

Please note that the purpose of this document is to facilitate the work of the Committee and to provide a means for outreach to both library and non-library cataloging communities. This document is intended for the exclusive use of CC:DA and its cataloging constituencies, and is presented as a discussion document in the ongoing process of rule revision. Under no circumstances should the information here be copied or re-transmitted without prior consultation with the current Chair of CC:DA.

TO: Adam Schiff  
FROM: Mary L. Larsgaard  
RE: Rule proposals for cartographic materials  
DATE: 12/4/2000

Here is the package of rule proposals for CC:DA discussion, ALA Midwinter, January 2001.

#### **A. History of proposals:**

During the year 2000, MAGERT presented two packets of rule proposals concerning cartographic materials. The first was presented at ALA Midwinter; it is now 4JSC/ALA/31. The second was presented at ALA Annual; it is now 4JSC/ALA/31/ALA follow-up.

JSC has had constituent responses only to ALA/31, not to ALA/31/ALA follow-up. Those responses are:

- 4JSC/ALA/31/ACOC response
- 4JSC/ALA/31/BL response
- 4JSC/ALA/31/CCC response
- 4JSC/ALA/31/LC response.

During JSC's September meeting in London, Brian Schottlaender and I presented the proposals in ALA/31. All non-Area 3 proposals were dealt with during this September meeting. But it rapidly became obvious that for Area 3 proposals, before decisions could be made it would be essential for all the various constituencies to read and respond to all of the JSC constituent responses, given that these responses presented different points of view not just from ALA/31 but from each other. I therefore requested that JSC consideration of Area 3 proposals be tabled until the next JSC meeting (April 2-4, 2001, Library of Congress, Washington, DC). JSC agreed.

During the months of October and November, members of MAGERT's Cataloging and Classification Committee (CCC), and members of the Anglo-American Cataloguing Committee for Cartographic Materials (AACCCM) read and responded, in emails to me, to the JSC responses to ALA/31. The following group of rule proposals is composed of the joint opinion of the MAGERT CCC. This group of rule proposals also includes rule proposals in 4JSC/ALA/31/ALA follow-up; this latter inclusion was at the express request of JSC, who preferred to have one document of cartographic-materials proposals, rather than two.

**B. List of rule proposals:**

Itemized below are proposals, some of which need discussion at Midwinter\* and some of which do not\*\*.

3.0A1 \*\*  
 3.3 \*  
 3.3A1 \*  
 3.3A3 \*  
 3.3B1 \*  
 3.3B3 \*  
 3.3B4 \*  
 3.3B5 \*  
 3.3B6 \*  
 3.3B7 \*  
 3.3B8 \*\* (since JSC agreed with what was presented)  
 3.3B9 \*  
 3.3C2 \*  
 3.3D1 \*  
 3.3D2 withdrawn, and therefore does not appear in this package  
 3.3E \*  
 3.3F \*  
 3.3G and 3.3G1 \*  
 3.3H \*  
 3.7B2 \*\*  
 3.7B8 \*\*  
 3.7B10 \*\*  
 3.7B12 \*\*  
 Glossary \*\*

**C. Method of presentation of proposals:**

Each proposal – except the ones that have no JSC constituent responses and therefore need not be discussed at this meeting – is composed of three sections:

- I. Original ALA proposal;
- II. JSC responses;
- III. MAGERT response.

Over the years that I have been a CC:DA member, one matter which has somewhat irritated me has been flipping through the pages of several documents in order to get all of the responses to a proposal. I have therefore compiled these, on the grounds that it makes it quicker and easier for us in CC:DA to have all pertinent information for a proposal in one place, rather than having to hunt around for it. I realize this is not the traditional method of CC:DA presentation, and am requesting that we give it a try. This method has certainly worked very well, over the past two months, for getting opinions from all MAGERT CCC and AACCCM members.

## 3.0A1

### I. ALA proposal

The scope for cartographic materials uses the term navigational when it should be nautical, since all charts are navigational (see also request for Glossary changes). Also, in keeping with the requested change in the specific material designation, the phrase *map section* should be changed to *section*.

### CURRENT RULE

**3.0A1.** The rules in this chapter cover the description of cartographic materials of all kinds. Cartographic materials include all materials that represent the whole or part of the earth or any celestial body. These include two- and three-dimensional maps and plans (including maps of imaginary places); aeronautical, navigational, and celestial charts; atlases; globes; block diagrams; map sections; aerial photographs with a cartographic purpose; bird's-eye views (map views); etc. They do not cover in detail the description of early or manuscript cartographic materials, though the use of an additional term in the physical description (see 3.5B) and/or the use of the specific instructions in chapter 4 will furnish a sufficiently detailed description for the general library catalogue. For items falling within the scope of other chapters but presenting cartographic information (e.g., some wall charts, some playing cards), consult the rules in this chapter in conjunction with those of the chapter appropriate to the item.

### PROPOSED RULE

**3.0A1.** The rules in this chapter cover the description of cartographic materials of all kinds. Cartographic materials include all materials that represent the whole or part of the earth or any celestial body. These include two- and three-dimensional maps and plans (including maps of imaginary places); aeronautical, ~~navigational~~ nautical, and celestial charts; atlases; globes; block diagrams; ~~map~~ sections; aerial photographs with a cartographic purpose; bird's-eye views (map views); etc. They do not cover in detail the description of early or manuscript cartographic materials, though the use of an additional term in the physical description (see 3.5B) and/or the use of the specific instructions in chapter 4 will furnish a sufficiently detailed description for the general library catalogue. For items falling within the scope of other chapters but presenting cartographic information (e.g., some wall charts, some playing cards), consult the rules in this chapter in conjunction with those of the chapter appropriate to the item.

