Association for Library Collections and Technical Services
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Cataloging and Classification Section

Committee on Cataloging: Description and Access

Task Force on Harmonization of ISBD(ER) and AACR2

Final Report

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FR: Task Force on the Harmonization of ISBD(ER) and AACR2

Final Report

1. Introduction

Recognizing the rapid changes in computer technology and the dynamic evolution of new forms of computer files – most notably interactive multimedia, optical discs, and remote electronic files on the Internet – the International Federation of Library Associations and Institutions (IFLA) Sections on Cataloguing and on Information Technology initiated, in 1994, a revision to the *International Standard Bibliographic Description for Computer Files* (ISBD(CF)) published in 1990. Following extensive consultation and worldwide review, a final version of the *ISBD(ER)* was approved by the IFLA sponsors and submitted to K.G. Saur for publication in late August, 1997.

With the emergence of this revised international standard for electronic resources, national cataloguing agencies have undertaken to review and update their rules for descriptive cataloguing. In this vein, the American Library Association, Committee on Cataloging: Description and Access (CC:DA) undertook a review of the *Anglo-American Cataloguing Rules,* striking a Task Force to consider opportunities for, and implications of, harmonizing *ISBD(ER)* with *AACR2*.

The Task Force on the Harmonization of ISBD(ER) and AACR2 was charged with the detailed review of the *ISBD(ER): International Standard Bibliographic Description for Electronic Resources* (1997), with noting areas in which Part 1 of *AACR2*, and Chapter 9 and Appendix D (Glossary), in particular, were not in conformance with the *ISBD(ER)*, and, if necessary, with proposing rule revisions to harmonize *AACR2* with the *ISBD(ER)*.

2. Task Force Workplan and Review Methodology

At its first meeting on January 11, 1998, the Task Force on the Harmonization of *ISBD(ER)* and *AACR2* identified the following components of *ISBD(ER)* for particular review and harmonization with *AACR2*:

0.5	Sources of information
Area 2	Edition area
Area 3	Type and Extent of Resource area **AND**
Appendix C	Recommended General Material Designation, Resource Designations and Specific Material Designations with their Definitions
Area 4	Publication, Distribution, etc., area
Area 5	Physical Description area
Area 7	Note area
0.2	Definitions (for consideration relative to Appendix D, Glossary, of *AACR2R*)

Responsibility for each of the components was assumed by a team of 2-3 members, with recommendations and proposals being posted to a closed LISTSERV for general discussion by the Task Force as a whole. Where appropriate, working documents or drafts were also mounted on the Task Force Web site for consideration and feedback from the broader bibliographic community. In its deliberations, the Task Force was mindful of the recommendations for changing rules in Chapter 9 of *AACR2R* emanating from the *Final Report* of the Task Force on Metadata and the Cataloging Rules, as well as deliberations ongoing with the CC:DA Task Force on Rule 0.24, and discussions resulting from the OCLC Intercat project and the application of the Olson guidelines, *Cataloging Internet resources* (1995; 1996).

At the February 1, 1999, meeting of CC:DA, the Task Force was asked to take into consideration responses to "4JSC/ALA/27 - Harmonization of AACR2 with ISBD(ER)" from each of the constituent bodies to JSC (i.e., from BL; LC; CCC; ACOC). Deliberations on those responses, as well as decisions on Task Force recommendations discussed at the CC:DA meeting of Monday, June 28, 1999, are incorporated into this final report. **Please note that**, with the exception of rules 9.0B2, (9.1B3, 9.1C2, and 9.5E1, all other rules which were referred for consideration to the Task Force on pp. 20-23 of 4JSC/ALA/27/ALA Follow-up/2, 12 April, 1999, were given close and particular review and have resulted in proposals listed in Section 4, below.

A recent and most welcome announcement is the availability of the electronic version of the *ISBD(ER)* on IFLANET (http://www.ifla.org/VII//s13/pubs/isbd.htm), which occurred at the time of the writing of this final report. The Task Force commends IFLA for making the text widely and readily available to the cataloguing community.

3. General Assumptions and Recommendations

After careful and detailed deliberation, the Task Force agreed that, while the "internationalization" of cataloguing standards was a desirable end, complete harmonization of *ISBD(ER)* and *AACR2R* was neither possible nor appropriate in all cases. In some proposals, the text of *ISBD(ER)* is wholly incorporated *verbatim* into individual *AACR2R* rules, representing full harmonization of the two texts. In others, *ISBD(ER)* text has been moderately, or even substantially reworded to conform with *AACR2R,* effecting a less exact harmonization of texts. In a few instances, such as the use of specific material designations, a minority opinion from the Task Force, supported broadly by CC:DA itself, is proposing that ***no*** change be made to *AACR2R*, thus creating conflict between the texts of *ISBD(ER)* and *AACR2R*, respectively. Finally, a small number of proposals, for example, the inclusion of other physical characteristics in *AACR2R* **9.5C2**, goes beyond provisions given in *ISBD(ER)* and essentially reinforces different application of cataloguing standards based on whichever code is used.

Having set the preceding framework, the Task Force makes the following general recommendations, with proposals for specific changes continuing immediately after. In general, the Task Force respectfully recommends that:

- *AACR2R* Chapter 9 include more current examples, and examples of a more contemporary nature, particularly those appropriate for networked and interactive multimedia electronic resources. Since these kinds of resources were not in widespread use when Chapter 9 was first written, the overall effect of their increasing use has been to broaden the scope of electronic resources to include characteristics formerly seen in other kinds of media, in other classes of material. The Task Force has proposed several especially in Area 7, notes. With the adoption of the GMD "electronic resources" in 9.1C1, the Task Force notes that interactive multimedia is included as a subset of electronic resources.

- *AACR2R* Glossary terms be substantially revised and terms be added using *ISBD(ER)* terminology and definitions wherever appropriate; the Task Force has included a number of *ISBD(ER)* compliant revisions and additions to the Glossary in this final report.

- the items on which there is either unanimous or substantial agreement as documented in *4JSC/ALA/27/ALA follow-up/2 12 April, 1999,* be adopted (exception: this Task Force report documents additional revisions to some glossary terms proposed in the 12 April, 1999, follow-up). In its recent deliberations, the Task Force endeavoured to focus on those areas on which there is not yet JSC agreement, as summarized on pp. 20 - 23 *of 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*

4. Specific Proposed Changes

Presentation of Proposals: In accordance with Joint Steering Committee (JSC) convention, proposed deletions or additions to the text of existing rules are highlighted by strikeout or double underscore, respectively. For clarity, the nature of the change is also described in square brackets following the *AACR2R* rule number. Proposed new rules are indicated as such. The reason for the proposed change is provided. For many, but not all, components, the corresponding section from *ISBD(ER)* follows, where appropriate. Where there was particular discussion or debate among members of the Task Force or a strong minority opinion concerning proposed revisions, this is noted in the report.

4.1 *ISBD(ER):* 0.5 Sources of Information

4.1.1 Rule 9.0A. Scope

Current Rule:

9.0A. Scope

9.0A1. The rules in this chapter cover the description of files that are encoded for manipulation by computer . These files comprise data and programs. Computer files may be stored on, or contained in, carrier available for direct access or by remote access.

. . .

Proposed Revision:

9.0A. Scope

9.0A1. The rules in this chapter cover the description of ~~files that are encoded for manipulation by computer~~ electronic resources. ~~These files comprise data and programs.~~ Electronic resources consist of data (information representing numbers, text, graphics, images, maps, sounds, etc.), programs (instructions, etc., that process the data for use), or combinations of data and programs. Electronic resources often include components with characteristics found in multiple classes of materials (as is the case with interactive multimedia); as such, there will frequently be a need to consult other chapters.

~~Computer files may be stored on, or contained in, carrier available for direct access or by remote access~~. For cataloguing purposes, electronic resources may be treated in one of two ways depending on whether access is direct (local) or remote (networked). Direct access is understood to mean that a physical carrier can be described. Such a carrier (e.g., disk/disc, cassette, cartridge) must be inserted by the user into a computer or into a peripheral attached to a computer. Remote access is understood to mean that no physical carrier can be handled

by the user – typically, access can only be provided by use of an input-output device (e.g., a terminal), either connected to a computer system (e.g., a resource in a network), or by use of resources stored in a hard disk or other storage device.

[**Note:** Paragraph # 2 of 9.0A1 remains as currently worded in *AACR2R*.]

Rationale:

The effect of the change of "computer file" to "electronic resource" has been to broaden the scope of Chapter 9 to include material with characteristics, once seen only in other kinds of media, in other classes of materials. With the adoption of the GMD "electronic resources" in 9.1C1, the Task Force notes that interactive multimedia is included as a subset of electronic resources, and new notes illustrate the broadened characteristics of electronic resources. In addition, the wording proposed above addresses specifically and clearly the distinctions between direct and remote access electronic resources.

Corresponding text from *ISBD(ER)*:

Electronic resources consist of materials that are computer-controlled, including materials that require the use of a peripheral (e.g. a CD-ROM player) attached to a computer; the items may or may not be used in the interactive mode. Included are two types of resources: data (information in the form of numbers, letters, graphics, images, and sound, or a combination thereof) and programs (instructions or routines for performing certain tasks including the processing of data). In addition, they may be combined to include electronic data and programs (e.g. online services, interactive multimedia).

For cataloguing purposes, electronic resources are treated in the ISBD(ER) in two ways depending on whether access is local or remote. Local access is understood to mean that a physical carrier can be described. Such a carrier (e.g. disk/disc, cassette, cartridge) must be inserted by the user into a computer or into a peripheral attached to a computer – typically a microcomputer. Remote access is understood to mean that no physical carrier can be handled by the user – typically, access can only be provided by use of an input-output device (e.g. a terminal) either connected to a computer system (e.g. a resource in a network) or by use of resources stored in a hard disk or other storage device.

This definition is taken as applying for the most part to resources, including interactive multimedia works, that are generally available, and includes those accessed by network or via telecommunications. Resources produced and/or generated for limited distribution, for fee on demand, or on a made-to-order basis are, however, included. A resource residing in permanent memory in a computer (ROM) is understood to be part of the device in which it is stored, and, if catalogued, would be treated as a resource requiring remote access. Programmed toys, calculators, and other programmed objects are considered to be outside the intended scope of the ISBD(ER).

4.1.2 Rule 9.0B1. Chief source of information

Current Rule:

9.0B. Sources of information

9.0B1. Chief source of information. The chief source of information for computer files is the title screen(s).

If there is no title screen, take the information from other formally presented internal evidence (e.g., main menus, program statements, first display of information, the header to the file including "Subject:" lines, information at the end of the file). In case of variation in fullness of information found in these sources, prefer the source with the most complete information.

If the computer file is unreadable without processing (e.g., compressed file, printer-formatted file), take the information from the file after it has been uncompressed, printed out, or otherwise processed for use.

If the information required is not available[1] from internal sources, take it from the following sources (in this order of preference):

the physical carrier or its labels [2]
information issued by the publisher, creator, etc., with the file (sometimes called "documentation")
information printed on the container issued by the publisher, distributor, etc.

Proposed Revision:

9.0B. Sources of information

9.0B1. Chief source of information. The chief source of information for ~~computer files~~ electronic resources is the ~~title screen(s)~~ resource itself.

~~If there is no title screen~~ Within the resource itself, take the information from ~~other~~ formally presented internal evidence (e.g., title screen(s), main menus, program statements, ~~first display~~ initial display(s) of information, home page(s), the header(s) to the file(s) including "Subject:" lines, encoded metadata (e.g., TEI (Text Encoding Initiative) headers, HTML/XML meta tags, etc.) and other identifying information ~~at the end of~~ internal to the file(s)). ~~In case of variation in~~ When the information in these sources varies in degree of fullness ~~of information found in these sources~~, prefer the source ~~with~~ that provides the most complete information.

If the ~~computer file~~ electronic resource is unreadable without additional processing (e.g., compressed file, printer-formatted file), take the information from the ~~file~~ resource after ~~it~~ the resource and its file have been ~~has been uncompressed, printed out, or otherwise~~ processed for use.

If the information required is not available[1] ~~from internal sources~~ or is insufficient, take it from the following sources (in this order of preference):

the physical carrier or its labels[2] (for direct access resources)
printed or online documentation or other accompanying material (e.g., publisher's letter, "about" file, publisher's Web page about an electronic resource)
~~information issued by the publisher, creator, etc., with the file (sometimes called "documentation")~~
information printed on ~~the~~ a container issued by the publisher, distributor, etc. (for direct access resources)

[Note: the remainder of 9.0B1 remains as currently worded in *AACR2R*.]

Rationale:

Electronic resources are so diverse and present information in so many ways that it is impossible to designate for every item any particular source as the chief source. Therefore, the resource itself is proposed as the chief source. Within the resource, preference for internal evidence is retained, and the list of examples is updated with some more current concepts such as file headers and metadata.

Minority Opinion:

Regarding the final sentence in the proposed revision, several members of the Task Force argue that fullness of information is not a sufficient guideline when the entire item is being treated as the chief source. They suggest adding the following as a penultimate sentence in this paragraph: "When the information varies in the internal sources, prefer the source that is most appropriate to the content of the resource (e.g., text, image, map, sound, etc.), and to its pattern of publication (e.g., complete, serial, continuing)." This would allow the cataloguers to use their judgment to select the source that is most appropriate to the item.

