THE ISBD(CR) AND ISBD(CM): ISSUES IN CATALOGUING ELECTRONIC CONTINUING RESOURCES AND CARTOGRAPHIC MATERIALS

by

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As many serials, integrating resources, and cartographic materials are issued in electronic format, the needs of bibliographic agencies and users of bibliographic records are of concern to the IFLA Section on Cataloguing and other Sections that work with these materials. This paper will discuss the background for revisions taking place in the ISBDs, some terminology, the ISBD revision process and current activities, and issues related to electronic aspects of the resources.

Background

The ISBD(S): International Standard Bibliographic Description for Serials, revised edition, was published in 1988 and the ISBD(CM): International Standard Bibliographic Description for Cartographic Materials, revised edition, was published in 1987, following a review and harmonization effort for all the ISBDs that were available at that time.

In 1997, there was concern that the ISBD(ER): International Standard Bibliographic Description for Electronic Resources primarily covered monographic textual resources, without sufficient consideration for serials or cartographic materials, many of which appear in electronic form, and that there are some problems not dealt with that needed to be addressed.

The transformation from paper to electronic form is more than a simple act of reproducing the serial or map in a different format. Some issues and concerns thought to be important in considering serials and cartographic materials in electronic form include: serials in electronic form might contain only the text of the printed version, or might include other content, such as video clips, graphics, or multimedia enhancements that would not be available in the hard copy; some directories and indexes that in the past have been published in sequential form in paper are now being published as databases, with changes in the content treated as replacement information rather than as separate issues or parts; recording the scale of a digital map might take one of several alternative methods.

Electronic aspects of a resource must be described, mentioning information needed to use the resource such as the file size of the resource, whether the resource is on a CD-ROM or available through remote access, etc. The user of the catalogue must know whether he or she has the equipment necessary to use the resource.

Some terminology

(The first three definitions are from the 2001 draft of the ISBD(CR), the last one from the 2001 draft of the ISBD(CM)

Discussions of serials during the last several years, discussions spearheaded by Jean Hirons and Crystal Graham, and within CONSER (the Cooperative Online Serials Program), led to a decision among the ISBD(S) Working Group members and resource people that some new terminology was needed to refer to resources that included not only serials but also those that had some attributes of serials but were not, strictly speaking, serials.

A **continuing resource** is a bibliographic resource that is issued over time with no predetermined conclusion. Continuing resources include serials and continuing integrating resources.

A **serial** is a continuing resource issued in a succession of discrete issues or parts, usually bearing numbering, that has no predetermined conclusion.

An **integrating resource** is a bibliographic resource that is added to or changed by means of updates that do not remain discrete and are integrated into the whole. Integrating resources can be finite or continuing.

Integrating resources include resources where some of the data change within the resource, but the structure and much of the data remain the same at any one time. An updating looseleaf service is an example of this type of resource in print. Continuing directories and websites are examples in electronic form. They do not fall neatly into either monographic or serial categories. In order to describe these resources, it was decided that a new term was needed.

Cartographic materials are all materials representing, in whole or in part, the Earth or any celestial body at any scale, such as two- and three-dimensional maps and plans; digital maps; spatial datasets, aeronautical, nautical and celestial charts; globes; block-diagrams; map sections; aerial, satellite and space photographs; remote-sensing imagery; atlases; bird's-eye views, etc.

ISBD revision process and current activities

Revision of the International Standard Bibliographic Descriptions takes place through Working Groups. A Working Group is established for a particular ISBD. After proposals are approved by the Working Group, they are sent out for worldwide review. The Working Group then considers the comments received, revises the proposed ISBD and forwards the revised version to the ISBD Review Group. The ISBD Review Group is a coordinating group that ensures that the proposed ISBD changes fit within the ISBD framework and do not contradict other ISBDs, because changes in any one ISBD affect the others. Following the overview by this group, the proposed revised ISBD is sent to the Standing Committee of the Section on Cataloguing and to the Standing Committees of other Sections that may be involved in the revision for a vote to accept or reject.

