

News of ISBD

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Meeting:

107. Cataloguing

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Abstract

ISBD, the international standard for bibliographic description, has a history from 1971, when the first standard was published. The concept, itself, dates back to the 1969 International Meeting of Cataloguing Experts in Copenhagen, sponsored by the IFLA Committee on Cataloguing. This paper will focus, not on the history of ISBD, but rather on recent revisions, developments, work in progress, and future projects that have followed on publication of the preliminary edition of the Consolidated ISBD in 2007.

Background

Consolidated ISBD, preliminary edition was published in 2007, as a result of a process of merging the 7 specialized ISBDs plus the general one existing before. With it we get

the required integration of all kinds of descriptions of material in our libraries represented in our catalogues. This edition also brought the description of all materials to the same state of conformity with the model FRBR (Functional Requirements for Bibliographic Records). The whole process was established looking for more consistency and harmonization. From the World Wide Review, indispensable in the official approval process of an IFLA standard, were received many comments for updating the standard, which were not possible to attend at that time because of their complexity, the lack of agreement, and the greater length of time needed to attend to some specific issues.

Recent Revision

During these past two years, the ISBD Review Group has worked in preparing the first revision of the Consolidated ISBD, to be published hopefully this year of 2009. This edition may have changes in structure due to the inclusion of a new area, and harmonization with other areas, plus the changes of updating, harmonization, editorial, consideration of the suggestions remaining from the world wide review of the preliminary edition I have just mentioned, and new issues that have been arisen during the translations of the standard by national commissions which have contribute to increase the amount of issues.

In the preliminary edition of ISBD it was decided not to include the full examples that will be published separately in a supplement, rather than being included in the ISBD itself. Conscious of its importance for a correct understanding of the standard and as much they contribute to a proper application, the ISBD Review Group appointed an ISBD Examples Study Group in 2006 with Jaesun Lee, and William Garrison as chairs. After the resignation of the latter Jaesun Lee has continued as chair. This supplement to the consolidated edition of the ISBD provides full examples in sixteen languages. Many contributors participated in this project to compile various examples in a variety of languages for this supplement. Some of the individuals were from the IFLA Cataloguing Section Standing Committee and/or the ISBD Review Group. The others were other IFLA section members and IME ICC participants. The contributors submitted the examples in their native languages so that over 200 examples cover the following languages: Arabic, Chinese, Croatian, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, and Swedish, plus several African languages. This work has already been finished, and was going to be published this year before the IFLA meeting. But as it conforms to the structure that includes the GMD, and was completed prior to finalization of Area 0, the decision was made to wait until approval of the area to update all the examples and ensure that the ISBD text had been carefully studied and corrected before including examples in the publication.

It is necessary to recall that, although published in English as the accepted IFLA working language, ISBD is an international standard and, as such, it must accommodate many situations coming from different cultures, languages and scripts. This condition has its impact and could be reflected in decisions on terminology, structure of elements, stipulations, etc., that could not be part of a national code although would it be recommended practice to align with it in order to support international exchange and cooperation. The aim of IFLA standards is to offer consistency when we share

bibliographic information. Taking this into account it must be understood that changes are carefully studied and commented on, and expertise in organizations consulted before a decision is taken.

The ISBD Review Group decided at the IFLA General Meeting in Quebec in 2008 that it was very important to develop stronger and closer relationships with rule making bodies and international associations, as a way to be aware of the needs of descriptive cataloguing among a larger group of cataloguing bodies, and to achieve better the general goal promoting and developing of professional standards. ¹ In the ISBD Review Group there are now official members representing seven cataloguing codes: Chinese, Croatian, Finish, French, German, Korean, Spanish.

There are also consulting liaisons with the Joint Steering Committee for the development of RDA, Nippon Cataloguing Rules, with Regole italiane di catalogazione (REICAT), Russian Cataloguing Rules, and Slovenian cataloguing code by the moment. We expect to increase these consulting liaisons with other national rule making bodies identified by the series of IFLA Meetings of Experts on an International Cataloguing Code, held all around the world. In making efforts for compatibility with other standards there have been also consulting with other international institutions as Permanent Unimarc Committee, ISSN Network, and International Association of Musical Libraries, Archives and Documentation Centres.

One of the relevant recommendations and suggestions coming from the first IME ICC (IFLA Meetings of Experts on an International Cataloguing Code) in 2003 was to consider some issues related to placement and content of the general material designation (GMD). The ISBD Review Group appointed a Material Designations Study Group (MDSG), with Lynne Howarth as chair.