Corresponding Section from *ISBD(ER)*:

0.5.1 Order of preference of sources

Sources internal to the electronic resource shall be preferred to all other sources. Such information must be formally presented (e.g. in the title screen, main menu, program statements, first display of information, the header to the file including "Subject:" lines, home page, TEI (Text Encoding Initiative) header, or other identifying information prominently displayed).

When the resource is unreadable without processing (e.g. it is compressed or printer-formatted), the information should be taken from the resource when it is not compressed, or when it has been printed out, or otherwise processed for use.

When the information varies in degree of fullness in these sources, prefer the source which provides the fullest or most complete information.

When the information in the internal sources is insufficient or is not available (either because the sources are lacking or because the equipment to mount the resource is lacking), other sources may be selected according to the following order of preference.

A. Labels permanently affixed to or imprinted on the physical carrier of the resource;
B. Documentation, containers, or other accompanying material (e.g. publisher's letter). In using accompanying documentation, caution is to be exercised in distinguishing between information that applies to the documentation and that which pertains to the resource itself. When there are several items in the container and only the container has a collective title, the container is used rather than the labels of the individual items.

When the electronic resource consists of two or more separate physical parts (e.g. an interactive multimedia item made up of an electronic optical disc and videodisc), each with its own sources of information, prefer the source which provides information that applies to the resource as a whole and that includes a collective title.

When the information varies in degree of fullness in these sources, prefer the source which provides the fullest or most complete information.

In cases where the necessary information is not provided in any of the above sources, preference should be given to the following sources in this order:

other published descriptions of the resource (e.g. bibliographic databases, reviews)

other sources

4.1.3 Rule 9.0B2. Prescribed sources of information

Current Rule:

…
File characteristics Any source
…

Proposed Revision:

…
~~File characteristics~~
Type and extent of resource Any source
…

Rationale:

A recommendation to change the name of rule 9.3 is presented below.

4.2 *AACR:* Chapter 1 – General Rules for Description

4.2.1 Rule 1.4C8

Current Rule:

1.4C8. Do not record a place of publication, distribution, etc., for unpublished items (e.g., manuscripts, art originals, naturally occurring objects that have not been packaged for commercial distribution, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished computer files). Do not record a place of publication, distribution, etc., for unpublished collections (including those containing published items but not published as collections). Do not give *s.l.* in either case.

Proposed Revision:

1.4C8. [*Rev. wording with deletions indicated*] Do not record a place of publication, distribution, etc., for unpublished items (e.g., manuscripts, art originals, naturally occurring objects that have not been packaged for commercial distribution, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished ~~computer files~~ electronic resources). Do not record a place of publication, distribution, etc., for unpublished collections (including those containing published items but not published as collections). Do not give *s.l.* in either case.

4.2.2 Rule 1.4D9

Current Rule:

1.4D9. Do not record the name of a publisher, distributor, etc., for unpublished items (e.g., manuscripts, art originals, naturally occurring objects that have not been packaged for commercial distribution, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished computer files). Do not record the name of a

publisher, distributor, etc., for unpublished collections (including those containing published items but not published as collections). Do not give *s.n.* in either case.

Proposed Revision:

1.4D9. [*Rev. wording with deletions indicated*] Do not record the name of a publisher, distributor, etc., for unpublished items (e.g., manuscripts, art originals, naturally occurring objects that have not been packaged for commercial distribution, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished ~~computer files~~ electronic resources). Do not record the name of a publisher, distributor, etc., for unpublished collections (including those containing published items but not published as collections). Do not give *s.n.* in either case.

4.2.3 Rule 1.4F9

Current Rule:

1.4F9. Do not record a date for naturally occurring objects that have not been packaged for commercial distribution. For other unpublished items (e.g., manuscripts, art originals, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished computer files), give the date of production (creation, inscription, manufacture, recording, etc.).

Proposed Revision:

1.4F9. [*Rev. wording with deletions indicated*] Do not record a date for naturally occurring objects that have not been packaged for commercial distribution. For other unpublished items (e.g., manuscripts, art originals, unedited or unpublished film or video materials, stock shots, nonprocessed sound recordings, unpublished ~~computer files~~ electronic resources), give the date of production (creation, inscription, manufacture, recording, etc.).

Rationale (1.4C8, 1.4D9 and 1.4F9):

The Task Force was initially inclined to recommend that all electronic resources be treated as published. This would have meant *deleting* reference to computer files in rules 1.4C8, 1.4D9, and 1.4F9. On reflection, however, the Task Force decided that unpublished electronic resources might exist (e.g., e-mail; electronic resources with limited access), and that unpublished direct access electronic resources *should* be treated as unpublished. Therefore, the changes to these rules recommended above are simply a change in terminology from “computer file” to “electronic resources” as originally proposed in 4JSC/ALA/27.

4.3 Area 2 – Edition area

General Rationale:

Proposed revisions to 9.2B1, 9.2B2, 9.2B3 and 9.2B4 are intended to make a distinction between major and minor changes to an electronic resource where only the former would be considered a new edition.

4.3.1 Rule 9.2B1

Current Rule:

9.2B1. Transcribe a statement relating to an edition of a computer file that contains differences from other editions of that file, or to a named reissue of a file, as instructed in 1.2B.

Rev. ed.
NORC test ed.
Level 3.4
Rev. ed. 10/2/82
3rd update
Version 5.20
[Version] 1.1
Prelim. release 0.5

Give the source of the edition statement in a note (see 9.7B7) if it is different from the source of the title proper.

Proposed Revision:

9.2B1. [*Rev. wording and added examples*] Transcribe a statement relating to an edition of ~~a computer file~~ an electronic resource that contains differences from other editions of that ~~file~~ resource, or to a named reissue of a ~~file~~ resource, as instructed in 1.2B. Consider an edition to consist of all copies embodying essentially the same content (e.g., produced from substantially the same master copy).

Rev. ed.
NORC test ed.
Level 3.4
Rev. ed. 10/2/82
3rd update
Version 5.20
[Version] 1.1
Prelim. release 0.5

Interactive ed.
School ed.

Give the source of the edition statement in a note (see 9.7B7) if it is different from the source of the title proper.

Rationale:

The first added example is included to illustrate an edition that accommodates newer technological capability; the second illustrates an edition that accommodates different audiences or purposes.

4.3.2 Rule 9.2B2

Current Rule:

9.2B2. In case of doubt about whether a statement is an edition statement, take the presence of words such as *edition*, *issue*, *version*, *release*, *level*, *update* (or their equivalents in other languages) as evidence that the statement is an edition statement, and transcribe it as such.

Proposed Revision:

9.2B2. [*Rev. wording*] In case of doubt about whether a statement is an edition statement, take the presence of ~~words such as *edition*, *issue*, *version*, *release*, *level*, *update* (or their equivalents in other languages)~~ the word *edition* (or its equivalent in other languages) as evidence that the statement is an edition statement, and transcribe it as such. The presence of related words such as *version*, *level*, *release*, or *update* (or their equivalents in other languages) may or may not indicate a new edition. Consider the item to be a new edition if there are significant changes in the intellectual or artistic content of the data or programming (e.g., additions or deletions to content; upgrades in programming language; operating system changes; etc.).

4.3.3 Rule 9.2B3

Current Rule:

9.2B3. *Optional addition.* If a computer file lacks an edition statement but is known to contain significant changes from other editions (e.g., changes in the data involving content, standardized coding, etc.; changes in the programming including changes in the program statements, programming language, and programming routines and operations; the addition of sound or graphics; improvement of graphics), supply a suitable brief statement in the language and script of the title proper and enclose it in square brackets.

[Version 7]

Proposed Revision:

9.2B3. *Optional addition.* [*Rev. wording and added example*] If ~~a computer file~~ the electronic resource lacks an edition statement but is known to contain significant changes from other editions (e.g., changes in the data involving content, standardized coding, etc.; changes in the programming including changes in the program statements, programming language, and programming routines and operations; the addition of sound or graphics; improvement of graphics), do not create one unless the changes from previous editions are significant. When the changes are significant, supply a suitable brief statement in the language and script of the title proper and enclose it in square brackets.

[Version 7, Rev. version]
[Windows 95 ed.]

4.3.4 Rule 9.2B4

Current Rule:

9.2B4. Do not treat an issue of a file that incorporates minor changes as a new edition. Such minor changes include corrections of misspellings of data, changes in the arrangement of the contents, changes in system-related formats, changes in the physical characteristics (e.g., blocking factors, recording density). If desired, give the details of such changes in a note (see 9.7B7).

Proposed Revision:

9.2B4. [*Rev. wording*] Do not treat an issue of ~~a file~~ a resource that incorporates minor changes as a new edition. Such minor changes include corrections of misspellings of data~~,~~; changes in the arrangement of the contents~~,~~; changes in ~~system-related formats, changes in system-related formats, changes in the physical characteristics (e.g., blocking factors, recording density)~~ the type of physical carrier (e.g., from disk to cassette) and/or the size of the physical carrier (e.g., 14 cm. to 9 cm. disk); changes in printer-related file formats (e.g., ASCII vs. PostScript); changes in system-related formats (e.g., IBM vs. Macintosh); changes relating to the character code or to blocking or recording densities; changes in the output medium or display format (e.g., a remote access resource reproduced on magnetic disk and optical disc). If desired, give the details of such changes in a note (see 9.7B7).

[**Note:** Please refer to section dealing with Area 7, Notes, below, for reference to 9.7B7.]

Corresponding Section from *ISBD(ER)*:

2.1.1 The edition statement consists of a term, phrase or group of characters relating to:

A. all copies of an item formally identified as constituting a named and/or numbered edition,

or

B. all the copies of an item in a particular form of presentation having significant differences, in the intellectual or artistic content, from other copies in the same form of presentation, whether or not the item bears any formal statement to this effect.

The edition statement normally includes either the word "edition" (or its equivalent in another language). Related terms such as "version", "level", "release", or "update" can indicate an edition statement; however, these terms are sometimes used to indicate major or minor changes in an item and, as such, may not constitute a reliable guide to indicate a new edition.

The edition statement can also include a term indicating differences from other editions (e.g. "new edition", "revised edition", etc.) or other phrases, which may be linguistically associated, linking the edition to other elements of the description (e.g. original title in a form such as "new release of ...").

An edition occurs when there are significant differences in the intellectual or artistic content of the resource, including additions and deletions; a difference in the programming language; changes to upgrade or improve the efficiency of the resource; modifications in the programming language or operating system that allow the resource to be compatible with other machines and operating systems.

Differences that do not constitute a new edition include: a difference in the type of physical carrier (e.g. from disk to cassette) and/or the size of the physical carrier (e.g. 14 cm to 9 cm disk); differences in printer-related file formats (e.g. ASCII vs. PostScript); differences in system-related formats (e.g. IBM vs. Macintosh); differences relating to the character code or to blocking or recording densities; differences in the output medium or display format (e.g. a remote access resource reproduced on floppy disk and optical disc). Normally, differences that do not constitute a new edition do not warrant the creation of a separate bibliographic record, although a bibliographic agency may choose to create multiple bibliographic records.

2.1.3 When no edition statement appears in the item, although it is known that the item contains significant changes from previous editions, a suitable edition statement in the language of the prescribed source of information and in accordance with the provisions of 2.1.2 may be supplied, enclosed in square brackets.
e.g. . -- [New ed.]
. -- [Apr. 1995 issue]
. -- [Rev. ed., Aug. 1995]
. -- [Version 1.5]
. -- [School ed.]

4.3.5 Rule 9.2B8

Current Rule:

[none]

Proposed Revision:

9.2B8. [New] If an item consists of multiple physical carriers and there are multiple edition statements relating to the whole as well as to parts of the resource, only transcribe edition statement(s) relating to the whole resource in the edition area. Edition statements relating to parts may be given in a note (see 9.7B7).

4.3.6 Rule 9.2B9

Current Rule:

[none]

Proposed Revision:

9.2B9. [*New*] If a remote access electronic resource is frequently updated, omit the edition statement and give the information in a note instead (see 9.7B7).

Rationale (9.2B8 and 9.2B9):

A new rule is proposed to cover the case where an item consisting of multiple carriers has different edition statements on different carriers. A second new rule is proposed to deal with electronic resources that are frequently updated [there is a similar rule in Chapter 12, and in chapter 9 – the scope of this new rule seems to be what Jean Hirons' report calls integrating resources]

Corresponding Section from *ISBD(ER)*:

2.1.1 [Paragraph 6] When the electronic resource has multiple edition statements relating to parts or pieces of the item (e.g. an interactive multimedia work), the statement(s) that relates (relate) to the item as a whole is (are) transcribed. When there is no one statement that applies to the item, the statement(s) may be given in area 7.

4.4 Area 3 – File Characteristics Area

Preamble:

The proposals below bring together stipulations in area 3 of the *ISBD(ER)*, the responses from JSC constituent members to 4JSC/ALA/27 and subsequent CC:DA discussion (1 February, 1999) as summarized by Brian Schottlaender, and comments submitted by Task Force members. The Task Force favoured using the expanded list of designations in the *ISBD(ER)* (see Area 3 and Appendix C of *ISBD(ER)*) as a starting point and also suggested several changes, as indicated below.

