URL directly to the licence information in the EZB.
As part of the ZDB-OPAC a function to browse by subject has been realized for electronic journals.

And recently we have also included titles from journal aggregations like EBSCO’s in ZDB and transformed them into the ZDB format. Thus the German libraries may also use the bibliographic records, which are offered by the suppliers of aggregations, without being obliged to handle MARC records.
This is what we see as the greatest advantage of the integrated catalog: You can find e-journals in the database without even having to know, if an electronic version is available.
And not only information about e-journals but also about all kinds of materials as digitizations, microforms a.s.o. is available from this single database.

National and international integration of the ZDB
The ZDB and its services are the essential basis of different national and international projects
- by means of the data distribution the ZDB has become the basis of the German regional catalogs (concerning journals) and
- thus the basis of the local OPACs, too
- and also the basis of different document delivery systems, especially SUBITO there are links between ZDB and EZB, the electronic serials database
- and to content databases the ZDB-OPAC can also be checked via the KVK

1 i.e. Karlsruhe Virtual Catalog, a meta search interface which allows to access all German regional library catalogs via WWW
- as the ZDB is part of PiCarta International the database can be easily checked in international library environments.

**International Cooperation**

International cooperation of ZDB will take place also in two other respects:

Cooperation in a more technical sense, which means we will try to include the serials of the national Suisse and Austrian databases. Perhaps Switzerland will even become participant of ZDB. But at the moment we are still negotiating with representatives of these countries about possibilities of a closer cooperation. In a first step all the Austrian holdings will be included and represented in ZDB. The Österreichische Nationalbibliothek, ÖNB will act as Editorial Board for Austrian libraries.

The cooperation with Switzerland would be much easier if our cataloguing code was AACR based.

And this reflection leads us to the next and very important idea of cooperation: whether the harmonization of cataloguing rules and formats upon an international basis should be realized. International basis means, of course, the world of AACR2 and MARC 21.

When we compare the cataloging codes we may contrast the German Cataloging Codes RAK-WB und RAK-NBM versus AACR2 inclusive the Rule interpretations.

For the special demands of serials cataloguing in the ZDB we have developed rule interpretations, too, called ZETA. Zeta corresponds to the rule precisions for the Conser Database: the CONSER Cataloging Manual.

The German exchange format is MAB2, whereas the AACR world has adopted MARC 21.

You certainly will have noticed that Germany is debating passionately whether it will be possible to change the German cataloging codes and the exchange format. We call these considerations „Umstieg“ [Switch] and many collegues consider it to be the worst word of the year...

Die Deutsche Bibliothek has been given the task to carry out a study about the possibilities of a change of German codes and exchange format. Under these auspices we have been very keen to look at the results of the IFLA Meeting of Experts on an International Cataloging Code. Today there is not the opportunity and not enough time to talk about the different objectives which led to these resolutions. And there may be good reasons for internal harmonization within an international frame, especially to achieve leaner cataloguing of monographic titles e.g. by a simplified use of MARC21-data of LOC.

But for serials or ongoing publications things are really different. The impact of a switch to AACR on serials will be worse than with monographs. Serials records have to serve us over many years because of the mode of issuance of these publications. But the many changes of title and other information a serial will have during its "lifetime" lead to current editorial work: about 40 % of the serials are current, this means split entries may happen, and in case of changed rules split entries will also widely differ. This creates new and different entities of titles.

In all these cases it is not only necessary to correct these titles, eg. to link the predecessor to the continuing title and perhaps if you find still another AACR relevant reason for a split entry in the pre-title, you have to make three different entries for this serial.

The other really significant difference between the cataloguing codes is the fact, that 60 % of the title records are linked to corporate bodies, may be that the corporate body is the „creator“ and the main heading, or an access point for an editing body has to be set up.
According to the multifile system, which ZDB is using, titles and corporate bodies are also technically linked. In this connection it is a serious problem that only 40% of the GKD name records match with entries of the LoC Name headings.

The reasons are that AACR do not use official language entries in case of governments bodies, there are differences in handling subordinate bodies, the rules for split entries differ, especially at local area additions and AACR provide more corporate bodies entries than RAK (e.g. ships, congress entries).

All these differences lead to varying entities of corporate bodies. And logically different splitting rules of corporate author names result in different title entities.

Besides the varying splitting rules different title headings in case of uniform titles and subseries/subsections present problems.

Even more important is the fact, that all the linked holding information belonging to these title entities has to be adapted too. And this correction cannot be made by the central editing board but every participant is obliged to do his own corrections. These corrections with all their implications on the library's in-house systems - and if they are only necessary because of a possible change to a new cataloging code - are not likely to find a great acceptance among serials catalogers in Germany (not to mention possible restrictions by maintenance bodies). This is true at least for the time being.

And this is our preferred scenario: we would like to go on improving our cataloging code in accordance with international rules, especially the ISBDs and ISSN, trying to internationalize the rules of splitting, and working together with international projects like ISST to find standardized definitions and agreements upon conventions of title headings.

Further developments of ZDB: in the near future we will build up a “Serials Portal” in order to provide options
- to search and access data by WWW based interfaces and thus link ZDB to other WEB Services
- to search in content databases, which are directly linked to the ZDB and
- to enhance the possibility for direct ordering.