IFLA's Section on Cataloguing set up a Working Group to revise the ISBD for Serials in 1997. This Working Group is chaired by Ingrid Parent (National Library of Canada). The members of the Working Group are mainly members of the Standing Committee of the Section, but they also include a member from the Section on Serial Publications, resource persons representing the ISSN Network, and some resource persons working on similar concerns in the Anglo-American Cataloguing Rules community. One of the key objectives is to minimize the bibliographic differences among the ISBD and the ISSN and AACR2 standards to the greatest extent possible. It was a good time to work on revisions of this kind, because the ISSN Network was revising its Manual (last published in 1983), and the Joint Steering Committee for Revision of AACR was addressing similar issues in order to revise AACR2.

The draft ISBD for Serials and Other Continuing Resources (the new version of the ISBD for Serials) was placed on the IFLANET for worldwide review from April-June 2001. Discussions on a revised draft, taking into consideration the comments received, took place in Boston at the 2001 IFLA conference, and decisions were made. Based on these decisions, the editor of the ISBD(CR), Edward Swanson, is preparing a final version for submission to

the ISBD Review Group, and expects it to be completed by the end of December 2001, and ready for publication early in 2002.
About the same time, the Section of Geography and Map Libraries was concerned that electronic aspects of cartographic materials had to be addressed in cataloguing these materials. Rather than approaching the changes through recommending amendments to the ISBD for Electronic Resources directly, that Section set up a Working Group to revise the ISBD for Cartographic Materials, adding data elements for electronic aspects. The Working Group is chaired by Göran Bäärnhielm (Royal Library, Stockholm, Sweden). A new draft of the ISBD for Cartographic Materials was distributed to the Working Group by its Chair in June, based on input provided to the previous drafts by members of the Working Group and others. This ISBD is still in a discussion stage within the Working Group, with many details yet to be decided. Delays have taken place partly because of potential changes in the ISBD for Electronic Resources and partly because final wording of the ISBDs for Serials and Other Continuing Resources and for Monographic Publications will affect some of the final wording in this ISBD.

The ISBD Review Group established a task force last year to provide guidelines for the treatment of publications where there is a need to refer to more than one ISBD in providing bibliographic descriptions. This includes consideration of the order in which information based on more than one ISBD will be transcribed and the punctuation that will be used within an area. The task force will submit its recommendations to the Review Group by the end of this year. The Review Group will review the recommendations and will post proposed guidelines on IFLANET for worldwide review by March 30, 2002. The ISBD(S) and ISBD(CM) Working Groups have been considering some of these issues as they worked on their revisions; it is important that the final results be consistent across all the ISBDs.

Funding has been obtained to engage a consultant to review the ISBD for Electronic Resources. The consultant will obtain input from various cataloguing communities. The main areas to be reviewed are on sources of information, the type and extent of resource area (area 3) and the physical description area (area 5). It is anticipated that the work will be completed within six months of its start.

- **How should an electronic serial be described when the resource is changed so that only the latest title, publication information, etc., now appear?**
- **How should integrating resources be described, where only the title, publication information, etc., from the latest iteration is available?**

Electronic continuing resources have features that required that we reexamine the basis for bibliographic descriptions. A print serial keeps its title and other bibliographic information, but the electronic version may be reformatted with the information available changing and with earlier information disappearing. There is no real choice for the basis of the description when the earlier information is no longer there

- If an electronic serial is reformatted or revised, showing only a later title, publication information, etc., the record is revised to treat the resource as an integrating resource; e.g.,

  All issues previously published under the title BMMR have been reformatted with the current title

- For an integrating resource, the original title, publication information, etc., are often not available, although they may be found somewhere in the resource. It is necessary to describe the resource based on the current iteration. When a new bibliographic record would not be required, the existing description would be changed to

reflect the current information, and a note made on when the resource was viewed. Earlier information, if known and considered important, would be placed in a note.

- For a looseleaf service, in print or online, a note is made, e.g.,

  Description based on: 1994 ed., through update 10

- **Description of print serials and electronic serials retaining discrete issues will be from the earliest issue or part**

Print serials and electronic serials retaining discrete issues with their original titles, publication statements, etc., will continue to be described from the first issue or part (or the first issue or part available if the bibliographic agency doesn't have the first).