Rationale:

Regarding proposed changes in Area 3 below, the Task Force supported the British Library preference for using the term “Type and Extent of Resource Area” instead of “File Characteristics” (as currently) or “Resource Characteristics” (as proposed in 4JSC/ALA/27). Additional prescribed punctuation is proposed for **9.3A1.** “Computer” is changed to “electronic” throughout **9.3** in accordance proposals from 4JSC/ALA/27). There is a proposal to add the option to give a more specific type of resource (i.e., more specific than “electronic data” or “electronic program”). The extensive 3-level hierarchy of resource types from *ISBD(ER)* Appendix C is proposed for incorporation into **9.3B1.**

4.4.1 Rule 9.3-9.3B1

Current Rule:

9.3. FILE CHARACTERISTICS AREA

Contents
9.3A. Preliminary rule
9.3B. File characteristics

9.3A. Preliminary rule

9.3A1. Punctuation

For instructions on the use of spaces before and after prescribed punctuation, see 1.0C. Precede this area by a full stop, space, dash, space.

Enclose each statement of the number of records, statements, etc., in parentheses.

Precede a statement of the number of records, statements, etc., by a colon when that number follows a statement of the number of files.

9.3B. File characteristics

9.3B1. Designation. When the information is readily available, indicate the type of file. Use one of the following terms:

computer data
computer program(s)
computer data and program(s)

Optionally, if general material designations are used (see 1.1C1), omit *computer* from the file designation.

Proposed Revision:

9.3. ~~FILE CHARACTERISTICS AREA~~ TYPE AND EXTENT OF RESOURCE AREA

Contents
9.3A. Preliminary rule
9.3B. ~~File characteristics~~
Type and extent of resource

9.3A. Preliminary rule

9.3A1. Punctuation [*Rev. wording*]

For instructions on the use of spaces before and after prescribed punctuation, see 1.0C. Precede this area by a full stop, space, dash, space.

Enclose each statement of ~~the number of records, statements, etc.,~~ extent in parentheses.

Precede a statement of the number of records, statements, etc., by a colon when that ~~number~~ statement follows a statement of the number of files.

9.3B. ~~File characteristics~~
Type and extent of resource

9.3B1. ~~Designation~~ Type of resource. [*Rev. wording*] ~~When the information is readily available, indicate the type of file.~~ Indicate the type of electronic resource being catalogued. Use one of the following terms:

~~computer~~ electronic data
~~computer~~ electronic program(s)
~~computer~~ electronic data and program(s)

[*Rev wording*] *Optionally*, if general material designations are used (see 1.1C1), omit ~~*computer*~~ *electronic* from the ~~file~~ type of resource designation.

Rationale:

The revised wording making use of these terms mandatory for both local and remote access resources. ***Note that the name of this area will also need to be changed in (a) rule 9.0B2, (b) the Table of Contents for Chapter 9, and (c) in the Index.***

Corresponding text from *ISBD(ER)*:

3.1 Designation of resource

The designation of resource identifies the particular type of resource(s) which constitutes the work and is given in the language of the bibliographic agency. The designations for use in English are contained in Appendix C. These designations may appear in the prescribed source of information; when they are not present in the prescribed source of information, they are supplied without brackets based on examination of the work.

3.1.1 When the electronic resource consists of data, the bibliographic agency may choose to identify the resource as "Electronic data" or "Data" (if the general material designation is given in the bibliographic description). Alternatively, the bibliographic agency may identify the

particular type of data using the selective list of designations given in Appendix C. When none of these terms is appropriate, an appropriate designation may be supplied, qualified by the word "electronic" or else used alone if the general material designation is given in the description. In the case where the designation is supplied, preference is given to a term that is currently well established, in use by both the producers and users of the particular data resource, and is mutually exclusive of other terms used as designations.
e.g.

Electronic data
Electronic numeric data
Electronic census data
Electronic text data
Electronic journal
Electronic image data
Electronic representational data
Electronic map data
Electronic sound data
Electronic font data

3.1.2 When the electronic resource consists of a program(s), the bibliographic agency may choose to identify the resource as "Electronic program(s)" or "Program(s)" (if the general material designation is given in the bibliographic description). Alternatively, the bibliographic agency may identify the particular type of program using the selective list of designations given in Appendix C. When none of these terms is appropriate, an appropriate designation may be supplied, qualified by the word "electronic" or else used alone if the general material designation is given in the description. In the case where the designation is supplied, preference is given to a term that is currently well established, in use by both the producers and users of the particular type of program, and is mutually exclusive of other terms used as designations.
e.g.

Electronic utility program
Electronic application programs
Electronic CAD program
Electronic database program
Electronic spreadsheet programs
Electronic games
Electronic system program
Electronic operating system program
Electronic retrieval program
Electronic word processor program
Electronic programming language program

3.1.3 When the electronic resource consists of data and program(s), the bibliographic agency may choose to identify the resource as "Electronic data and program(s)" or "Data and program(s)" (if the general material designation is given in the bibliographic description). Alternatively, the agency may identify the particular type of data and program using the selective lists in Appendix C. The terms "interactive multimedia" and

"online service(s)" may be used in conjunction with these lists or else alone as resource designations. When neither of these terms nor the terms in the lists are appropriate, an appropriate designation may be supplied, qualified by the word "electronic" or else used alone if the general material designation is given in the description. In the case where the designation is supplied, preference is given to a term that is currently well established, in use by both the producers and users of the particular data resource and program(s), and is mutually exclusive of other terms used as designations.
e.g.

Electronic data and program
Electronic image data and retrieval program
Electronic census data and spreadsheet program
Electronic document and word processor program
Electronic interactive multimedia game
Electronic online service bibliographic database
Electronic interactive multimedia
Electronic online service

3.1.4 When the data or program is incidental and not primary in the resource, it is recommended that the bibliographic agency apply the primary term.
e.g.

Electronic program
Editorial comment: Data is incidental in the resource.

4.4.2 Additions to Rule 9.3B1

[The following proposed sections are new to Chapter 9 and proposed as additions to be inserted before the final paragraph of rule 9.3B1:]

Proposed Revision:

Optionally, if a more detailed designation is desired, use one of the following terms:

For electronic data:

electronic font data

electronic image data
- electronic art data
- electronic motion-picture data
- electronic realia data
- electronic representational data
  - electronic cartographic materials
  - electronic map data
  - electronic remote-sensing-image data

electronic numeric data
electronic census data
electronic remote-sensing data
electronic survey data

electronic sound data

electronic text data
electronic bibliographic database(s)
electronic document(s) (e.g., letters, articles)
electronic journal(s)
electronic newsletter(s)
electronic musical notation

For electronic programs:

electronic application program(s)
electronic CAD program(s)
electronic database program(s)
electronic desktop publishing program(s)
electronic game(s)
electronic spreadsheet program(s)
electronic word processor program(s)

electronic system program(s)
electronic operating system program(s)
electronic programming language program(s)
electronic retrieval program(s)

For electronic data and program(s). Combine particular types of data and program(s) from the above lists, e.g.

electronic census data and spreadsheet program
electronic image data and retrieval program

Additionally, use the following terms alone or in conjunction with the above list of terms as appropriate.

electronic interactive multimedia
electronic online service(s)

If more detail is desired but none of the above terms is appropriate, supply a brief term beginning with "electronic." Prefer a term that is currently well established, in use by both the producers and users of the particular resource, and is mutually exclusive of other terms used as designations. Do not enclose a supplied term in square brackets.

Rationale:

The Task Force recommends that a list of types of resources appear in the rules. Although the list is by no means exhaustive, it seems preferable to suggest use of consistent terms. The Task Force has proposed several terms not included in the *ISBD(ER)* appendix because they are in common usage and because their inclusion makes the list applicable to a wider range of electronic resources. The terms in question are (1) electronic art data, (2) electronic motion-picture data, (3) electronic realia data, (4) electronic cartographic materials, (5) electronic remote-sensing-image data, (6) electronic remote-sensing data, and (7) electronic musical notation. “Electronic musical notation” has been placed in the hierarchy under “electronic text data,” rather than under “electronic representational data,” on the grounds that it constitutes a script for writing musical texts. Finally, “electronic representational data” is treated as a sub-category under “electronic image data.”

Minority Opinion:

A minority within the Task Force had the following concerns with: 1) the proposal of additional terms to an already lengthy list, and 2) the recognition that the *ISBD(ER)* is a starter list for general use and does not contain specialized terms associated with particular types of libraries and/or collections. In the latter instance, it would be assumed that the library will develop its own list or a cooperative list with other agencies/constituencies which share collections of the same or related materials.

Without these developments, most of the additional terms listed above are out of scope. The exceptions are: “Remote-sensing image data," which has been suggested by authorities dealing with this material and "Musical notation,” also suggested by authorities working with musical collections in the U.S. and Europe. “Electronic remote-sensing image data” should be added to the list below under “Electronic representational data” and “Electronic musical notation” should be added under “Electronic text data.” The other terms should not be added, and the hierarchy below should be retained.

Corresponding text from *ISBD(ER)*:

Appendix C: Recommended ... Resource Designations ...

Resource designations with "electronic" in the designations:

- Electronic data
  - Electronic font data
  - Electronic image data
  - Electronic numeric data
    - Electronic census data
    - Electronic survey data
  - Electronic representational data
    - Electronic map data

```
          Electronic sound data

          Electronic text data
               Electronic bibliographic database(s)
               Electronic document(s) (e.g. letters, articles)
               Electronic journal(s)
               Electronic newsletter(s)

     Electronic program(s)
          Electronic application program(s)
               Electronic CAD program(s)
               Electronic database program(s)
               Electronic desktop publishing program(s)
               Electronic game(s)
               Electronic spreadsheet program(s)
               Electronic word processor program(s)

          Electronic system program(s)
               Electronic operating system program(s)
               Electronic programming language program(s)
               Electronic retrieval program(s)

          Electronic utility program(s)

     Electronic data and program(s)
          Editorial comment: Particular types of data and programs
          may be identified by combining terms in the selective
          lists above. The following terms may be used in
          conjunction with the above terms or alone as resource
          designations.

               Electronic interactive multimedia

               Electronic online service(s) (e.g. bulletin boards,
                 discussion groups/lists, World Wide Web sites)
```

4.4.3 Rule 9.3B2

Current Rule:

9.3B2. Number of records, statements, etc. If a file designation is given and if the information is readily available, give the number or approximate number of files that make up the content (use file or files preceded by an arabic numeral) and/or these other details.

a) *Data*. Give the number or approximate number of records (use *records*) and/or bytes (give the term in either abbreviated or full form).

Computer data (1 file : 350 records)
Computer data (550 records)
Computer data (1 file : 600 records, 240,000 bytes)

b) *Programs*. Give the number or approximate number of statements (use *statements*) and/or bytes (give the term in abbreviated or full form).

Computer program (1 file : 200 statements)
Computer program (2150 statements)

c) *Multipart files.* [*Wording of examples revised*] Give the number or approximate number of records and/or bytes, or statements and/or bytes, in each part according to a) and b) above.

Computer data (3 files : 100, 460, 550 records)
Computer programs (2 files : 4300, 1250 bytes)
Computer data (2 files : ca. 330 records each)
Computer data (2 files : 800, 1250 records) and programs (3 files : 7260, 3490, 5076 bytes)
Computer data (2 files : 3.5, 2 megabytes)

If such numbering cannot be given succinctly, omit the information from this area. If desired, give it in a note (see 9.7B8).

Proposed Revision:

9.3B2. ~~Number of records, statements, etc.~~ Extent of Resource [*Rev. wording*] If ~~a file designation is given and if~~ the information is readily available, give the number or approximate number of files that make up the ~~content~~ extent (use *file* or *files* preceded by an arabic numeral) and/or these other details. If the resource is in a compressed form, omit the statement of extent.

a) *Data*. [*Wording of examples revised*] Give the number or approximate number of records (use *records*) and/or bytes (give the term in either abbreviated or full form).

~~Computer~~ Electronic data (1 file : 350 records)
~~Computer~~ Electronic data (550 records)
~~Computer~~ Electronic data (1 file : 600 records, 240,000 bytes)
Electronic text data (2 files : 2.5 gb)
Electronic numeric data (1 file : 1.2 megabytes)

b) *Programs*. [*Wording of examples revised*] Give the number or approximate number of statements (use *statements*) and/or bytes (give the term in abbreviated or full form).

~~Computer~~ Electronic program (1 file : 200 statements)
~~Computer~~ Electronic program (2150 statements)

c) *Multipart files.* [*Wording of examples revised*] Give the number or approximate number of records and/or bytes, or statements and/or bytes, in each part according to a) and b) above.

~~Computer~~ Electronic data (3 files : 100, 460, 550 records)
~~Computer~~ Electronic programs (2 files : 4300, 1250 bytes)
~~Computer~~ Electronic data (2 files : ca. 330 records each)
~~Computer~~ Electronic data (2 files : 800, 1250 records) and programs (3 files : 7260, 3490, 5076 bytes)
~~Computer~~ Electronic data (2 files : 3.5, 2 megabytes)

If such numbering cannot be given succinctly, omit the information from this area. If desired, give it in a note (see 9.7B8).