## 3.3

### I. Original ALA proposal

Because rules are being added to accommodate additional material-specific details for cartographic electronic resources, it would be helpful to indicate the order of the information for Area 3. The cartographic community would like the more general File characteristics information to precede the specific details of a cartographic electronic resource. Additionally, since a cartographic item can also be an electronic resource and/or be issued serially, it would be helpful to indicate the overall order for Area 3 when multiple chapters are consulted in cataloguing.

### CURRENT RULE

#### 3.3. MATHEMATICAL DATA AREA

Contents:

- 3A. Preliminary rule
- 3B. Statement of scale
- 3C. Statement of projection
- 3D. Statement of coordinates and equinox

### PROPOSED RULE

#### 3.3. MATHEMATICAL AND OTHER MATERIAL-SPECIFIC DETAILS DATA AREA

Contents:

- 3A. Preliminary rule
- 3B. Statement of scale
- 3C. Statement of projection
- 3D. Statement of coordinates and equinox
- 3E. File characteristics
- 3F. Geospatial reference data
- 3G. Digital graphic representation
- 3H. Numeric and other data related to serials

### 3.3 (continued)

#### II. JSC responses

##### ACOC RESPONSE

3.3 The Australian Committee on Cataloguing supports the change of name for the area, and the addition of the elements 'Digital graphic representation' and 'Geospatial reference data'. Providing there are no overriding reasons for the order given, we would prefer that the order of these two elements be reversed so that it parallels the order in MARC 21.

JSC may also wish to consider treating 'File characteristics' and 'Numeric and other data related to serials' as part of a new generic order of preference in 1.3.

##### 3.3. MATHEMATICAL AND OTHER MATERIAL-SPECIFIC DETAILS DATA AREA

Contents:

- 3A. Preliminary rule
- 3B. Statement of scale
- 3C. Statement of projection
- 3D. Statement of coordinates and equinox
- 3E. File characteristics
- 3F. Geospatial reference data
- 3G. Digital graphic representation
- 3H. Numeric and other data related to serials

##### CCC RESPONSE

3.3 CCC agrees.

##### LC RESPONSE

3.3: (1) We agree with the proposal to rename area 3. (2) Regarding the inclusion of "3E. File characteristics" under "Contents;" we wish to defer consideration until a decision regarding area 3 for chapter 9 has been made.

### 3.3 (continued)

#### III. MAGERT responses

1. We thank JSC for agreeing to the renaming of 3.3.
2. We note that the decision to retain area 3 in Chapter 9 has been made so therefore the inclusion of 3.3E (File characteristics) is acceptable.
3. After considerable discussion of our experience cataloging electronic cartographic materials, the map library community requests that 3.3G (Geospatial reference data) be removed from area 3 and that instead this information be included as a note on area 3, in area 7. If this is acceptable to JSC, we are willing to whichever of the following seems most appropriate: write a revised 3.7B8 which includes an example; write a revised 3.7B8 which includes both a rule and an example; or deal with it only in the interpretive manual, Cartographic Materials: A Manual of Interpretation for AACR2.
4. While generally it is not appropriate to use the M word (MARC 21) in an AACR2 rule discussion, since this was specifically mentioned (relating to the order of information – that is, that 3.F and 3.G should be reversed, to match MARC order) we are addressing the matter.

The new MARC fields for electronic cartographic materials were presented to MARBI – in 1994 – because of a U.S. Presidential Executive Order that directed all Federal agencies to begin using the Content Standard for Digital Geospatial Data effective January 1 of 1995. None of us had any cataloging experience using these fields and yet it was essential that these fields be approved by MARBI in sufficient time that Federal agencies would be able to use the fields in a MARC environment. Thus at the time the proposal was prepared, we were forced to work by sheer logic, and decided that it made sense within that context to have 3F (e.g., “Raster ; pixel”; MARC 352) come after 3G (detailed projection, grid, etc., information; MARC 343 and 343) so that it would follow as closely as possible after the projection information that is given in MARC 255 subfield b. MARBI was very understanding of the entire situation, and approved the fields as provisional.

As we catalog more and more digital geospatial data, we have come to the realization that while our initial theorization – that users need to know whether an electronic item is raster or vector very early on (since it determines what software may be used to manipulate the data) – is correct, the detailed projection, grid, etc., information is more appropriately given in Area 7.

## 3.3A1

### I. No ALA original proposal

This came about from JSC responses to ALA proposal for 3.3A3.

### II. JSC responses

#### CCC RESPONSE (from 3.3A3)

We suggest that only an additional statement be given at rule **3.3A1. Punctuation** (cf. 1.8A1):

#### CURRENT TEXT

##### 3.3A1. 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.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

Precede the statement of epoch by a comma.

#### PROPOSED TEXT

##### 3.3A1. 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.

Precede each repetition of this area by a full stop, space, dash, space.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

Precede the statement of epoch by a comma.

Furthermore, given that this area now stipulates other material specific details (i.e., file characteristics, digital graphic representation, geo-spatial reference data, and numeric and other data related to serials), augmenting rule **3.3A1** to encompass the details now appearing in the new subrules should also be considered.