As you know, these are some advantages to description from the earliest issue or part:

- The title on the earliest issue or part of a serial does not change (at least if the serial is a print serial) and provides stability to the bibliographic description.
- A stable title is important for description and identification of the item itself and in linking notes of associated records, particularly in the context of record sharing.
- Changes that are needed for identification or otherwise considered important for the users can be shown in notes.
- It provides a stable source of information for description so that little recataloguing would be needed as descriptive information in one part or another of a record changes in later issues (the title may have changed at one time and the publication information, etc., at a different time, for example).

and these are some advantages to description from the latest issue or part available

- The information in the record would be current as of the issues received, making it easier for library users to identify and select the serial wanted when recent issues are sought.
- Acquisitions people would find check-in of issues easier if the title, publication information, etc., matches the issue being received.
- Reference and collection development people would identify current serials more easily through the information that usually appears even in a brief display in an online public access catalogue, without having to read through notes.

The decision was made to continue to use the earliest issue or part for serials because the advantages of using the earliest issue or part outweigh the advantages of using the latest issue or part, even in an increasingly electronic environment.

- **Can a stable title be created (e.g. a combination of key title and uniform title) for linking and identification purposes, while the description of the resource could be changed to reflect the latest title, publication information, etc., for those who prefer that information to display prominently?**

The ISBD(S) Working Group discussed the possibility of creating an International Standard Serial Title that could be used as a benchmark for determining when to create a new bibliographic record for a serial. This would retain the advantage of stability for identification and for linking bibliographic records that is provided with the description based on the earliest issue or part while addressing the needs of users for current information. The basis for the bibliographic description could then be changed to the latest issue or part (within a "minor" title change). The ISST could take the best features of the key title of the ISSN Network and the uniform title of AACR2. However, work on the ISST was dropped by the

Working Group because there were too many aspects left to look at in the time available; many issues had to be addressed, and it was thought to be essential to experiment with an ISST with real records and to assess the impact of using it. Further work on the ISST will be undertaken under the aegis of the ISSN International Centre.

- **If use of more than one ISBD is needed to describe a resource, so that the result will be a combination of elements or areas, how should these elements or areas be combined?**

How are elements and areas combined if use of more than one ISBD is needed to describe a resource?

A General material designation is optional, but may be used for cartographic materials and is used for many non-book materials. If the resource is an electronic cartographic resource, the appropriate GMDs could be combined and displayed in a number of ways, for example: [Cartographic material (Electronic resource)], [Cartographic material] [Electronic resource], [Cartographic material : Electronic resource]. Cataloguers of cartographic materials generally agree that the GMD for those materials should be transcribed first. Frequently no GMD is used for the continuing resource aspect of an electronic continuing resource, so a GMD would be needed only for the electronic resource aspect. There are currently discussions taking place on the value of retaining GMDs, and this element might be discontinued in the future.

The material (or type of publication) specific area (area 3) contains data that are unique to a particular class of library material or type of publication. For continuing resources this area is used to record numbering. For cartographic materials it is used to record mathematical data. For electronic resources, it is used to record the type and extent of resource. The ISBD(G): General International Standard Bibliographic Description, provides the order if area 3 is repeated: information on cartographic materials comes first (e.g. scale information), followed (if the area is to be retained in the ISBD(ER)) by information for this area for electronic resources, and, finally, information for continuing resources (numbering information). Some examples illustrating descriptions for resources where area 3 is repeated:

. – Electronic text data. – Vol. 3, no. 4 (Apr. 1996) –
. – Scales differ. – Electronic map data. – Map 1 –
. – Scale not given. – Electronic map data

- **For cartographic materials, is there a need to know the details on how the digital graphic representation was created in area 3?**

Disagreement occurs among cataloguers of cartographic materials about whether information on digital graphic representation should be added in area 3, or whether it is better to put this information into a note. Digital graphic representation would include information such as the data type (e.g., raster (generally the result of scanning the material) or vector (generally the result of digitizing the information) and the object type (e.g., point, line, polygon, pixel). Users need to know whether an electronic cartographic resource is raster or vector since it determines what software may be used to manipulate the data, but it is not yet decided how early in the record that information may be needed. It is generally agreed, however, that the detailed projection, grid, etc., information should be given in area 7 as a note. In-depth details on digital graphic representation are thought to be too detailed for an ISBD and are best given in specialized cataloguing manuals.