Rationale:

In the first paragraph, the use of the term "file(s)" as given is appropriate; the instruction for compressed resources is also added. Under "a) Data," the Task Force has retained the first 3 examples from Chapter 9 and changed the other 2 to show a more detailed designation and in the case of the 4th example, the designation of 2 rather than 1 file.

Corresponding text from *ISBD(ER)*:

3.2 Extent of resource (optional)

Extent of resource may be given when the information is available and the bibliographic agency desires to record it. When the resource is in a compressed form, the bibliographic agency may omit this information. Extent of resource consists of the number of files that make up the content of the data or program, adding additional measures of extent as appropriate. A statement of extent of resource is recorded in parentheses after the designation of the resource. The specific terms for extent of resource are given in the language of the bibliographic agency. The terms recommended for use in English are contained in the examples.

3.2.1 The number of files constituting the content of the data or program(s) is given in arabic numerals.
e.g.
Electronic document (1 file)
Electronic utility programs (3 files)
Electronic CAD program (17 files)
Electronic text data (5 files) and retrieval program (1 file)

3.2.2 The number of records and/or bytes may be given for a data resource and the number of statements and/or bytes may be given for a program. When the number of files is given, this further statement of extent is introduced with a space, colon, space. The number of bytes may be variously expressed (e.g. "megabytes", "MB", "Mbytes") but are given in the form in which they appear in the source. The programming language of source code statements is given in a note (see 7.5.1).
e.g.
Electronic representational data (800 records, 131,550 bytes)
Electronic system program (1 file : 997 statements)
Electronic text data (2 files : 1.6 megabytes)
Electronic data (1 file : 1.2 GB) and program (1 file : 2520 statements)

3.2.3 For a multi-part resource, the number of records and/or bytes or the number of statements and/or bytes may be given for each resource. When the numbers are numerous or complex, they may be given in a note (see 7.3).
e.g.
Electronic data (2 files : 800, 1250 records, 2 Mbytes)
Electronic image data (7 files : 6700 records each)
Electronic system programs (2 files : 1.2, 1.5 MB)
Electronic data (2 files : 2540 records each) and programs (3 files : 7260, 3490, 5076 bytes)
Electronic sound data (4 files)
Note: Resource size: 11,000, 33,006, 55,007, 91,325 bytes

3.2.4 The number of records and/or bytes or the number of statements and/or bytes may be approximated. When an estimate cannot be determined, a statement relative to the situation may be given in a note (see 7.3).
e.g.
Electronic image data (ca. 3000-4000 records)
Electronic system program (23 files : ca. 35000 bytes each)
Electronic data (6 files : ca. 1.2 GB each)
Electronic text data (12 files)
Note: Resource size varies

4.5 Area 4 – Publication, Distribution, etc., Area

4.5.1 Rule 9.4B2

Current Rule:

[none]

Proposed Revision:

9.4B2. [*New*] For direct and remote access electronic resources, publishing, distributing, etc., activities include all types of publication, production, distribution, issuing, and release activities. Consider all remote access electronic resources to be published.

4.5.2 Rule 9.4D1

Current Rule:

9.4D1. Give the name of the publisher, etc., and *optionally* the distributor, of a published computer file as instructed in 1.4D.

London : Psion

Newton Upper Falls, Mass. ; Ipswich : Practicorp
(Cataloguing agency in the United Kingdom)

Prague : [s.n.]

[S.l.] : Bruce & James Program Publishers ; [New York : Distributed by Simon & Schuster]

Bellevue, Wash. : Temporal Acuity Products ; Owatonna, Minn. : Distributed exclusively by Musictronic

Proposed Revision:

9.4D1. [*Rev. wording with added example*] Give the name of the publisher, etc., and *optionally* the distributor, of a published ~~computer file~~ electronic resource as instructed in 1.4D.

London : Psion

Newton Upper Falls, Mass. ; Ipswich : Practicorp
(Cataloguing agency in the United Kingdom)

Prague : [s.n.]

[S.l.] : Bruce & James Program Publishers ; [New York : Distributed by Simon & Schuster]

Bellevue, Wash. : Temporal Acuity Products ; Owatonna, Minn. : Distributed exclusively by Musictronic

[Honolulu, Hawaii] : M.R. Ogden
(A personal home page)

4.5.3 Rule 9.4F1

Current Rule:

9.4F1. Give the date of publication, distribution, etc., of a published computer file as instructed in 1.4F.

Ann Arbor : University of Michigan, Institute for Social Research, 1968

Chicago : University of Chicago, 1961-1962

Richmond, Va. : Rhiannon Software, c1985

[United States : s.n., 198-]

Proposed Revision:

9.4F1. [*Added example*] Give the date of publication, distribution, etc., of a published computer file as instructed in 1.4F.

Ann Arbor : University of Michigan, Institute for Social Research, 1968

Chicago : University of Chicago, 1961-1962

Richmond, Va. : Rhiannon Software, c1985

[United States : s.n., 198-]

[Jamestown, N.D.] : Northern Prairie Science Center, [1995?-

Rationale:

Many electronic resources, particularly remote resources accessed via the World Wide Web, are continuing resources that have no terminal date. The addition of the last example above shows an open-ended date, indicating that the resource has no set termination or completion. Furthermore, the example also illustrates that the initial publication date of many electronic resources, especially those that are accessed remotely, cannot always be determined with certainty, but that often a reasonable guess can be made based on information found in the resource and on when the resource has been examined for cataloguing. The addition of this new example also ties in well with the example included in the proposed revision of 9.7B9, which shows the change of publisher of a resource since the resource was first put online.

Rule 9.4F1 refers cataloguers to rule 1.4F. However, rule 1.4F does not address the recording of open-ended dates for continuing resources for which no completion date is expected. Rule 1.4F8 refers explicitly to multipart items, but integrating resources such as Web sites, online continually updated databases, and loose-leafs are not multipart items. Thus, the additional example in rule 9.4F1 is needed, since rule 1.4F does not apply as written. Rule 12.4F applies to electronic serials, but not to nonserial continuing electronic resources.

4.5.4 Rule 9.4F4

Current Rule:

[none]

Proposed Revision:

9.4F4. [*New*] If an item has multiple copyright dates which apply to various aspects of the production (e.g., programming, sound production, graphics, documentation, etc.) and there is no publication, distribution, etc., date which applies to the item as a whole, transcribe only the latest copyright date.

Optionally, transcribe the other dates in a note (see 9.7B7) or in a contents note (see 9.7B18).

Rationale:

New rule 9.4F4 is proposed to cover the case of multiple dates applying to different aspects of production, none of which applies to the publication of the item as a whole.

Corresponding Section from *ISBD(ER)*:

0.2 Definitions

Publication (Remote electronic resource)	In the context of applying the ISBD(ER), all remote electronic resources are considered to be published. A formal statement of publication that includes place, publisher, and date is given in the bibliographic record when such information is available. If no place or publisher information is available in the item, the abbreviations "s.l." and "s.n." are given as appropriate (see 4.1 and 4.2).

4. Publication, Distribution, etc., Area

Introductory note [Paragraph 1, last sentence]

In the context of applying the ISBD(ER), all remote access electronic resources are considered to be published.

2.1.1 [Paragraph 7]

In the case of remote access electronic resources which are often frequently updated, the edition statement is omitted in area 2, and an appropriate note(s) is given in area 7 (see 7.2.2 and 7.9).

4.4.1 The date of publication or production of the item described is given.
e.g. . -- St. Paul (Minn.) : Quanta Press, 1995

In the case of online services and other dynamic resources (e.g. World Wide Web sites), a note may be given to indicate also the month, day, and year that appears in the resource (see 7.9).

7.2.2 Notes on the bibliographic history of the item [Paragraph 1]

These may include indication of the frequently changing contents of a remote access electronic resource.
e.g. . -- Frequently updated; Last update: 2/18/97
. -- Updated weekly
. -- Continuously updated; Version 7 dated: May 5, 1997

7.9 Notes relating to the resource described

These may include notes on the edition or issue on which the description of a dynamic remote access resource is based.
e.g. . -- Description based on version dated: Oct. 4, 1997 13:22:11
. -- Description based on: Vol. 3, no. 3 (May/June 1995)
. -- Description based on home page dated: 09/06/96
. -- Description of resource as of: May 19, 1996

4.4.7.1 When there are multiple copyright dates that apply to various aspects in the production of the item (e.g. a separate copyright date for the written program, sound production, graphics, and documentation) and there is no date of publication, production or distribution in the item applying to the item as a whole, the latest copyright date is given. It does not matter that the date applies only to one aspect of the creation of the item. (See also 4.4.11.)
e.g. , cop. 1995
Editorial comment: Date is for the written program; other earlier copyright dates are for sound and documentation.

4.4.11 When copyright dates are given for each work brought together in an item, these dates are not transcribed in the publication, distribution, etc., area. They may be given either in a note on the publication, distribution, etc., area (see 7.4) or in a contents note (see 7.7); or the multi-level method of description provided in Appendix A may be utilized.

4.6 Area 5 – Physical Description Area

4.6.1 Rule 9.5B1

Preamble:

The Task Force gave serious consideration to three options regarding the terminology for specific material designations in rule 9.5B1:

1. Retain "computer" as it is currently used in *AACR2*
2. Change "computer" to "electronic" as is done in *ISBD(ER)*
3. Use the specific term without either qualifier, as is presently allowed in the option in 9.5B1

There was strong support on the Task Force for all three options. In June, the Task Force recommended option 2 to CC:DA. However, CC:DA voted on June 27, 1999, to endorse option 1, and to delete the option to omit the word "computer" when the GMD is used.

The other two options continue to be supported by members of the Task Force. A proposed revision and rationale for each is given in the minority opinions below.

Current Rule:

9.5B1. Record the number of physical units of the carrier by giving the number of them in arabic numerals and one of the following terms as appropriate:[4]

computer cartridge
computer cassette
computer disk
computer optical disc
computer reel

1 computer disk
2 computer cassettes
1 computer reel
1 computer optical disc

When new physical carriers are developed for which none of these terms is appropriate, give the specific name of the physical carrier as concisely as possible, preferably qualified by *computer*.

1 computer card

If the information is readily available and if desired, indicate the specific type of physical medium.

1 computer chip cartridge
1 computer tape cartridge
1 computer tape reel
1 computer optical card

Optionally, if general material designations are used (see 1.1C1), omit *computer* from the specific material designation.

Give a trade name or other similar specification in a note (see 9.7B1b).

Proposed Revision:

9.5B1. [*Rev. examples*] Record the number of physical units of the carrier by giving the number of them in arabic numerals and one of the following terms as appropriate:[4]

computer chip cartridge
computer tape cassette
computer disk
computer optical disc
computer tape reel

1 computer disk
2 computer tape cassettes
1 computer tape reel
1 computer optical disc

When new physical carriers are developed for which none of these terms is appropriate, give the specific name of the physical carrier as concisely as possible, preferably qualified by *computer*.

1 computer card

~~If the information is readily available and if desired, indicate the specific type of physical medium.~~

~~1 computer chip cartridge~~
~~1 computer tape cartridge~~
~~1 computer tape reel~~
~~1 computer optical card~~

The following optical-disc formats may be recorded as appropriate: CD-I, CD-ROM, Photo CD.

1 computer optical card
1 computer optical disc (CD-ROM)
2 computer optical discs (Photo CD)
1 computer optical disc (CD-I)

~~*Optionally*, if general material designations are used (see 1.1C1), omit *computer* from the specific material designation.~~

Give a trade name or other similar specification in a note (see 9.7B1b).

Rationale:

Since Area 5 is not used for remote-access electronic resources, the specific material designations apply only to the physical carriers for direct-access resources. The terminology currently in common use does not use the word "electronic" in relation to these carriers. If the specific term is modified by an adjective, that adjective is usually "computer." The current SMD terminology in AACR will be more recognizable by catalogue users than the terminology in *ISBD(ER)*.

Addendum:

The following changes to the above revision were suggested in the final stages of CC:DA's deliberations. The Committee feels that the suggestion has merit, but that further investigation of the implications of the change (particularly the introduction of the DVD example) for other rules, examples, and glossary definitions is needed. The general point should also be noted that DVD (like other optical carriers) is appropriate in Chapter 7 as well as Chapter 9.

9.5B1. [*Terms in first list below revised and re-sorted in alphabetical order; rev. examples*] Record the number of physical units of the carrier by giving the number of them in arabic numerals and one of the following terms as appropriate:[4]

computer chip cartridge
computer disk
computer optical disc
computer tape cassette
computer tape reel

1 computer disk
2 computer tape cassettes
1 computer tape reel
1 computer optical disc

When new physical carriers are developed for which none of these terms is appropriate, give the specific name of the physical carrier as concisely as possible, preferably qualified by *computer*.

1 computer card
1 computer optical card

~~If the information is readily available and if desired, indicate the specific type of physical medium.~~

~~1 computer chip cartridge~~
~~1 computer tape cartridge~~
~~1 computer tape reel~~
~~1 computer optical card~~

Optionally, record the specific format of the physical carrier in parentheses after the term for the physical carrier. For optical discs, use *CD-I*, *CD-ROM*, *Photo CD*, or other terms as new formats are developed.