### 3.3A1 (continued)

#### LC RESPONSE (for 3.3F-3.3G)

Nevertheless, we recommend that at least the punctuation of the data elements be included in AACR2. Suggested revision for 3.3A1:

#### 3.3A1. 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.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement in one pair of parentheses.

Precede the statement of epoch by a comma.

Precede the object type by a space, colon, space.

Precede the format name by a space, semicolon, space.

Enclose each statement on the number of objects in parentheses after the object type.

If both point/vector object count and VPF level are given, precede the VPF level by a space, semicolon, space.

Enclose each set of projection or ellipsoid parameters in parentheses.

Separate the multiple parameters by a space, semicolon, space.

Precede the secondary/related reference method by a space, colon, space.

### 3.3A1 (continued)

#### III. MAGERT response

We agree with JSC responses that note that the repeatability of an area, and the punctuation, need to appear in 3.3A1 and are not appropriate in 3.3A3. The Canadian members of the Anglo-American Cataloguing Committee for Cartographic Materials (AACCCM) have very kindly written the following compilation of the various JSC responses. We are in agreement with it.

We agree with the CCC proposal for the addition of :

Precede each repetition of this area by a full stop, space, dash, space.

and with the LC proposal to add the punctuation for the new rules. The LC proposal has a typographical error:

If both coordinates and equinox are given, precede the statement in one pair of parentheses.

This should read:

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

In addition, we would like to move the instructions for object count to follow the instruction for object type, as this arrangement more closely follows the order of the rules. The following then is a compilation of the proposals:

#### 3.3A1. 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.

Precede each repetition of this area by a full stop, space, dash, space.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

Precede the statement of epoch by a comma.

Precede the object type by a space, colon, space.

Enclose each statement on the number of objects in parentheses after the object type.

Precede the format name by a space, semicolon, space.

If both point/vector object count and VPF level are given, precede the VPF level by a space, semicolon, space.

Enclose each set of projection or ellipsoid parameters in parentheses.

Separate the multiple parameters by a space, semicolon, space.

Precede the secondary/related reference method by a space, colon, space.

It should be noted that if 3G becomes a note, the last three instructions which relate to it will have to be deleted.

### 3.3A3

#### I. Original ALA proposal

In 1982 the MARC format was changed because of the difficulty in coding multiple scales in a machine-readable record for an item with two unrelated scales. This change forced the use of separate scale statements, to enable MARC coding, rather than combining the information in a single scale statement. The cartographic community believes this new rule is needed to clearly indicate that Area 3 can contain multiple scale statements or Area 3 information as directed in chapter 9 and/or chapter 12.

#### NEW RULE

##### 3.3A3. This area is repeatable.

If more than one material specific detail area is required, give them in the following order: mathematical data, file characteristics, including digital graphic representation and geospatial reference data, and numeric and/or alphabetic, chronological, or other designation.

Scale not applicable (W 138<sup>0</sup>59' -W 93<sup>0</sup>47'/N 74<sup>0</sup>25' -N 69<sup>0</sup>16'). - Computer data (17 files : 692,560,000 bytes)

#### II. JSC responses

##### ACOC RESPONSE

**3.3A3** This new rule proposal is attempting to address both the order in which to record the materials specific details, and the repeatability of the field.

The order in which to record the material specific details is covered sufficiently by the revision of rule 3.3. Throughout AACR2 areas of the description of an item are governed by their order in the rules, and a specific rule is not required for this purpose.

The proposed wording, 'this area is repeatable,' does not conform to aACR2 style conventions. We believe an additional statement at rule 3.3A1 as proposed in the 4JSC/ALA/31/CCC response is a better solution. We also agree with the 4JSC/ALA/31/CCC response that repetition of the same material specific data is covered by rules 3.3B3 to 3.3B6. See also our later comments on rule 3.3B4.

If JSC does decide to add this new rule, 'detail' should be replaced with 'details' as in rule 1.3. The Australian Committee on Cataloguing does not agree with the new rule proposal 3.3B9 regarding scale for electronic resources, and therefore does not agree with the example provided. It would also be more helpful to include two more examples, one incorporating multiple scale statements and another incorporating numeric or other serials related data.

### 3.3A3 (continued)

#### CCC RESPONSE

**3.3A3.** The proposed wording “This area is repeatable” does not conform to AACR language and style. We suggest that only an additional statement be given at rule **3.3A1**.

**Punctuation** (cf. 1.8A1):

#### CURRENT TEXT

##### 3.3A1. 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.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

Precede the statement of epoch by a comma.

#### PROPOSED TEXT

##### 3.3A1. 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.

Precede each repetition of this area by a full stop, space, dash, space.

Precede the projection statement by a semicolon.

Enclose the statement of coordinates and equinox in one pair of parentheses.

If both coordinates and equinox are given, precede the statement of equinox by a semicolon.

Precede the statement of epoch by a comma.

Furthermore, given that this area now stipulates other material specific details (i.e., file characteristics, digital graphic representation, geo-spatial reference data, and numeric and other data related to serials), augmenting rule **3.3A1** to encompass the details now appearing in the new subrules should also be considered.

Since rule **3.3A1. Punctuation** indicates that this area is repeatable, the new rule **3.3A3** would then only have to stipulate the order of the material specific details as follows:

**3.3A3.** If more than one material specific detail area is required, give them in the following order: mathematical data, file characteristics, including digital graphic representation and geospatial reference data, and numeric and or alphabetic, chronological, or other designation.