- **How should scale be recorded for electronic maps?**

Scale is the ratio of distances on cartographic resources compared to the actual distances they represent. There is a difference of opinion among people working on the proposed revision to the ISBD for Cartographic Materials about how the scale statement for electronic cartographic resources should be worded. If there is an explicit statement about the scale in the electronic resource, it would be recorded in the record. The electronic resource, however, can be modified to display at various scales, rather than at only one scale. If there is no explicit statement, some map cataloguers recommend use of the phrase *Scale not given*. Other map cataloguers would prefer to use "Input scale:", with the scale of the original stated. However, this scale refers to information about the original hard copy map, not the map being catalogued, and therefore the decision will probably be that a note about the scale of the original would be put into area 7 instead.

Resolution (i.e. the size of the smallest object that can be discerned) can be thought of as roughly the equivalent of scale for digital cartographic materials. A proposed option in the draft ISBD is that resolution be substituted for scale when the information is readily available. Resolution can be expressed as the size in meters of the smallest feature that is discernable in the data (usually pixel size or vertex spacing). Examples:

, resolution: 1 pixel = 20 m
, resolution: minimum adjacent vertex spacing: 5 m ground distance

- **Why is a physical description area needed for all cartographic materials, even when what is being described is a remote-access electronic cartographic resource?**

Currently remote-access electronic resources are not catalogued with a physical description area, and this will not be changed for remote-access continuing resources. However, this area is considered very important by people working with cartographic materials because it contains information on file size, number of maps or remote-sensing images, colour, etc. Information on the size of a file is important enough that it should be placed in area 5 where it will be more readily accessible to users of the record. This is due in part to the very large file sizes of some electronic cartographic resources. Depending on one's method of access and the size of the file, it is possible for a file to require several hours to download. The user needs to know the size of the file no matter where the image is stored before he or she decides to download it at all, since its size may affect how the file can be used or even if there is room to store it locally. Another important aspect is colour. In general colour may be unimportant to most users of remotely-accessed resources, but for certain kinds of maps the lack of colour may make the item nearly useless, e.g., thematic maps use colour to communicate subject information.

Example:

1 remote-sensing image (97 megabytes) : col.

For web versions of printed maps in general, retention of the area 5 information that was in the record for the printed version in the same area for the electronic version would help the user determine the degree of similarity of the two versions. If the extent of a resource is 110 remote-sensing images on 1 CD-ROM, and that same database is available through remote access (as a non-changing database), it still contains 110 remote-sensing images. Only the mode of access is different. The number of bytes can be considered as the same sort of measurement as the number of pages, and this information would be useful in area 5.

- **Should map series be treated as integrating resources?**

One issue that affects both electronic and paper cartographic materials is how to handle map series. Map series consist of a number of related but physically separate and bibliographically distinct cartographic units intended by the producer(s) or issuing body or bodies to form a single group. For bibliographic treatment, the group is collectively identified by any commonly occurring unifying characteristic or combination of characteristics including a common designation (e.g. collective title, number, or a combination of both); sheet identification system (including successive or chronological numbering systems); scale; publisher; cartographic specifications; uniform format; etc.

Map series have some of the features of integrating resources, such as publication of new individual maps that update part of the series but not all of it, but generally map cataloguers do not consider them to be integrating resources. An integrating resource has "updates that do not remain discrete", while individual maps in a map series are self-contained and remain discrete. Many libraries do not discard old editions of the maps when new ones come in, so that the library has multiple editions of some sheets of the series, issued at different times, while there is a single edition of some other sheets. However, the conditions of issuance are similar to those of a looseleaf compilation of laws, and such a collection *is* treated as an integrating resource. Map series also have some of the characteristics of monographic series.

In practice map series are treated in many ways similar to the ways in which integrating resources are treated. As the information changes, the title proper in the record, the statement of responsibility (if any), and the publication statement reflect the new information. Older information is moved to notes. The issue of the treatment of map series in ISBD(CM) must be discussed further to determine how they fit into the definitions of resources and the treatment of other types of resources.

Conclusion

The comments presented earlier show that there are a number of issues in cataloguing continuing resources and cartographic materials that have been raised as a result of the need to describe electronic resources for these types of materials. Some of these issues have been resolved as the new ISBD for Serials and Other Continuing Resources has been developed, while others are still under discussion in drafts of the ISBD for Cartographic Materials. As mentioned earlier, it is anticipated that the ISBD(CR) will be published early in 2002, while the revision of the ISBD(CM) will be completed following potential revisions to the ISBD for Electronic Resources that would affect cataloguing of cartographic materials.