1 computer optical disc (CD-ROM)
2 computer optical discs (Photo CD)
1 computer optical disc (DVD-ROM)

~~*Optionally*, if general material designations are used (see 1.1C1), omit *computer* from the specific material designation.~~

Give a trade name or other similar specification in a note (see 9.7B1b).

Rationale for the addendum:

(a) The SMD terms in the current rule are in alphabetical order, and the revised terms should be re-sorted in alphabetical order. (b) "Computer optical card" is not an optical disc format, and therefore that example does not belong with the rule for optical discs. (c) The rule allowing the option to add a parenthetical qualifier has been generalized to allow such

qualifiers to be added to any appropriate SMD; this provides additional flexibility in dealing with new storage technologies.

Minority Opinion #1 (change "computer" to "electronic"):

9.5B1. [*Rev. examples*] Record the number of physical units of the carrier by giving the number of them in arabic numerals and one of the following terms as appropriate:[4]

~~computer~~ electronic chip cartridge
~~computer~~ electronic tape cassette
~~computer~~ electronic disk
~~computer~~ electronic optical disc
~~computer~~ electronic tape reel

1 ~~computer~~ electronic disk
2 ~~computer~~ electronic tape cassettes
1 ~~computer~~ electronic tape reel
~~1 computer optical disc~~

[*Rev. wording and footnote wording*] When new physical carriers are developed for which none of these terms is appropriate, give the specific name of the physical carrier as concisely as possible, preferably qualified by ~~*computer*~~ *electronic*.[5]

1 ~~computer~~ electronic card

Footnote 4 [*Rev. wording*]

4. The following rules apply to the terms:
   1) Use ~~*computer*~~ *electronic disk* for magnetically encoded ~~computer~~ electronic disks.
   2) Use ~~*computer*~~ *electronic optical disc* for optically encoded ~~computer~~ electronic discs.

Footnote 5 [*New*]

5. If the general material designation is used, "electronic" may be omitted from the supplied term and other specific material designations (e.g. . – 2 optical discs).

Rationale for Minority Opinion #1:

The adjective needs to be retained because the terms need support. Philosophically the term "electronic" speaks more to the content than does "computer," just as "sound" speaks to the content when used in Area 5 as a qualifier for music sound recordings ("sound disc," "sound tape reel"). Therefore, as proposed and largely agreed in responses to

4JSC/ALA/27, this minority opinion follows *ISBD(ER)* in preferring "electronic" over "computer" in the specific material designations.

Minority Opinion #2 (use no qualifier):

9.5B1. [*Rev. examples*] Record the number of physical units of the carrier by giving the number of them in arabic numerals and one of the following terms as appropriate:[4]

~~computer~~ chip cartridge
~~computer~~ tape cassette
~~computer~~ disk
~~computer~~ optical disc
~~computer~~ tape reel

1 ~~computer~~ disk
2 ~~computer~~ tape cassettes
1 ~~computer~~ tape reel
~~1 computer optical disc~~

[*Rev. wording and footnote wording*] When new physical carriers are developed for which none of these terms is appropriate, give the specific name of the physical carrier as concisely as possible~~, preferably qualified by *computer*~~.

1 ~~computer~~ card

Footnote 4 [*Rev. wording*]

4. The following rules apply to the terms:
   1) Use ~~*computer*~~ *disk* for magnetically encoded ~~computer~~ disks.
   2) Use ~~*computer*~~ *optical disc* for optically encoded ~~computer~~ discs.

Rationale for Minority Opinion #2:

This approach avoids redundant language by eliminating a qualifying term used with other terms that either imply "electronic" by their meanings or with other terms that take on the meaning of "electronic" from their context in the remainder of the record. It seems that any qualifier in front of "optical" is redundant, whether it is "computer" or "electronic." "Disk" looks more naked without a qualifier, but it is still recognizable.

Additional possibility to consider: CC:DA voted to delete from 9.5B1 the paragraph which gives the option to omit the qualifying adjective when a GMD is given. However, if that provision were retained in either the recommended revision or the first minority opinion above, then the qualifying term *could* be omitted – but it would be an option, not the preferred rule. Given the strong support on the Task Force for omitting the qualifying term, this might be worth considering.

4.6.2 Rule 9.5B3

Current Rule:

[none]

Proposed Revision:

9.5B3. Items with different types and/or sizes of carrier. [*New*] When the item is available in different types of carriers (e.g., cassette and disk) and/or different sizes of carriers (e.g., 9 cm. and 14 cm. disks), or in a different output medium or display format (e.g., a direct access resource reproduced on optical disc and magnetic disk), apply whichever of the following two methods is appropriate to the item being described:

a) Give within the same bibliographic record a separate physical description for each different physical carrier. Give each physical description on a separate line.

1 electronic optical disc ; sd., col. ; 12 cm.
3 electronic disks : sd., col. ; 9 cm.
1 user guide (225 p.) ; 23 cm.

Optionally, give within the same bibliographic record the extent of each different physical carrier as the first element of the physical description (do this if no further physical description of each physical carrier is desired).

1 electronic optical disc, 3 electronic disks, 1 user guide (225 p.)

b) Give a separate bibliographic record for each different physical carrier.

Rationale:

Proposed new rule, **9.5B3**, covers items with different types and/or sizes of carriers and proposes alternative approaches to description similar to those now in 1.10.

4.6.3 Rule 9.5C

Current Rule:

9.5C. Other physical details

9.5C1. If the file is encoded to produce sound, give *sd*. If the file is encoded to display in two or more colours, give *col.*

1 computer chip cartridge : sd.
1 computer disk : col.
1 computer disk cartridge : sd., col.

Give details of the requirements for the production of sound or the display of colour in a note (see 9.7B1b).

9.5C2. *Optionally*, give the following physical characteristics, if readily available and if they are considered to be important:

number of sides used
recording density (e.g., number of bytes per inch (bpi), single, double)
sectoring

1 computer disk : sd., col., single sided, single density, soft sectored
2 computer tape reels : 6,250 bpi

Proposed Revision:

9.5C. Other physical details

9.5C1. [*Rev. wording as proposed by BL*] If the ~~file is encoded~~ resource is specified to have sound or is known to produce sound, give *sd*. If ~~the file is encoded~~ it is specified or known to display in two or more colours, give *col.*

1 computer chip cartridge : sd.
1 computer disk : col.
1 computer disk cartridge : sd., col.

Give details of the requirements for the production of sound or the display of colour in a note (see 9.7B1b).

9.5C2. [*Rev. wording*] *Optionally*, give ~~the following~~ other physical characteristics (e.g., recording density, sectoring), if readily available and if they are considered to be important:

~~number of sides used~~
~~recording density (e.g., number of bytes per inch (bpi), single, double)~~
~~sectoring~~

1 computer disk : sd., col., single sided, single density, soft sectored
2 computer tape reels : 6,250 bpi

Rationale:

Noted in Task Force Discussion: There was some debate over whether or not delete **9.5C2** from *AACR2,* particularly given the exclusion of physical characteristics other than sound and colour from *ISBD(ER)*. Some Task Force members felt that the stipulations in the existing **9.5C2** were no longer meaningful or useful, or had some value but in limited circumstances. The Task Force agreed that to make provisions only for sound and colour might prove a constraint in the volatile world of emerging electronic resources. The proposed rewording of **9.5C2** opens up the interpretation of the rule, and provides the opportunity for cataloguers to record other necessary physical details as they judge appropriate and meaningful.

4.6.4 Rule 9.5D

Current Rule:

9.5D1. Give the dimensions of the physical carrier as instructed below.

a) *Disks/Discs*. Give the diameter of the disc or disk in inches, to the next 1/4 inch up.

1 computer disk : col. ; 5 1/4 in.
1 computer optical disc : col. ; 4 3/4 in.

b) *Cartridges*. Give, in inches to the next 1/4 inch up, the length of the side of the cartridge that is to be inserted into the machine.

1 computer chip cartridge ; 3 1/2 in.

c) *Cassettes.* Give the length and height of the face of the cassette in inches, to the next 1/8 inch up.

1 computer tape cassette ; 3 7/8 x 2 1/2 in.

d) *Reels*. Give the diameter of the tape reel in inches, to the next inch up.

1 computer tape reel ; 9 in.

e) *Other carriers.* Give the appropriate dimensions of other physical carriers in centimetre to the whole centimetre up.

9.5D2. If the item consists of more than one physical carrier and they differ in size, give the smallest or smaller and the largest or larger size, separated by a hyphen.

3 computer disks ; 3 1/2 - 5 1/4 in.

Proposed Revision:

9.5D1. [*Additional option of metric dimensions*] Give the dimensions of the physical carrier as instructed below.

a) *Disks/Discs*. Give the diameter of the disc or disk in inches, to the next 1/4 inch up.

1 computer disk : col. ; 5 1/4 in.
1 computer optical disc : col. ; 4 3/4 in.

b) *Cartridges*. Give, in inches to the next 1/4 inch up, the length of the side of the cartridge that is to be inserted into the machine.

1 computer chip cartridge ; 3 1/2 in.

c) *Cassettes.* Give the length and height of the face of the cassette in inches, to the next 1/8 inch up.

1 computer tape cassette ; 3 7/8 x 2 1/2 in.

d) *Reels*. Give the diameter of the tape reel in inches, to the next inch up.

1 computer tape reel ; 9 in.

Optionally, give the dimensions of the physical carrier in terms of centimetres rounded up to the next whole centimetre.

1 computer disk : col. ; 14 cm.
1 computer optical disc : col. ; 12 cm.
1 computer chip cartridge ; 9 cm.
1 computer tape cassette ; 10 x 7 cm.
1 computer tape reel ; 27 cm.

e) *Other carriers.* Give the appropriate dimensions of other physical carriers in centimetre to the whole centimetre up.

9.5D2. [*added metric example*] If the item consists of more than one physical carrier and they differ in size, give the smallest or smaller and the largest or larger size, separated by a hyphen.

3 computer disks ; 3 1/2 - 5 1/4 in.
3 computer disks ; 9-14 cm.
(If metric option applied)

Rationale:

Noted in the Task Force Discussion: ISBD(ER) specifies the use of "cm" rather than "cm." *AACR* uses "cm." The Task Force does not recommend changing *AACR* from "cm." to "cm" as that would require changes to all instances of "cm." throughout *AACR*.

The Task Force agreed that it would be helpful and internationally-inclusive to permit cataloguers the option of using either metric or Imperial measurements. The inclusion of *Optionally* with corresponding metric examples reflects this consensus.

4.7 Area 7 – Note Area

General Rationale:

The majority of changes proposed below relate to the addition of examples derived from actual items (from the OCLC database) to illustrate better the intent and application of the rule for a particular note, given changes in technology, and to reflect the growing complexity in electronic resources. The Task Force has retained OCLC source record numbers for proposed examples should CC:DA or, subsequently, JSC, wish access to the records.

4.7.1 Rule 9.7B1

Current Rule:

9.7B. Notes

Make notes as set out in the following subrules and in the order given there. However, give a particular note first when it has been decided that note is of primary importance.

9.7B1. Nature and scope and system requirements

a) *Nature and scope*. Make notes on the nature and scope of the file unless it is apparent from the rest of the description.

Game

Word processor

Combined time series analysis and graph plotting system

Spread sheet, with word processing and graphic capabilities

b) *System requirements*. Make a note on the system requirements of the file if the information is readily available. Begin the note with *System requirements:*. Give the following characteristics in the order in which they are listed below. Precede each characteristic, other than the first, by a semicolon.

the make and model of the computer(s) on which the file is designed to run
the amount of memory required
the name of the operating system
the software requirements (including the programming language)
the kind and characteristics of any required or recommended peripherals

System requirements: 48K RAM; Apple Disk II with controller; col. monitor
(File requires colour monitor for display)

System requirements: Apple family; 48K RAM; DOS 3.3

System requirements: IBM PC; 64K; colour card; 2 disk drives

System requirements: Commodore Super PET SP9000; 64K; Commodore BASIC, version 4.0; dual disk drive

System requirements: Apple II, II+, or IIe; 48K; DOS 3.3; Applesoft BASIC; some programs require game paddles

System requirements: IBM PC or 100% compatible; 128K; DOS 1.1 to DOS 2.1

System requirements: RTI Series 500 CD-ROM DataDrive

System requirements: IBM PC AT or XT; CD-ROM player and drive

c) *Mode of access*. If a file is available only by remote access, always specify the mode of access.

Online access via AUSINET
Mode of access: Electronic mail using ARPA

Proposed Revision:

9.7B. Notes

Make notes as set out in the following subrules and in the order given there. However, give a particular note first when it has been decided that note is of primary importance.

9.7B1. Nature and scope and system requirements

a) *Nature and scope*. Make notes on the nature and scope of the file unless it is apparent from the rest of the description.