Scale not applicable (W 138°59'—W 93°47'/N 74°25'—N 69°16'). — Computer data (17 files ; 692,560,000 bytes)

With regard to repetition of the same material specific data (e.g., scale statement) it appears that rules 3.3B3 to 3.3B6 already address these situations. Please see also our comments at **3.3B4**, **3.3B5** and **3.3B6**.

### 3.3A3 (continued)

#### LC RESPONSE

**3.3A3:** (1) The first sentence in the proposal (“This area is repeatable.”) is already covered by 0.25. Therefore, we recommend that it not be included in 3.3A3. (If retained, the same statement would need to be added to 5.3, 9.3 (if retained), 11.3, and 12.3.) (2) We agree with the proposal to specify the order of the area 3 data elements. (The proposal to include “file characteristics” will need to be deferred until a decision regarding area 3 for chapter 9 has been made.)

#### III. MAGERT response

We agree that the first statement (“This area is repeatable”) is now covered by the addition to 3.3A1 and so is no longer necessary.

We would like to amend further the wording of the proposed rule; if the geospatial reference data becomes a note, it will be deleted from this list. The example has been amended, but will have to be re-examined once the final decision on how to record scale for electronic cartographic resources is made.

Clean copy reads as follows:

**3.3A3.** If more than one material specific detail area is required, give them in the following order: mathematical data; file characteristics; digital graphic representation; geospatial reference data; and numeric and or alphabetic, chronological, or other designation.

Scale not applicable (W 138°59'—W 93°47'/N 74°25'—N 69°16'). — Computer data.

Note: MAGERT thanks the Canadian contingent of AACCCM for writing the bulk of this response.

### 3.3B1

#### I. Original ALA proposal

In providing a scale statement, the rules currently instruct a cataloguer to base the statement on the following types of scale information, in the following order of preference

- 1) a representative fraction (e.g. 1:1,000,000)
- 2) a verbal statement of scale (e.g. one to a million, 1 inch = 1 mile)
- 3) a bar scale, which graphically represents the scale based on the length of a line,  
or  
a grid of known scale (e.g. latitude and longitude, township and range system)
- 4) comparison with another item of known scale.

In order to provide a scale using the third method a cataloguer must use a cataloguing tool known as a natural scale indicator to determine a representative fraction by placing it along the base line of the bar scale or line in the grid, and estimating where the line crosses the scale indicator, which is rarely on a line of exact scale. This method results in an estimated scale rather than a computed scale and thus the change in the language in the fourth paragraph of the rule.

In practice, most all cataloguing institutions which deal with cartographic materials, including the Library of Congress, cannot afford to determine a scale by comparison to a item of known scale. Since the statement *Scale indeterminable* is not an accurate statement when an agency judges that it is too costly to attempt comparison, the cartographic community has been using the statement *Scale not given*, as was the phrasing in AACR1. We believe that this practice should be codified in the rule, while still providing for the option to determine a scale through comparison for those agencies for whom giving scale is a necessity.

### 3.3B1 (continued)

#### CURRENT RULE

**3.3B1.** Give the scale of a cartographic item (except as noted below) as a representative fraction expressed as a ratio (1: ). Precede the ratio by *Scale*. Give the scale even if it is already recorded as part of the title proper or other title information.

Scale ca. 1:36,000,000  
(*Scale as it appears on the item*)

Bartholomew one inch map of the Lake District [GMD]. – Rev. – Scale 1:63,360

If a scale statement found in the chief source of information or accompanying material is not expressed as a representative fraction give it as a representative fraction in square brackets.

Scale [1:253,440]  
(*Scale statement reads: 1 inch to 4 miles*)

If a representative fraction or other scale statement is found in a source other than the chief source of information or accompanying material (e.g., on a container or case not used as the chief source), give the scale as a representative fraction in square brackets.

Scale [1:63,360]

If no scale statement is found in the chief source of information or accompanying material or on the item's container or case, compute a representative fraction from a bar graph or a grid or by comparison with a map of known scale, and give it in square brackets preceded by *ca.*

Scale [ca. 1:63,360]

If no scale can be determined by any of the above means, give *Scale indeterminate*.

**3.3B1 (continued)****PROPOSED RULE**

**3.3B1.** Give the scale of a cartographic item (except as noted below) as a representative fraction expressed as a ratio (1: ). Precede the ratio by *Scale*. Give the scale even if it is already recorded as part of the title proper or other title information.

Scale ca. 1:36,000,000  
(*Scale as it appears on the item*)

Bartholomew one inch map of the Lake District [GMD]. – Rev. – Scale 1:63,360

If a scale statement found in the chief source of information or accompanying material is not expressed as a representative fraction give it as a representative fraction in square brackets.

Scale [1:253,440]  
(*Scale statement reads: 1 inch to 4 miles*)

If a representative fraction or other scale statement is found in a source other than the chief source of information or accompanying material (e.g., on a container or case not used as the chief source), give the scale as a representative fraction in square brackets.

Scale [1:63,360]

If no scale statement is found in the chief source of information or accompanying material or on the item's container or case, ~~compute~~ estimate a representative fraction from a bar ~~graph~~ scale or a grid ~~or by comparison with a map of known scale, and give it in square brackets preceded by ca.~~ Give the representative fraction preceded by ca. in square brackets.

Scale [ca. 1:63,360]

If no scale can be determined by any of the above means, give *Scale* ~~indeterminable~~ not given. Optionally, estimate a scale by comparison with a map of known scale and give it in square brackets preceded by ca. If no scale can be determined by either estimation or comparison, give the statement *Scale indeterminable*.