The Material Designations Study Group began discussions on these two issues. Lynne Howarth will next introduce you the new area 0 of the ISBD as a result of all these research, which represents the most important change in the revision of the ISBD.

Finally, during several IFLA Conferences has been suggested to open a line of investigation on XML schema language (e.g. a W3C XML Schema or a Document Type Definition) for the ISBD. In 2008 ISBD Review Group meeting, the group approved the recommendations from Material Designation Study Group to develop an XML Schema, and appointed a Study Group, whose chair Mirna Willer will explain the developments in such field.

It is a short time to give an overview of the amount of work invested in the updating of the standard and its development, but with this brief summary, I hope to have given you a general impression.

<u>Area 0</u>

Attempting to provide improved guidance regarding the use of the ISBDs for bibliographic description of resources in multiple formats, and recognizing the increasing incidence of resources published in more than one physical medium, and the challenges that these resources pose for bibliographic control, the ISBD Review Group appointed a task force in 2003 to investigate the general and specific material designations (GMD/SMD).

This duly appointed ISBD Material Designations Study Group (MDSG) was aware of concerns that had been raised by the Working Group on General Material Designations at the first IFLA Meeting of Experts on an International Cataloguing Code (IME ICC) in 2003 in Frankfurt. As Tom Delsey had noted in a 1998 study of the logical structure of Part I of the *Anglo-American Cataloguing Rules*, the GMD terms reflected a confusing mix of physical format, class of material, form of carrier, and notation (e.g., braille). Moreover, the location of the GMD immediately following the title proper was seen as interrupting the logical order and sequencing of title information. The IME ICC Working Group had suggested further that the status of the GMD as an optional element within ISBD be revisited given its relative importance to the catalogue user in identifying and selecting appropriate resources.

In its early deliberations the MDSG agreed on the importance and primacy of the GMD as an "early warning device" for catalogue users. At its IFLA 2005 meetings in Oslo, the group proposed the creation of a separate, unique, high level component for recording in bibliographic records. This "content/carrier" or "content/medium" designation would be mandatory. The ISBD Review Group charged the Study Group with preparing a definitive text.

By the IFLA 2007 meeting in Durban, the Preliminary Consolidated edition of the ISBD had been published, and the MDSG had drafted the proposal for a content/carrier component for ISBD Review Group discussion. The draft took into account version 1.0 of the RDA/ONIX Framework for Resource Categorization (August 2006), and the subsequent drafts of RDA: Resource Description and Access incorporating the RDA/ONIX Framework. It also reflected recommendations contained in the April 3, 2006 Draft of the IME ICC "Statement of International Cataloguing Principles." These and other documents were instrumental to the work of the Study Group as it addressed the structure and terminology of an independent ISBD component for content/carrier.

Also fundamental to, and incorporated in, the proposal were the following assumptions:

- Like the current ISBD general material designation [gmd], any proposed content/carrier component should, likewise, serve as an "early warning" or filtering device, assisting (catalogue) users in identifying and selecting resources suitable to their needs;
- The structure of content/carrier terms should be logical, the categories mutually exclusive, and the terminology clear, unambiguous, and readily understood by users;

- Carrier categories, in particular should be sufficiently flexible to accommodate new formats and types of resources (manifestations) as they evolve or are identified;
- The application of a content/carrier component should accommodate both local and broader user needs;
- Existing ISBD terminology should be retained wherever possible and applicable, to support compatibility with legacy records, and to minimize the number of new terms requiring extensive systems updates, cataloguer retraining, or user reorientation;
- A separate content/carrier component should be sufficiently inclusive as to clarify what additional information remains to be recorded in areas 3, 5, and 7, as necessary;
- Content/carrier terminology should be as compatible as possible or appropriate with that used by other metadata communities (e.g., publishing; museums; archives), to support interoperability. Such alignment should extend, in particular, to other resource description constituencies (e.g., RDA) to facilitate the exchange of bibliographic record.

In May 2008 a draft of the text for a proposed new ISBD Rule 1.2 Content/Carrier Component was circulated to the ISBD Review Group for discussion at the IFLA 2008 meetings in Quebec City.

From that latter set of deliberations emerged a commitment to a new area for the ISBD description. Assigned number "zero", the Content Form and Media Type Area, containing the three mandatory elements of (1) Content form, (2) Content qualification, and (3) Media type, was sent for worldwide review in late November, 2008. The 21 responses received by the January 30, 2009, deadline were analysed, and suggestions incorporated into a subsequent revised text of ISBD Area 0 which underwent further scrutiny by the ISBD Review Group.