Game

Word processor

Combined time series analysis and graph plotting system

~~Spread sheet~~ Spreadsheet, with word processing and graphic capabilities

b) *System requirements*. Make a note on the system requirements of the file if the information is readily available. If the resource is available only via direct access, always specify the system requirements. Begin the note with *System requirements:*. Give the following characteristics in the order in which they are listed below. Precede each characteristic, other than the first, by a semicolon.

the make and model of the computer(s) on which the file is designed to run
the amount of memory required
the name of the operating system
the software requirements (including the programming language)
the kind and characteristics of any required or recommended peripherals
the type of any required or recommended hardware modifications

System requirements: 48K RAM; Apple Disk II with controller; col. monitor *(File requires colour monitor for display)*

System requirements: Apple family; 48K RAM; DOS 3.3

System requirements: IBM PC; 64K; colour card; 2 disk drives

System requirements: Commodore Super PET SP9000; 64K; Commodore BASIC, version 4.0; dual disk drive

System requirements: Apple II, II+, or IIe; 48K; DOS 3.3; Applesoft BASIC; some programs require game paddles

System requirements: IBM PC or 100% compatible; 128K; DOS 1.1 to DOS 2.1

System requirements: RTI Series 500 CD-ROM DataDrive

System requirements: IBM PC AT or XT; CD-ROM player and drive

System requirements: 486/33MHz PC, Macintosh, or Power Macintosh; 8MB RAM; Windows 3.1 (or higher) or System 7.0.1 (or higher); Java-capable Web browser; VGA

c) *Mode of access.* If a file is available only by remote access, always specify the mode of access.

Online access via AUSINET
Mode of access: Electronic mail using ARPA
Mode of access: World Wide Web. URL: http://www.un.org
Mode of access: Internet via ftp://ftp.nevada.edu

Rationale:

The additional example under "System requirements" illustrates a complex set of system requirements, as well as more up-to-date language {OCLC #39499283}. The examples under "Mode of access" introduce terminology and concepts appropriate to the Internet {examples from *ISBD(ER), p. 79*}

Minority Opinion:

Some members of the Task Force disagreed with the inclusion of URLs or other specific access information suggesting that this information is more appropriately treated as holdings, rather than bibliographic information. In this case the URL and ftp addresses included in the preceding two examples would be deleted.

Additional Note on URLs:

CC:DA's Task Force on Metadata and the Cataloging Rules noted "the need to record standard identifiers such as uniform resource locators (URLs) and uniform resource names (URNs) in catalog records, and AACR2's lack of instruction for recording such information. This information appears in the 856 field in USMARC. It could be argued that URLs are equivalent to "shelf" locations and thus out of scope for AACR2. On the other hand, persistent uniform resource locators (PURLs), 'handles,' and other schemes for stabilizing electronic addresses are standard numbers or identifiers in that they are intended to be

unique and permanent. The Task Force recommends that the Task Force on ISBD(ER) propose to expand rule 9.8 to include instructions to record standard identifiers for electronic resources. There was discussion and disagreement among members of this Task Force, but in the end, we were not convinced that URLs were standard numbers or even bibliographic information that should be covered by *AACR2* 9.8 and therefore do not recommend any change to that part of the rules.

Corresponding Section from *ISBD(ER)*:

7. Note Area

Contents [Paragraph 2, last sentence]

However, in descriptions made following ISBD(ER), the notes on system requirements (see 7.5.1) and mode of access (see 7.5.2), in this sequence, precede all other notes.

7.1.2 Notes on the nature, scope, artistic form or purpose of the item

The genre or other intellectual category to which the item belongs may be given in a note.
e.g. . -- Interactive adventure game
. -- spreadsheet, with word processing and graphics capabilities
. -- Simulation model of the U.S. economy structured after the Wharton Econometric Model
. -- Combined time series analysis and graph plotting system
. -- Gray-scale image processing program

7.5.1 Notes on system requirements *(mandatory for local access electronic resources)*

System requirements that are conditional for use of the item shall be recorded in a note for all local access electronic resources.

System requirements are given as the first note. These requirements may include one or more technical specifications, usually given in the following order, and preceded by "System requirements" (or its equivalent in another language and/or script).

Name, model and/or number of machine(s)
Amount of memory
Name of the operating system(s)
Software requirements (including programming language)
Peripherals
Hardware (internal) modifications

Each requirement, other than the first, is preceded by a semi-colon.

When the item consists of two or more different physical carriers (e.g. an interactive multimedia item consisting of an electronic disk and a videodisc), a separate system requirements note may be made to highlight distinctive system features associated with each physical carrier. Alternatively, the cataloguing agency may choose to make a single system requirements note for both physical carriers.

e.g. . -- System requirements: Macintosh; at least 1MB; System 6.0.5 or later; HyperCard version 1.0 or later; hard disk drive; videodisc player (Pioneer 2200, 4200, 6000A, 6010A, 8000); RS232 cable connector (from Macintosh to videodisc player)
Editorial comment: Single system requirements note for different physical carriers (electronic disk and videodisc).

. -- System requirements for electronic disk: Macintosh; at least 1MB; System 6.0.5 or later; HyperCard version 1.0 or later; hard disk drive; connector cable (from Macintosh to videodisc player)
Editorial comment: Separate system requirements note for different physical carrier.
. -- System requirements for videodisc: Laserdisc player (Pioneer 2200, 4200, 6000A, 6010A, 8000)
Editorial comment: Separate system requirements note for different physical carrier.

. -- System requirements: Requires BinHex 4.0 to convert binary file

. -- System requirements: 386SX processor or higher; 2M RAM (4M recommended); Windows 3.0 or higher; hard disk with 8M free space; VGA adapter; col. monitor; mouse

. -- System requirements: UNIX workstation with Mosaic software

. -- System requirements: Philips Interactive compact disc (CD-I) player with monitor

7.5.2 Notes relating to mode of access *(mandatory for remote access electronic resources)*

Mode of access shall be recorded in a note for all remote access electronic resources.
Mode of access is given as the second note following the System requirements note (see 7.5.1), if given, and is preceded by "Mode of access" (or its equivalent in another language and/or script). In the absence of a system requirements note, mode of access is given as the first note.

```
e.g.     . -- Mode of access: Lexis system. Requires subscription to
       Mead Data Central, Inc.
       . -- Mode of access: World Wide Web. URL: http://www.un.org
       . -- Mode of access: Internet via ftp://ftp.nevada.edu
       . -- Mode of access: Gopher://gopher.peabody.yale.edu
       . -- Mode of access: Computer university network
       . -- Mode of access: Mikenet
```

4.7.2 Rule 9.7B2

Current Rule:

9.7B2. Language and script. Give the language(s) and/or script(s) of the spoken or written content of a file unless this is apparent from the rest of the description.

In German
Greek language transcribed in medieval manuscript tradition

Record the programming language as part of the system requirements note (see 9.7B1b).

Proposed Revision:

9.7B2. Language and script. [*Rev. wording and added examples*] Give the language(s) and/or script(s) of the spoken or written content of a ~~file~~ resource unless this is apparent from the rest of the description.

In German
Greek language transcribed in medieval manuscript tradition
Screen text and audio in English and French
Alphabetical lists of names in Luxembourgish, French, and German

Record the programming language as part of the system requirements note (see 9.7B1b).

Rationale:

The new first example illustrated an interactive computer-assisted instructional course with bilingual text and bilingual sound {OCLC #40124876}. The second is a polyglot gazetteer accessed via the World Wide Web {OCLC #40488835}.

4.7.3 Rule 9.7B4

Current Rule:

9.7B4. Variations in title. …

Title on manual: Compu-math decimals
Also known as: MAXLIK

Proposed Revision:

9.7B4. Variations in title. [*added examples; text of rule unchanged*] …

Title on manual: Compu-math decimals
Also known as: MAXLIK
At head of title: The all new, all purpose, Joy of cooking
HTML title: American Birding Association home page
Former title: Butterflies of the United States
(Web resource whose titled changed to Butterflies of North America)
Personal finances and other applications – Second title screen

Rationale:

The first new example illustrates an alternative internal title for interactive multimedia software featuring World Wide Web links and PalmPilot optional features; the title proper is "Joy of cooking" {OCLC #41087597}. The second shows an alternative HTML mark-up title for the World Wide Web title "American Birding Association hotline" {OCLC #40711199}. The third illustrates that Web resources can change titles {OCLC #35183288}. The fourth gives a title from a second title screen, the first title screen having been chosen as the chief source.

4.7.4 Rule 9.7B5

Current Rule:

9.7B5. Parallel titles and other title information. …

Proposed Revision:

9.7B5. Parallel titles and other title information. [*added examples; text of rule unchanged*] …

Subtitle on container: Life & work of explorer Thor Heyerdahl

HTML title: NRCan resources atlas : welcome! = NRCan atlas des ressources : bienvenue!

Rationale:

The first example gives a subtitle that was not included on the internal sources; the title proper is "Kon-Tiki interactive" {OCLC #35639337}. The second example shows a parallel title from the HTML mark-up that was not present on the English title screen {OCLC #39753376}.

4.7.5 Rule 9.7B6

Current Rule:

9.7B6. Statements of responsibility. Make notes on variant names of persons or bodies named in statements of responsibility if they are considered to be important for identification. Give statements of responsibility not recorded in the title and statement of responsibility area. Make notes on persons or bodies connected with a work, or significant persons or bodies connected with previous editions and not already named in the description.

Data collected in collaboration with Christiane Klapisch, École pratique des hautes études, Paris

Additional contributors to program: Eric Rosenfeld, Debra Spencer

Simulation rev. and reprogrammed by John Smith for use in an online time-sharing environment

Systems designer, Henry Letow ; sound, LF Acoustics

User's guide by John Unger Zussman

Proposed Revision:

9.7B6. Statements of responsibility. [*Rev. wording and added examples*] Make notes on variant names of persons or bodies named in statements of responsibility if they are considered to be important for identification. Give statements of responsibility not recorded in the title and statement of responsibility area. Make notes on persons or bodies connected with a work, or significant persons or bodies connected with previous editions and not already named in the description. These may include persons or corporate bodies responsible for technical and/or artistic production, administrative and consulting functions of the work, performers, and those connected with related versions, if significant for identification.

Data collected in collaboration with Christiane Klapisch, École pratique des hautes études, Paris

Additional contributors to program: Eric Rosenfeld, Debra Spencer

Simulation rev. and reprogrammed by John Smith for use in an online time-sharing environment

Systems designer, Henry Letow ; sound, LF Acoustics

User's guide by John Unger Zussman

"By Robert Winter with the Voyager Company" – Instruction sheet

Terry Jones (voice of the parrot)

"Photographs are by Peter Haaker and Web page organization and graphics by Terry Tillman" – Ack.

Program initially developed by Richard Strauss, Jean Foss, and Mable Kinzie and ported to HTML by Bill Looney, Jason Mitchell, and Mable Kinzie

"Website developed by Catherine Vouchilas"

Text scanned (OCR) by James Crawford and Joshua McKim; images scanned by Carlene Hempel; text encoded by Carlene Hempel and Natalia Smith

Hosted by the University of Edinburgh Dept. of Geography

Rationale:

The first new example justifies two added entries, with differing functions, for the title "Microsoft multimedia Stravinsky on computer optical disc" {OCLC #32314097}. The second gives the features voice for the title "Starship Titanic," a computer optical disc interactive game with sound cassette, book and 3-D glasses {OCLC #38941792}. The third quotes information lacking on the chief source for two statements of responsibility for differing functions performed in creating the Web title "California abalone" {OCLC #40222793}. The fourth gives statements of responsibility lacking on the title screen of the Web title "The interactive frog" {OCLC #39306555}. The fifth quotes a statement relating to the site development, which was done by a person other than the two authors given on the chief source of the Web title "A field guide to the reptiles …" {OCLC #40111713}. The sixth illustrates some complex multiple responsibilities for a typical type of electronic resource {OCLC #40774025}. The final new example gives the host institution for the Web title "Digital elevation data catalogue" by B.M. Gittings {OCLC #39977967}.

4.7.6 Rule 9.7B7

Current Rule:

9.7B7. Edition and history. Give the source of the edition statement if it is different from that of the title proper.

Ed. statement from container label

Make notes relating to the edition being described or to the history of the item.

Updated version of 1982 program

Program first issued in 1981

…

Proposed Revision:

9.7B7. Edition and history. [*added examples*] Give the source of the edition statement if it is different from that of the title proper.

Ed. statement from container label

Make notes relating to the edition being described or to the history of the item.

Updated version of 1982 program
Program first issued in 1981
Frequently updated; Last update: 2/18/97
Updated weekly
Re-published on the Internet, November, 1997
Issued in part in print as: Protected areas of the world : a review of national systems. Gland, Switzerland : IUCN, c1991-c1992; and in part as latest ed. of: United Nations list of national parks and protected areas
Electronic reprint. Originally published in: Journal of wildlife management, vol. 20, no. 2 (1956), p. 111-113.
Originally published in print: Pierre, SD : South Dakota Dept.of Games, Fish & Parks, Wildlife Division, c1991. (Report / South Dakota Division of Wildlife) ; no. 91-04)

[**Note:** The rest of 9.7B7 remains as currently worded in *AACR2R*.]

Rationale:

The first two examples examples added to the 2nd paragraph above illustrate the application of this rule to electronic resources that are frequently or regularly updated. {*ISBD(ER)*, p. 76}

The third example gives digital publication information about the title “Aquatic plant management,” which was originally a print publication {OCLC #40538042}. The fourth illustrates the citation of a related publication {OCLC #36838059}. The fifth shows how a typical reproduction note can be applied to a digital reproduction, in this case an electronic reprint of a print serial {OCLC #39677329}. The sixth example is a more complex history note.

4.7.7 Rule 9.7B8

Current Rule:

9.7B8. File characteristics. Give important file characteristics that are not included in the file characteristics area.