### 3.3B1 (continued)

#### II. JSC responses

##### ACOC RESPONSE

**3.3B1** The Australian Committee on Cataloguing supports the revised wording as it is more accurate, i.e., replacing 'compute' with 'estimate', and 'bar graph' with 'bar scale'.

We also agree that estimation of the scale by comparison with another map should be optional, as is appropriate to the third level of description. We do not agree with the proposed re-wording in 4JSC/ALA/31/CCC response, as this would reverse the change. It is not usual in AACR2 to make the optional provision the one which supplies less information.

The following typing error should be corrected: 'preceeded should be spelt 'preceded'.

##### CCC RESPONSE

**3.3B1.** We suggest the following rewording of the fourth to sixth paragraphs of this rule.

##### PROPOSED TEXT

If no representative fraction or verbal scale is found in the chief source of information or accompanying material or on the item's container or case, estimate a representative fraction from a bar scale or a grid. Give in square brackets the representative fraction preceded by *ca.*

Scale [ca. 1:63,360]

If no scale statement or grid is found in the chief source of information or accompanying material or on the item's container or case, estimate a scale by comparison with a map of known scale and give in square brackets the representative fraction preceded by *ca.* *Optionally, give Scale not given.*

If no scale can be determined by any of the above means, give *Scale indeterminable.*

### 3.3B1 (continued)

#### LC RESPONSE

**3.3B1:** (1) We agree with the proposed revisions to the fourth and fifth paragraphs. (2) Regarding the “optionally” statement, we recommend deleting “either estimating or” since the entire option is dealing with comparison. Also, we strongly recommend that “*Scale indeterminable*” in the option be replaced by “*Scale not given*” so that the same terminology would be used both when the scale cannot be estimated and when the scale cannot be compared. We do not think that users would grasp the subtle differences. Suggested revision for the final paragraph:

Optionally, estimate a scale by comparison with a map of known scale and give it in square brackets preceded by ca. If no scale can be determined by comparison, give the statement *Scale not given*.

#### LC RESPONSE (for 3.3B9)

In addition, we recommend that the standard terminology “*Scale not given*” be used whenever the scale is not recorded for whatever reason. Suggested revision:

**3.3B1.** [Add as the final paragraph:]

For electronic resources, give the scale if the resource has a scale statement or if the scale is already recorded as part of the title proper or other title information. Otherwise, give *Scale not given*.

### III. MAGERT response

Generally we are in agreement with the ACOC and LC responses. We do maintain that there is a difference between “Scale not given” and “Scale indeterminable,” but we can live with using only “Scale not given.”

### 3.3B3

#### I. There is no ALA proposal for this rule

#### II. JSC responses

##### LC RESPONSE

**3.3B3:** There is no rule revision proposal in 4JSC/ALA/31 for 3.3B3, but there are proposals to change “*Scales vary*” to “*Scales differ*” in 3.3B5 and 3.3B6, which we support. The proposed changes to 3.3B5 and 3.3B6 suggest that “*Scale varies*” in 3.3B3 should be changed to “*Scale not given*” when the scale values are not known. This proposed change in 3.3B3 would remove from AACR2 altogether the existing confusion created by the two terminologies “*Scale varies*” and “*Scales vary*.” Also, “*Scale not given*” seems the more accurate terminology for the situation being addressed. Suggested revision for the last paragraph in 3.3B3:

If the values are not known, give *Scale ~~varies~~ not given*.

#### III. MAGERT response

There is a qualitative difference between “*Scale varies*” and “*Scale not given*.” We consider this to be important information for the user and request that the rule stay as is.

## 3.3B4

### I. Original ALA proposal

The requested modification reflects the addition of **3.3A3** and the 1982 change to the MARC format requiring separate machine-readable fields to record two unrelated scales.

#### CURRENT RULE

**3.3B4.** If the description is of a multipart item with two scales, give both. Give the larger scale first.

Scale 1:100,000 and 1:200,000

#### PROPOSED RULE

**3.3B4.** If the description is of a multipart item with two scales, give both in separate scale statements. Give the larger scale first.

Scale 1:100,000 ~~and~~ – Scale 1:200,000

## 3.3B4 (continued)

### II. JSC responses

#### ACOC RESPONSE

**3.3B4** The Australian Committee on Cataloguing agrees that rule 3.3B4 should be altered to allow for separate statements of scale.

However we also support the CCC proposal in 4JSC/ALA/31/CCC response that rules 3.3B4 and 3.3B5 are equally applicable to single part items, and that therefore 'multipart' be replaced by 'cartographic' in each. We further note that the present definition of 'multipart' in the glossary does not refer to cartographic materials, but refers specifically to monographic items.

As noted in 4JSC/ALA/31/CCC response, rule 3.7B8 should be revised accordingly.

#### CCC RESPONSE

**3.3B4 and 3.3B5.** We do not understand why these two rules are applicable only to multipart items and not to single part items. We propose that "multipart" be replaced by "cartographic" (cf. 3.3B6). These proposed revisions to 3.3B4 and 3.3B5 are reflected in our comments below.

**3.3B4.** We do not support this proposal in its entirety. We feel that in cases when projection and/or coordinates are the same in a cartographic item, it is unnecessary to repeat that information in separate scale statements. We would like to propose the following as an option in such cases. Rule 3.3B4 would read as follows:

**3.3B4.** If the description is of a cartographic item with two scales, give both in separate scale statements. Give the larger scale first.

Scale 1:100,000. —Scale 1:200,000

Optionally, if the projection and/or coordinates are the same in a cartographic item with two scales, give both and give the larger scale first.