As the introduction to new Area 0 (April 15, 2009, text) notes, "The purpose of the content form and media type area is to indicate at the very beginning of the record both the fundamental form(s) in which the content of a resource is expressed, and the type(s) of carrier used to convey that content so as to assist catalogue users in identifying and selecting resources appropriate to their needs." This is accomplished by a three-element construction that is intended to address some of the inconsistencies that were inherent to GMDs – now replaced by Preliminary Area 0. Consequently, the cataloguer is to record in the bibliographic description of each record, terms from closed lists representing each of the following three elements:

- **Content Form (mandatory)**: one or more terms reflecting the fundamental f orm(s) in which the content of a resource is expressed;
- **Content Qualification (mandatory as applicable to the resource being described)**: specifying the type, sensory nature, dimensionality, and/or presence or absence of motion for the resource being described; and

• **Media Type (mandatory)**: indicating the type(s) of carrier used to convey the content of the resource.

As of the writing of this paper (May 2009) the ISBD Review Group has recommended to the IFLA Cataloguing Section the approval of the May 04, 2009, final text of the proposed Area 0. Any further activities relating to updating the Consolidated ISBD to incorporate Area 0 await a final decision by the Cataloguing Section before IFLA 2009 in Milan.

ISBD/XML

PROJECT DEVELOPMENT OF ISBD/XML SCHEMA Goals and objectives

IFLA Cataloguing Section's ISBD Review Group approved the recommendations from its Material Designation Study Group to develop an XML Schema for the ISBD. This has been considered important for the ISBD Updating Project from the aspect of researching into the possibilities of reviewing ISBD concepts and the standard itself by the application of web technologies to the field such as building an ISBD/XML schema, and of evolving the standard into a tool open to the semantic web technologies and services. The ISBD/XML Study Group was formed, and accepted by the Cataloguing Section Standing Committee during the IFLA meeting in Quebec, 2008.

The **main goals** of the project are (1) to build a consensus on the *raison d'être* of moving the ISBD into the web environment, and define possible uses of such a product, (2) to develop ISBD/XML schema, (3) to ensure the interoperability of the product with similar ones such as MARC/DC XML schemas, at least at the conceptual level, within the current semantic web technologies and services, (4) to liaise with relevant constituencies in the field, and (5) to propose further development of software tools and services.

Due to the fact that it will not be possible to develop appropriate software tools and services within the proposed two-year project, and due to the rapid changes of web technologies, the **primary objective** of the ISBD/XML Study Group to be met with in this project is to position the ISBD as a relevant factor in assessing structured bibliographic information in the global information environment.

Methodology:

The methodology will be based on the above goals:

- (1) build consensus and define uses of ISBD/XML set of tools
- (2) identify and contact a consultant, preferably the one who would liaise between ISBD/XML SG and semantic web communities
- (3) identify and contract an XML expert for the purposes of building the ISBD/XML schema
- (4) identify and define bibliographic and/or related XML schemas to verify the possibilities of interoperability

(5) identify necessary procedures to position ISBD within the semantic web environment

Timeline:

Beginning of the project (January 2009) – August 2009 (IFLA Conference; 1st meeting):

- (1) build consensus and define uses of ISBD/XML set of tools: preliminary report to be presented to the ISBD Review Group and Cataloguing Section for discussion and acceptance
- (2) identify and contact a consultant, preferably the one who would liaise between ISBD/XML SG and semantic web communities
- (3) identify and contract an XML expert

August 2009 – March 2010 (2nd person-person meeting):

- (1) XML expert to purpose and build the first draft of an ISBD/XML schema; ISBD/XML SG members to consult and comment
- (2) ISBD/XML SG members with the consultant (liaison) to identify and define bibliographic and/or related XML schemas to verify the possibilities of interoperability: preliminary report discussed

March 2010 – August 2010 (IFLA Conference; 3rd meeting)

- (1) XML expert to build the first draft of an ISBD/XML schema; ISBD/XML SG members to consult and comment
- (2) ISBD/XML SG members with the consultant (liaison): draft report on the interoperability to be presented to the ISBD Review Group and Cataloguing Section for discussion and acceptance
- (3) ISBD/XML SG members with the consultant (liaison) to identify necessary procedures to position ISBD within the semantic web environment: draft report to be presented to the ISBD Review Group and Cataloguing Section for discussion and acceptance
- (4) Presentation of the interim results at the IFLA Conference workshop/session