…

Proposed Revision:

9.7B8. ~~File characteristics~~ Type and extent of resource. [*Rev. wording*] Give important ~~file characteristics~~ information relating to the type and extent of the resource that has not been ~~that are not~~ included in the ~~file characteristics~~ type and extent of resource area.

[examples as currently given]

[no change to remainder of rule]

4.7.8 Rule 9.7B9

Current Rule:

9.7B9. Publication, distribution, etc., area. …

Solely distributed by the Laboratory

User's manual distributed by the American Political Science Association, Washington, D.C.

Proposed Revision:

9.7B9. Publication, distribution, etc., area. [*add examples; text of rule unchanged*] …

Solely distributed by the Laboratory

User's manual distributed by the American Political Science Association, Washington, D.C.

Made available through the FirstSearch service by OCLC

Currently published: Belfast? : B. Picton, 1998?-
(The publisher given in area 4 is Dublin, Ireland : Trinity College, 1995- . The resource is now at the author's personal home page.)

Published by: Northern Prairie Wildlife Research Center, 1997- .
(The resource has stayed at the same URL, but the name of the publisher has changed since the resource was first put online.)

Rationale:

The first new example reflects that the title "Periodical abstracts" (available in Web and CD-ROM editions) is distributed or made available through a particular online service {OCLC #39222078}. The other new examples are explained in the parenthetical note.

4.7.9 Rule 9.7B11

Current Rule:

9.7B11. Accompanying material. …

Accompanied by a series of 65 programs in PL/1, with assembler subroutines

Accompanied by documentation: 1980 census user's guide. Pts. 1-2. Washington, D.C. : Supt. Of Docs., 1982

Proposed Revision:

9.7B11. Accompanying material. [*add example; text of rule unchanged*] …

Accompanied by a series of 65 programs in PL/1, with assembler subroutines

Accompanied by documentation: 1980 census user's guide. Pts. 1-2. Washington, D.C. : Supt. Of Docs., 1982

Set accompanied by one teacher's and parents' guide, titled: Using primary sources / by James A. Peroco; and one user's guide. A teacher's guide accompanies each disc

Rationale:

The new example illustrates a complex set of accompanying guides, including one with a distinctive title and statement of responsibility, for which an added entry might be appropriate. This note appears on the record for the interactive multimedia title "Research Publications' American journey." {OCLC #41147530}

4.7.10 Rule 9.7B16

Current Rule:

9.7B16. Other formats. …

Data issued also in printed form and in microform

Issued also for IBM PC and PC-compatible hardware

Proposed Revision:

9.7B16. Other formats. [*add examples; text of rule unchanged*] …

Data issued also in printed form and in microform

Issued also for IBM PC and PC-compatible hardware

Database also on CD-ROM; included in: Arctic and antarctic regions (National Information Services Corp.)

Database and associated documentation are available in a MAC version and in four PC-compatible formats: tab-delimited ASCII file; SPSS portable file; Excel file; SAS formatted file

Also available online in French as: Plantes vasculaires et lichens en péril au Canada

Rationale:

The first new example gives information about a database that is being described in the record as a Web resource {OCLC #40691186}. The second is a typical example of a resource available in a variety of electronic formats {OCLC #19951048}. The third is an online resource available in English and French versions {OCLC #3965197}.

4.7.11 Rule 9.7B17

Current Rule:

9.7B17. Summary. …

Summary: Can be used to manipulate, weigh, and aggregate raw data in any manner desired. By assigning values to the coordinate locations of data points or data zones, the user may produce three types of map: contour, proximal, or conformant

Summary: Responses of New York City adults to Harris study questionnaire used during Apr. and May 1969

Summary: Eight versions of a video game for 1-2 players. To survive, players use laser cannons to destroy flying demons

Summary: A simulation of Operation Barbarossa, the German invasion of Russia during World War II

Proposed Revision:

9.7B17. Summary. [*add examples; text of rule unchanged*] …

Summary: Can be used to manipulate, weigh, and aggregate raw data in any manner desired. By assigning values to the coordinate locations of data points or data zones, the user may produce three types of map: contour, proximal, or conformant

Summary: Responses of New York City adults to Harris study questionnaire used during Apr. and May 1969

Summary: Eight versions of a video game for 1-2 players. To survive, players use laser cannons to destroy flying demons

Summary: A simulation of Operation Barbarossa, the German invasion of Russia during World War II

Summary: Utility program, featuring a screen saver with video clips from the TV show, wallpaper, and sound effects

Summary: Includes full text HTML versions in English or Greek and Latin classics, plus links to other related sites, some with texts also in the original languages. Online index available

Rationale:

The first new example provides more up-to-date terminology for computer characteristics, for the CD-ROM title “Lost in space” {OCLC #40691186}. The second illustrates the polyglot nature of the Web title “Internet classics archive” {OCLC #35184807}.

4.7.12 Rule 9.7B20

Current Rule:

9.7B20. Copy being described, library's holdings, and restrictions on use. …

Local data set name: RBBIT.1

Library's set lacks disk 7

Copied June 1983

File closed until Jan. 1990

Restricted to scholarly use

Proposed Revision:

9.7B20. Copy being described, library's holdings, and restrictions on use. [*add examples; text of rule unchanged*] …

Local data set name: RBBIT.1

Library's set lacks disk 7

Copied June 1983

File closed until Jan. 1990

Restricted to scholarly use

Resource copied April 1999 from local area network

Restricted to users at subscribing institutions

Rationale:

These are typical local notes, commonly seen in cataloguing for electronic resources.

4.7.13 Rule 9.7B22

Current Rule:

[none]

Proposed Revision:

9.7B22. Item described. [*New*] If the electronic resource is frequently updated, identify the date on which the resource was described. This note may be combined with other notes, particularly with the note on the source of the title.

Title from Web page (viewed on May 29, 1999)

Description based on lists dated: Oct. 1997; title from title screen (viewed on Sept. 10, 1998)

Description based on: 2nd Internet ed.; title from title screen (viewed on Sept. 16, 1998)

Rationale:

For frequently updated networked electronic resources, the sources of information upon which the description is based are subject to change at any time. It is therefore vital that the date when the resource was described be given. The proposed new rule is base on a comparable rule for serials (12.7B23). Given that this information is closely associated with the source of the title proper, it seemed appropriate to suggest combining these two notes, as is shown in the proposed examples, which illustrate a range from simple to more complex situations. The form of note in the examples is presently being used by many CONSER cataloguers. If the consistent use of this form in the examples is felt to be too prescriptive, the second example might be changed to "Description based on lists dated: Oct. 1997; title from title screen dated Sept. 10, 1998". {OCLC #39853604 (#2), 39880916 (#3)}

4.8 *AACR:* Appendix D – Glossary

Based on ISBD(ER): **0.2 - DEFINITIONS AND CROSS REFERENCES**

The Task Force acknowledges the changes to the Glossary definitions as contained in *4JSC/ALA/27/ALA follow-up/2 12 April, 1999*, on which there was either unanimous or substantial agreement. These include: (1) an added definition for **Electronic resource**; (2) revised definitions for **Direct access (Computer files)**; **Edition: Computer files; File name (Computer files); Remote access (Computer files);** and **Title screen (Computer files)**; (3) an added reference for **Computer file**; and (4) revised references for **Data set name; File,**

Computer; Machine-readable data file. Unless the Task Force is proposing an *additional* change or changes to one of the above, the preceding glossary terms are not repeated below.

The following, then, is the Task Force's proposed list of glossary terms for incorporation into *AACR2*. The Task Force drew from definitions in *ISBD(ER)*, but also revised many of the definitions to better fit *AACR2* conventions and to reflect updated concepts. For each term, the current *AACR2* text is given, along with the *ISBD(ER)* text and the proposed revisions to the *AACR2* text (marked with additions and deletions). The rationale includes the rule – or proposed revision – in which the term is used in *AACR2* and the special sense in which the term is used in the code, as well as the intent of the particular changes being proposed.

AACR conventions: In the *AACR* glossary, the convention regarding qualifiers is (a) to place qualifiers that state the class of materials in parentheses and (b) to give the qualifying term in the plural (e.g., "Direct access (Electronic resource**s**)"). However, this convention is used *only* under the condition that the same term is not in use by another class of materials. If a term is used differently by two or more classes of materials (as in the case of "Edition," for example), then the qualifier is given without parentheses preceded by a colon – e.g., "Edition: Electronic resources."

4.8.1 Container

Current Rule:

Container. Any housing for an item, a group of items, or part of an item that is physically separable from the material being housed. *See also* Physical carrier.

***ISBD(ER)* text:**

Container. Any housing for an item, a group of items, or a part of an item, which is physically separable from the material being housed. (A box or folder for a set of disks/discs is a container, a cassette or cartridge is not).

Proposed Revision:

Container. [*Rev. wording*] ~~Any h~~Housing for an item, a group of items, or part of ~~an~~ any item, that is readily physically separable from the material being housed (e.g., a box for a disk or a box for a videocassette or sound cassette is a container; but permanent casings for disks, videocassettes or sound cassettes are not). *See also* Physical carrier.

Rationale:

Container is used in 9.0B1. The definition is a modification of *ISBD(ER)* definition, p. 6. The ER definition follows the *AACR* closely. However, distinguishing container from physical carrier using the *AACR2R* definition has been problematic for cataloguers. This revision

clarifies long-standing confusion. “Readily” is given as a qualifier to “physically separable” in order to emphasize the issue of user separability. The parenthetical examples of at least 3 classes of materials make the term’s definition clearer and more generally applicable. By removing “any” from “any housing” and by using “housing” alone, confusion is minimized (“any” seems to include permanent housing or casings which are not containers but physical carriers).

4.8.2 Direct access (Electronic resources)

Current Rule:

Direct access (Computer files). The use of computer files via carriers (e.g., disks, cassettes, cartridges) designed to be inserted into a computer or its auxiliary equipment by the user. *See also* Remote access (Computer files).

***ISBD(ER)* text:**

Local access. A method of obtaining an electronic resource by use of a physical carrier, such as a disk/disc, cassette or cartridge, designed to be inserted by the user into a peripheral attached to a computer - typically a microcomputer.

Proposed Revision in 4JSC/ALA/27/ALA follow-up/2:

Direct access ~~(Computer files)~~ (Electronic resources). The use of ~~computer files~~ electronic resources via carriers (e.g., disks, cassettes, cartridges) designed to be inserted into a computer or its auxiliary equipment by the user. *See also* Remote access ~~(Computer files)~~ (Electronic resources).

Proposed Revision:

Direct access ~~(Computer files)~~ (Electronic resources). [*Rev. wording additional to that proposed in 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*] The use of ~~computer files~~ electronic resources via carriers (e.g., disks/discs, cassettes, cartridges) designed to be inserted into a computer or its auxiliary equipment by the user. Also known as local access. *See also* Remote access ~~(Computer files)~~ (Electronic resources).

Rationale:

The addition of “discs” and “Also known as local access.” to the definition proposed in *4JSC/ALA/27/ALA follow-up/2 12 April, 1999*, ensures the inclusion of both “disks” and “discs,” and clarifies that “local access” is used synonymously with “direct access.”

4.8.3 Disc (Electronic resources)

Current Rule:

[none]

***ISBD(ER)* text:**

[No equivalent. Instead, CD-ROM, CD-I, Photo CD are defined on pp. 5 and 11.]

Proposed Revision:

Disc (Electronic resources). [*New*] Any of several specific carriers delivering optically read data (e.g., CD-I, CD-ROM, Photo CD). *See also* Disk (Electronic resources).

Rationale:

Disc is used in the proposed revision to 9.5B1. This modification of the ISBD*(ER)* definition includes parenthetical examples of specific kinds of carriers. Separate glossary entries are not proposed for specific kinds of carriers (such as Photo-CD) because they are only used in examples (and not in the text of the rules). The proposed definition for disc is parallel to that of disk.

4.8.4 Disk (Electronic resources)

Current Rule:

[none]

***ISBD(ER)* text:**

Hard disk. A non-flexible magnetic disk, in a solid container, used to read and write electronic resources; hard disks can be either fixed or removable.

Proposed Revision:

Disk (Electronic resources). [*New*] A magnetic disk, in a solid container, used to read and write electronic resources. Disks can either be fixed or removable. Also known as floppy disk or hard disk. *See also* Disc (Electronic resources).

Rationale:

"Disk" is used in 9.5B1. *ISBD(ER)* uses "hard disk" as the main term, instead of "disk." "Disk" is more parallel with "disc" than is "hard disk". As such, "disk" should be of greater help to cataloguers. "Disk" is used in revised text proposed above; "hard disk" is rarely used, if ever.

4.8.5 Edition: Electronic resources

Current Rule:

Edition: Computer files. All copies embodying essentially the same content and issued by the same entity.

***ISBD(ER)* text:**

Edition. All the copies of a resource produced from substantially the same master copy and published or issued by a particular agency or group of agencies. An edition may be identified by an edition statement in the resource or may be inferred by the cataloguer by the presence of significant differences in the content or by information provided by the publisher. (See also Version).

Proposed Revision:

Edition: ~~Computer files~~ Electronic resources. [*Rev. wording additional to that proposed in 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*] All copies embodying essentially the same content (e.g., produced from substantially the same master copy), and issued by the same entity.