Scale 1:50,000 and 1:250,000 (W 80°—W 78°/N 47°—N 46°)

### 3.3B4 (continued)

#### LC RESPONSE

**3.3B4-3.3B6:** Having more than one scale listed in the scale statement creates confusion for users since the scale order is not related to the titles of the cartographic items being transcribed in the title and responsibility area. Therefore, we propose restricting the scale statement to a single scale. The result is that if the cartographic items has more than one scale, we are recommending using “*Scales differ*” in the scale statement. We wish to point out that 3.7B8 already makes provision for giving multiple scales in the note area.

Suggested revisions:

**3.3B4.** If the description is of a multipart item with two or more scales, give ~~both~~ *Scales differ*.  
Give the larger scale first.

Scale 1:100,000 and 1:200,000

~~**3.3B5.** If the description is of a multipart item with three or more scales, give *Scales vary*.~~

**3.3B6.** In describing a cartographic item in which all the main maps are of one scale, ~~or two scales~~, give the scale, ~~or both scales (in the latter case give the larger scale first)~~. If the main maps are of two ~~three~~ or more scales, give ~~*Scales vary*~~ *differ*.

Renumber **3.3B7** as **3.3B6** and **3.3B8** as **3.3B7**.

### III. MAGERT response (for 3.3B4 through 3.3B6)

1. We agree with the CCC idea of having the rules cover all cartographic materials, rather than just multipart items. See 4 below for clean-copy proposals for the proposed rules. Note that these rules apply to all cartographic materials, not just to maps.
2. Re the ACOC comment that “multipart item” as currently defined in the AACR2R glossary does not include cartographic materials: after much consultation of the glossary and various dictionaries, we were saved by Judy Kuhagen’s noting JSC’s tentative approval of the following glossary entries, which take care of this problem:

**Monograph.** A bibliographic resource that is complete in one part or intended to be completed within a finite number of parts.

**Multipart item.** A monograph complete, or intended to be completed, in a finite number of separate parts. The separate parts may or may not be numbered.

**3.3B4 (continued)**

3. We agree that when more than one scale statement is given and there is more than one title in the title statement, the scale statements should be in the same order as the titles are given in area 2, rather as per the CCC response, in which the largest scale is given first. Where there is only one title in the title statement, then largest scale is given first.
4. Re the situation when the projection and coordinates are the same, with only the scale being different: It does seem more clear to us to have one scale statement per item in this situation, and current cataloging software makes copying and pasting the first mathematical-data statement (to use as a base for other scale statements) quick and easy. If the JSC decision is to go the route given by CCC (that is, to use one mathematical-data statement when projection and/or coordinates are the same for each, e.g., map), then we can live with that, although even in that case, we would prefer that it be an option rather than a requirement to use one scale statement in such a situation.
5. Re LC's response concerning using "Scales differ" when there is more than one scale, instead of the current rule of using "Scales differ" when there are more than two scales: we would prefer that if this is the route JSC chooses to go, there be an "Optionally" statement which allows catalogers to give as many scale statements as are appropriate, given the users of the item(s) being cataloged. There are, as noted in 3 above, two situations – where there is only one title in the title statement, and where there is more than one title in the title statement. For the latter situation, since neither 3.1G2 nor 1.1G3 limit the number of titles that may be given for a cartographic item lacking a collective title, this would allow catalogers to provide as many mathematical-data statements as there were titles in such a situation. Following are proposed rules:

**PROPOSED RULE**

[Substitute ALA's proposed rule 3.3B6 for proposed 3.3B4]

**3.3B4.** In describing an item in which all the main cartographic items are of one or two scales, give the scale or both scales (in the latter case give the larger scale first). If the main cartographic items are of three or more scales, give *Scales vary* ~~*differ*~~.

*Optionally*, if the description is of a cartographic item with three or more scales, give each in separate scale statements. When there is more than one title, give the scales in the same order in which the titles are given. When there is only one title, give largest scale first.

Scale 1:100,000 ~~and~~ – Scale 1:200,000. – Scale 1:250,000

[DELETE PROPOSED RULE 3.3B5]

(**3.3B5.** If the description is of an multipart item with three or more scales, give *Scales vary* ~~*differ*~~.)

## 3.3B5

### I. Original ALA proposal

In practice, because of the confusion about the difference between *Scales vary*, used when a cartographic item contains maps at more than two scales, and *Scale varies*, used when a single map is drawn at more than one scale (e.g. a perspective map in which the foreground and background scales differ), the cartographic cataloguing community uses *Scales differ* rather than *Scales vary*.

#### CURRENT RULE

**3.3B5.** If the description is of a multipart item with three or more scales, give *Scales vary*.

#### PROPOSED RULE

**3.3B5.** If the description is of a multipart item with three or more scales, give *Scales ~~vary~~ differ*.

### II. JSC responses

#### ACOC RESPONSE

**3.3B5** The Australian Committee on Cataloguing supports the intent of this proposal. However we also support the CCC proposal to replace the word 'multipart' with 'cartographic'.

### 3.3B5 (continued)

#### CCC RESPONSE

**3.3B5.** CCC agrees. (To add more credibility to this proposal, we note that the usage of the term “differ” in the revision parallels the use of that term at rule 2.5D3.) The revised rule would read as follows:

**3.3B5.** If the description is of a cartographic item with three or more scales, give *Scales differ*.

In addition, the last paragraph of **3.7B8** should be revised accordingly:

#### Current text of 3.7B8

If the scales vary (see 3.3B5) and if one or more of the scales is readily discernible and can be expressed concisely, give the scale(s).