August 2010 – January 2011 (end of the project)

- (1) Finalize the ISBD/XML schema
- (2) Finalize documentation

Anticipated beneficiaries and stakeholders:

It is anticipated that the result of the project will be primarily the (re)positioning of the IFLA standard and its values of enabling provision and (re)use of authoritative structured bibliographic information in the internet environment. The anticipated beneficiaries and stakeholders will be all interested in producing/sharing/(re)using authoritative bibliographic information in the web environment. This is in concordance with IFLA Statutes defined core values, article 6: "b) the belief that people, communities and organizations need universal and equitable access to information, ideas and works of imagination for their social, educational, cultural, democratic and economic well-being".

Expected outcomes and results and how these will be disseminated:

(1) Document on the use and application of the ISBD/XML

(2) ISBD/XML schema

(3) Document on the directions of further actions to position ISBD within the semantic web environment

Plan of follow-up action:

Taking into consideration that the present proposed project's two basic goals are to identify the relevant issues of new environment for the ISBD as a web content standard and to build the basic tool such as an ISBD/XML schema, it is realistic to predict a follow-up project that will aim at developing software tools and services appropriate to the then current web technologies.

ISBD ON THE WEB: ABOUT A STRATEGY OF CREATING ISBD/XML SCHEMA

The main task of the International Standard Bibliographic Description (ISBD) is to ensure consistent bibliographic description of all published resources worldwide. So far, this task was being fulfilled by any particular format for bibliographic description (e.g., MARC), however only at the level of principle, often accompanied by partial acceptance of standardized properties of ISBD elements and rules. Furthermore, MARC formats are not tested in accordance to their matching to the ISBD. One of the most popular XML technology which is now being used on the web - XML Schema - contains a mechanism that allows the validation of pre-declared standardized elements. Moreover, XML Schema is a tool with the ability to re-affirm the existing task of ISBD in a new network environment in the best possible way.

In practice, the XML Schema represents a document (XSD document) which declares pre-defined elements or types of elements which can also occur in the instances of the XSD document (XML documents) in the ways prescribed by that superior XSD document. Thus, elements which can be declared in an XML Schema can include all data elements which are used for bibliographic description, such as *title, author, year of publication, edition,* etc., and which are found in formats for bibliographic description. Majority of bibliographic formats used today have already created their own XML Schema (UNIMARC/XML Slim, MARC/XML, MODS, etc.), which allows validation of each XML record created in the respective format, and in its interoperability in the network environment. This means that all records created in a particular format can be eventually shared. In this regard, the terminology used in the web environment is "metadata schema" rather than "format for bibliographic description".

ISBD as a set of elements and rules is not accompanied by a concrete format for bibliographic description or metadata scheme. Therefore, ISBD can be considered as a kind of meta metadata schema, which prescribes only the type and some properties, but not necessarily the names of certain elements which are used for bibliographic description. Namely, by using this possibility to declare only types of elements, XML

Schema presents an excellent strategy for the conversion of ISBD elements and rules into the XML environment. For example, the element *Title proper*, as declared in the ISBD, excludes any parallel title or other title information. This characteristic can be declared in the XML Schema as an inherent feature of the type of an element which points to title proper without indicating how this element will be named.

After creating the ISBD/XML Schema for those who want to apply ISBD rules for bibliographic description of resources, there remains a task of creating a separate XML Schema in which each element used in the bibliographic description (one's own or one based on existing metadata schemas) would be joined to a certain type of element from the ISBD/XML Schema. In this way, it is declared that a certain element used to describe the resource has the properties of a certain type of element declared in ISBD/XML Schema. This option is also open to all existing bibliographic formats and metadata schemes (UNIMARC/XML Slim, MARC/XML, MODS, and even Dublin Core). Such a procedure would allow to measure the level of a particular matching between existing metadata schemes and ISBD elements and rules.

The described procedure can be carried out partially; this means that within one's own metadata schema only some elements are declared in a way that they have properties of ISBD's types of elements. In practice, that will be the most common case. Therefore, creating ISBD/XML schema can also be an incentive to the ISBD community to try to create its own ideal metadata scheme that would consistently follow the rules from ISBD/XML Schema, almost half a century old, and which with the help of XML technology finally has the opportunity to develop its full potential.