Rationale:

"Edition" is used in 9.2B1. The addition of the master copy concept is intended to exemplify, and therefore clarify, what may be considered to be "essentially the same content." The concept is being used in the *AACR2* proposal in a less prescriptive manner than in the *ISBD(ER)*.

4.8.6 Electronic resource

Current Rule:

Computer file. A file (data and/or programs) encoded for manipulation by computer.

***ISBD(ER)* text:**

Electronic resource. Material (data and/or program(s)) encoded for manipulation by computer. Includes materials that require the use of a peripheral (e.g. a CD-ROM player) attached to a computer, and online service(s) (e.g. bulletin boards, discussion groups/lists, World Wide Web sites.

Proposed Revision in 4JSC/ALA/27/ALA follow-up/2:

Electronic resource. Material (data and/or program(s)) encoded for manipulation by computer or by a peripheral device attached to a computer (e.g., CD-ROM player). Includes both directly accessed materials (e.g., computer disks, computer optical discs) and remotely accessed materials (e.g., online services, computer bulletin boards, discussion groups/lists, World Wide Web sites). *See also* Direct access (Electronic resources) and Remote access (Electronic resources).

Proposed Revision:

Electronic resource. [*New*] Material encoded for manipulation by computer, including texts, sounds, images, numeric data, computer programs, etc., alone or in combination, as well as materials that require the use of peripheral devices directly connected to a computer (e.g., CD-ROM drive or player) or that require connection to a computer network (e.g., the Internet). *See also* File (Electronic resources).

Rationale:

Used throughout the revised text. This revision takes the *ISBD(ER)* language into account, but modernizes it, giving more attention to the content of the resource and on direct and remote connectivity as distinct types of access. Also consulted: the *Microsoft Computer Dictionary* (an industry standard), in order to find a better (less dated) word than “attached”; “connected” carries fewer connotations of hard-wired physical attachment.

4.8.7 File (Electronic resources)

Current Rule:

[none]

***ISBD(ER)* text:**

[no equivalent]

Proposed Revision:

File (Electronic resources). [*New*] The basic unit in which electronic resources are organized and stored. Electronic resources are comprised of one or more files. *See also* Electronic resource.

Rationale:

Used throughout Chapter 9. In area 3, file reflects the concept that file is a unit of measurement for indicating extent. The above has been reworked/adapted from the *ISBD(ER)* under "file name" and from the existing *AACR* under computer file and the newly proposed Area 3 wording. Also consulted: the related definition in the *Microsoft Press Computer Dictionary*.

4.8.8 File name (Electronic resources)

Current Rule:

File name (Computer files). A designation used in a computer system to identify a file. Sometimes, a file name is called a "data set name." For external designations of a computer file, *see* Title proper.

***ISBD(ER)* text:**

File name. A name, usually consisting of a maximum number of alphanumeric characters that are used to identify either a data resource or a program to the computer. Also known as data set name.

Proposed Revision in 4JSC/ALA/27/ALA follow-up/2:

File name ~~(Computer files)~~ (Electronic resources). A designation used in a computer system to identify a file. Sometimes, a file name is called a "data set name." For external designations of a computer file, *see* Title proper.

Proposed Revision:

File name ~~(Computer files)~~ (Electronic resources). [*Rev. wording additional to that proposed in 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*] ~~A designation used in a computer system to identify a file. Sometimes, a file name is called a "data set name." For external designations of a computer file, *see* Title proper.~~ A name used by a computer to identify, retrieve, manipulate, and save a file. For the chief name of the resource used for bibliographic identification, *see* Title proper.

Rationale:

"File name" is used in 9.7B4 (option). The proposed revision has been adapted from the *ISBD(ER)*, from *AACR2R*'s glossary and the *Microsoft Press Computer Dictionary*. *AACR2R* may confuse cataloguers by making a distinction between internal file names and external titles, particularly since the preferred source for the latter is internal to the resource. The file name is used by programs and operating systems for various functions. File name titles are meaningful bibliographically. The proposed definition clarifies the issue.

4.8.9 Hard disk

Current Rule:

[none]

Proposed Revision:

Hard disk. [*New*] *See* Disk.

Rationale:

While *ISBD(ER)*, p. 7, includes a definition for "Hard disk," the Task Force is not recommending its inclusion in the Glossary of *AACR2*. See rationale under "Disk" above.

4.8.10 Interactive multimedia (Electronic resources)

Current Rule:

[none]

***ISBD(ER)* text:**

Interactive multimedia. Media residing in one or more physical carriers (e.g. an electronic optical disc and videodisc) or in computer networks or systems. Interactive multimedia should exhibit the following two characteristics: (1) user-controlled, nonlinear navigation using computer technology, and (2) the combination of two or more media sound, text, graphics, images, animation, and video) that the user manipulates to control the order and/or nature of the presentation.

Proposed Revision:

Interactive multimedia (Electronic resources). [*New*] Media (e.g., sound, text, graphics, images, video, animation) residing in one or more physical carriers (e.g., an electronic optical disc and videodisc) or in electronic networks or systems. Usually characterized by nonlinear navigation and user-manipulated control of the order and/or nature of the presentation. *See also* Multimedia item.

Rationale:

Used in the proposed revisions to 9.0A1 and 9.3B1. This is a term used by many libraries and in the *ISBD(ER)*. However, *ISBD(ER)* uses a dated narrower definition which, although clearly supported by literary warrant research conducted for *ISBD(ER)* and the *Interactive Multimedia (IM) Guidelines* – and which matches definitions found in technical dictionaries – is too narrow for many *but not all* library applications. With usage over time, and since *ISBD(ER)* was published, there have been suggestions to broaden the definition. The newer definition allows for the "broader concept" that many, but not all libraries are using when they employ it, while retaining the existing "narrower concept."

4.8.11 Metadata

Current Rule:

[none]

***ISBD(ER)* text:**

[no equivalent]

Proposed Revision:

Metadata. [*New*] Structured, encoded data that describe characteristics of information-bearing entities to aid in the identification, discovery, assessment, and management of the described entities.

Rationale:

Used in 9.0B. The definition is from the CC:DA Metadata Task Force Summary Report, June 1999.

4.8.12 Peripheral (Electronic resources)

Current Rule:

[none]

***ISBD(ER)* text:**

Peripheral. An accessory connected to a computer system that is usually used to conduct input-output operations (e.g. a printer, joystick).

Proposed Revision:

Peripheral (Electronic resources). [*New*] An accessory connected to a computer system that is usually used to conduct input-output operations (e.g. a printer, joystick).

Rationale:

"Peripheral" is used in 9.7B1 and conceptually, although not expressly, in many notes. Similar to the *ISBD(ER)* wording, the Task Force wished to have a definition more tied in with system requirements – since cataloguers are directed to describe "peripherals" in systems requirements notes, and such notes are common.

4.8.13 Remote access (Electronic resources)

Current Rule:

Remote access (Computer files). The use of computer files via input/output devices connected electronically to a computer. *See also* Direct access (Computer files).

***ISBD(ER)* text:**

Remote access. A method of using an electronic resource when there is no physical carrier to be handled by the user. The resources are stored on large storage devices maintained mechanically or by a computer technician, including hard disks on microcomputers.

Proposed Revision in 4JSC/ALA/27/ALA follow-up/2:

Remote access ~~(Computer files)~~ (Electronic resources). [*Rev. wording additional to that proposed in 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*] The use of ~~computer files~~ electronic resources via input/output devices connected electronically to a computer. *See also* Direct access ~~(Computer files)~~ (Electronic resources).

Proposed Revision:

Remote access ~~(Computer files)~~ (Electronic resources). [*Rev. wording additional to that proposed in 4JSC/ALA/27/ALA follow-up/2 12 April, 1999*] The use of ~~computer files~~ electronic resources via ~~input/output devices connected electronically to a computer~~ computer networks. With remote access electronic resources no physical carrier is handled by the user. *See also* Direct access ~~(Computer files)~~ (Electronic resources).

Rationale:

Used in 9.0A1. This revised definition makes explicit mention of networked computers. It is more of a melding of *ISBD(ER)* and *AACR* definitions and is parallel to the direct access definition.

4.8.14 TEI header

Current Rule:

[none]

***ISBD(ER)* text:**

TEI (Text Encoding Initiative) header. Descriptive and declarative information making up an "electronic title page" that is attached to a TEI-conformant electronic text. The header consists of four principal components: a file description, encoding description, profile description and revision description.

Proposed Revision:

TEI header. [*New*] Descriptive and declarative information making up an "electronic title page" that is attached to a Text Encoding Initiative-conformant electronic text. Consists of four primary components: file, encoding, profile, and revision descriptions.

Rationale:

Used in proposed revisions to 9.0B1. Wording is very close to *ISBD(ER)* wording, but made to conform more closely to *AACR* formatting and language.

4.9 *AACR:* Index

The Task Force notes that there are probably changes required in the Index to *AACR2* as a result of the proposals recommended in this document. The Task Force regrets that they were not able to include the specific changes in this document.

Appendix

Minority Opinion concerning Area 3, Type and Extent of Resource

Some members of the Task Force would like to re-examine the question of the use of Area 5 for remote-access electronic resources and the separation between type and extent of resource (Area 3) and type and extent of carrier (Area 5). This feature of both *AACR2* and of *ISBD(ER)* has always been controversial, and perhaps it is time for the Joint Steering Committee to reconsider its earlier decisions.

Background

From the very beginning, Chapter 9 has recognized that the physical description of the carrier of a computer file (or electronic resource) is not of primary significance. In the original chapter in the 1978 rules, rule 9.5 was called "File Description Area" and the type (data or programs) and extent of the file was given under 9.5B. At this time, computer files were primarily large numeric data files that were distributed on magnetic tape, but were stored for use on a variety of media. The actual carrier at any given time was neither predictable nor important for users to know. Therefore, the type and extent of the file was recorded instead.

In 1984, ALA issued a set of interim "Guidelines for using AACR2 Chapter 9 for Cataloging Microcomputer Software." Because computer files were now being published and distributed on standard carriers, it was felt that the physical description needed to be given in addition to the file description. Therefore these Guidelines (9.5B1) called for the construction "X files on X [physical media]" (e.g., 10 files on 1 computer disk).

When Chapter 9 was revised for the 1988 revision of *AACR*, Michael Gorman convinced the members of the Joint Steering Committee that file descriptive was not physical description and did not belong in Area 5 at all; he proposed that a new implementation of Area 3 be used for file description in Chapter 9. It was pointed out at the time that the carrier on which an item was distributed need have nothing to do with the medium on which the item was stored or used. Installing computer data and programs on large hard disks was already common, and networked computing was just over the horizon. However, Gorman's view prevailed and rule 9.5 now stated that Area 5 was to be omitted for remote-access files.

This view was carried over to the ISBD for Computer Files and then to the ISBD for Electronic Resources, as well as to the 1998 revisions to *AACR2*.

The Case for Using Area 5 for Remote-Access Resources

A major component of both Area 3 and Area 5 is the type and extent of the item. In Area 3, this is the type and extent of the content of the resource; in Area 5, it is the type and extent of the

carrier. It should be noted that extent in both cases is a quantitative measurement, serves much the same purpose in the description, and is artificially separated by the present rules.

It can be argued that the only difference between a remote-access resource and that same file stored on a specific carrier is either chronological or geographical. The difference is either that the direct-access resource hasn't yet been installed in a permanent location from which it can actually be used (at which point it has become a remote-access resource) or the resource has been stored on a remote rather than a local computer. Networked computing has – at least in a sense – eliminated the distinction.

For both remote and direct-access resources, the resource in question still has a fixed content: structure, extent, features like colour and sound. It could be argued that an SMD in Area 5 based on the intellectual content could be equally applicable to both and would be more informative. For example, the description "1 electronic map (97 megabytes) : col." would apply both to a resource distributed on CD-ROM and to the same files stored on a remote networked server. The rest of the description (if these are indeed distinct items – are they not the same expression of the same work?) would need to make it clear the mode of access or system requirements for each "version" of the resource.

Additional Issues

One clean way to add type and extent of resource back into Area 5 would be to divide 9.5B into two sets of rules. The present 9.5B rules would be designated for describing direct-access resources; the present 9.3 rules would be designated for describing remote-access resources. 9.5C would be equally applicable to both types. 9.5D would be applicable only to direct-access resources. 9.5D would again be applicable to both types (thus eliminating the need to describe accompanying material for remote-access resources in a note).

This may be too simple. Area 3 is currently applicable to both types, and the revision suggested above makes the description of type and extent of resource at least an option for direct access resources. There may be a need for a third alternative, similar to the convention in the 1984 ALA guidelines described above.

Conclusion

The present distinction between the type of information given in Area 3 and the type of information given in Area 5 is an historical artefact of what may have been a misunderstanding of the nature of the digital form. It is certainly difficult to maintain in the present networked environment. The Joint Steering Committee in the past took a strong position that only *physical* characteristics could be given in Area 5. The result was the separation in the description of the information about type and extent of the intellectual content from that about type and extent of the physical carrier. Perhaps it is time to reconsider that 1988 decision.

While this view did not prevail in the deliberations or recommendations of this Task Force, there is support through the articulation of this minority report, for JSC re-examining the issue.

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