*[examples not transcribed]*

#### Proposed text of 3.7B8

If the scales differ (see 3.3B5) and if one or more of the scales is readily discernible and can be expressed concisely, give the scale(s).

*[examples not transcribed]*

### III. MAGERT response

See response for 3.3B4.

## 3.3B6

### I. Original ALA proposal

Same as 3.3B5.

#### CURRENT RULE

**3.3B6.** In describing a cartographic item in which all the main maps are of one or two scales, give the scale or both scales (in the latter case give the larger scale first). If the main maps are of three or more scales, give *Scales vary*.

#### PROPOSED RULE

**3.3B6.** In describing a cartographic item in which all the main maps are of one or two scales, give the scale or both scales (in the latter case give the larger scale first). If the main maps are of three or more scales, give *Scales ~~vary~~ differ*.

### II. JSC responses

#### ACOC RESPONSE

**3.3B6** The Australian Committee on Cataloguing supports the proposed revision.

#### CCC RESPONSE

**3.3B6.** CCC agrees. We note, however, that specific instructions on how the information should be presented have not been given at this rule. Perhaps a see reference back to 3.3B4 would be appropriate. Rule 3.3B6 would then read as follows:

**3.3B6.** In describing a cartographic item in which all the main maps are of one or two scales, give the scale or both scales (see 3.3B4). If the main maps are of three or more scales, give *Scales differ*.

### III. MAGERT response

See 3.3B4.

## 3.3B7

### I. Original ALA proposal

Because many cartographic items which fall under this rule do not include scale information, the cartographic community wants to clarify that when the item has a scale, which is generally the case, then *Scale not given* (see 3.3B1) is more accurate than *Not drawn to scale*. The community feels the addition of the word *consistent* clarifies the rule.

#### CURRENT RULE

**3.3B7.** Give a statement of scale for celestial charts, maps of imaginary places, views (bird's-eye views or map views), and maps with nonlinear scales only if the information appears on the item. If the item is not drawn to scale, give *Not drawn to scale*.

Scale 1' per 2 cm.

#### PROPOSED RULE

**3.3B7.** Give a statement of scale for celestial ~~charts~~ maps, maps of imaginary places, views (bird's-eye views or map views), and maps with nonlinear scales only if the information appears on the item. If the item is not drawn to a consistent scale, give *Not drawn to scale*.

Scale 1' per 2 cm.

### II. JSC responses

#### ACOC RESPONSE

**3.3B7** The Australian Committee on Cataloguing does not agree with the change in terminology from 'charts' to 'maps', as charts is a more accurate term.

The rationale for MAGERT's proposal is confusing, however we agree that there is a need to clarify this rule. The intent of the rule is twofold: to instruct cataloguers on how to deal with celestial charts etc. which do not have a consistent scale, and to divert them from estimating a scale for these types of materials. ACOC would prefer the following wording:

**3.3B7.** If no scale statement is found on celestial charts, maps of imaginary places, views (bird's-eye views or map views), and maps with nonlinear scales, give *Scale not given*. If the item is not drawn to a consistent scale, give *Not drawn to scale*. Do not estimate a scale.

Scale 1' per 2 cm.

### 3.3B7 (continued)

#### CCC RESPONSE

**3.3B7.** CCC is aware that this rule proposal is to be withdrawn and that a new definition for chart is being proposed. In light of this, CCC does not support the proposal in the current document.

#### LC RESPONSE

**3.3B7:** We agree with the proposal.

### III. MAGERT response

We agree that “maps” should not be substituted for “charts”, since there are celestial maps that are not celestial charts. This rule is intended to apply not to all celestial maps but rather to those charts that have an angular rather than a linear scale.

After double-checking with cartographers, we found that both views and perspective maps are indeed drawn to a linear scale (although it varies), and should not be included in this rule. This rule is intended for maps drawn to non-linear scales, e.g., celestial charts and cartograms. Therefore the phrase “views (bird’s-eye views or map views)” should be deleted, as should the word “consistent”. For examples respectively of a perspective map and a view, see these URLs (CAUTION: files are large):

[http://www.sdc.ucsb.edu/projects/ml\\_sacramento\\_map.gif](http://www.sdc.ucsb.edu/projects/ml_sacramento_map.gif)  
[http://www.sdc.ucsb.edu/projects/ml\\_UCSD\\_map.gif](http://www.sdc.ucsb.edu/projects/ml_UCSD_map.gif)

Clean copy for rule follows.

**3.3B7** Give a statement of scale for celestial charts, maps of imaginary places, and other cartographic items with nonlinear scales only if the information appears on the item. If no scale statement is found on the item, give *Scale not given*. If the item is not drawn to scale, give *Not drawn to scale*. Do not estimate a scale.

Scale 1’ per 2 cm.

## 3.3B8

### I. Original ALA proposal

When three-dimensional cartographic models are reproduced in two dimensions the vertical scale or vertical exaggeration information is often provided and it has relevance to the two-dimensional item. The cartographic community therefore wants to include this information in the bibliographic record.

#### CURRENT RULE

**3.3B8.** In describing a relief model or other three-dimensional item, give the vertical scale (specified as such) after the horizontal scale if the vertical scale can be ascertained.

Scale 1:744,080. 1 in. to ca. 28 miles. Vertical scale ca. 1:96,000

Scale 1:250,000. Vertical exaggeration 1:5

#### PROPOSED RULE

**3.3B8.** In describing a relief model or other three-dimensional item, or a two-dimensional representation of a three-dimensional item (e.g., block diagram, profile), give the vertical scale (specified as such) after the horizontal scale if the vertical scale can be ascertained.

Scale 1:744,080. 1 in. to ca. 28 miles. Vertical scale ca. 1:96,000

Scale 1:250,000. Vertical exaggeration 1:5

### II. JSC responses

#### ACOC RESPONSE

**3.3B8** The Australian Committee on Cataloguing supports the proposed revision.

#### CCC RESPONSE

**3.3B8** CCC agrees.

#### LC RESPONSE

**3.3B8:** We agree with the proposal.

**3.3B8** (continued)

**III. MAGERT response**

We thank JSC for its favorable consideration of this rule proposal.

## 3.3B9

### I. Original ALA proposal

The scale of a map (i.e. the ratio of distances on the map to the actual distances on the ground) displayed on a computer screen is directly determined by many factors, e.g., the size and resolution of the screen, whether the software can enlarge and reduce the image, etc. The cartographic community therefore believes that *Scale not applicable* is the most appropriate scale statement for cartographic electronic resources.

#### NEW RULE

3.3B9. For electronic resources, give the statement *Scale not applicable*.

### II. JSC responses

#### ACOC RESPONSE

**3.3B9** As the scale statement can be a critical element in determining whether a map is appropriate for a particular purpose, the Australian Committee on Cataloguing believes that the scale should be given in this area if it is available, as with other cartographic resources.

We need to consider carefully under what circumstances we could ignore statements regarding scale that are found in the prescribed sources for this area. Although the apparent scale will be different depending on the viewing conditions, the scale statement also conveys vital information about the utility and limitations of the electronic resource. Using the phrase 'Scale not applicable' routinely for all electronic resources would result in an unacceptable reduction of the available information.

Underlying the proposal that the statement 'Scale not applicable' be applied to all electronic resources, seems to be an assumption that users will be misled by if we simply record scale statements found on the item.

One way to address this concern might be to precede the scale statement for all electronic items with a generic phrase, which gives an indication to the user that the scale statement cannot be taken at face value. In the following proposed text, we have used the phrase 'Interactive scale' to perform this function.

We also note that the scale statement will be read in conjunction with the Digital graphic representation area which gives information on how the resource was created, e.g. a rastered image encoded from a print original, or a 'born digital' vector item. Other information affecting the interpretation of the scale statement can be given as appropriate in the optional addition of 3.3B2, the notes field 3.7B8, or the system requirements field.

### 3.3B9 (continued)

Some special consideration also needs to be given to electronic cartographic resources which have been scanned from print cartographic materials. We support the Canadian Committee on Cataloguing's proposal in *4JSC/ALA/31/CCC response* that the scale of the original cartographic item should be given in this area of the description, preceded by the phrase 'Input scale'.

As with other electronic resources, the way in which some information should be recorded may need to be different depending on whether the resource is a physical format or a remote access resource. The outcome of the present discussions regarding areas 3 and 5 for electronic resources will also need to be taken into account.

#### **ACOC proposed text (new rule)**

**3.3B9.** Give the scale of an electronic cartographic resource as instructed in 3.3B1-3.3B8. Precede the ratio by *Interactive scale*.

Interactive scale ca. 1:250,000

If a scale statement is found on an electronic resource which is able to be viewed at a range of scales, give the outside values connected by a hyphen as instructed in 3.3B3. Precede the ratio by *Interactive scale*.

Interactive scale 1:15,000-1:25,000

For electronic resources which have been encoded from a print cartographic item, also give the scale of the print cartographic item as a representative fraction as instructed in 3.3B1-3.3B8. Precede the ratio by *Input scale*.

Input scale 1:1,000,000

#### **CCC RESPONSE**

**3.3B9.** The Canadian map community feels strongly that the option should be retained and that this information should not be included in the note area. The scale of the original map is very important to users as it conveys information not only on the limits to which the data can be manipulated but also on the degree of generalization and accuracy of the data itself. We suggest the following wording:

*Optionally*, if an electronic resource is encoded from a cartographic item, give the scale of the cartographic item as a representative fraction as instructed in 3.3B1-3.3B8. Precede the ratio by *Input scale*.

Input scale 1:1 000 000

### 3.3B9 (continued)

#### LC RESPONSE

**3.3B9:** We do not agree that “*Scale not applicable*” is appropriate for all cartographic electronic resources. There is sufficient evidence that many cartographic electronic resources have the scale mentioned in the title and statement of responsibility area (e.g., “Geology of the conterminous United States at 1:2,500,000 scale,” a cartographic electronic resource). It seems too drastic to omit the scale when the resource gives it. We also recommend that the information regarding the scale statement for electronic resources be included under the basic provisions for scale statements, 3.3B1, rather than coming at the end of 3.3B. In addition, we recommend that the standard terminology “*Scale not given*” be used whenever the scale is not recorded for whatever reason. Suggested revision:

**3.3B1.** [Add as the final paragraph:]

For electronic resources, give the scale if the resource has a scale statement or if the scale is already recorded as part of the title proper or other title information. Otherwise, give *Scale not given*.

### III. MAGERT response

We agree with the comments that “Scale not applicable” is not appropriate, and with the LC proposal to add LC’s wording as a final paragraph to the end of 3.3B1.

## 3.3C2

### I. Original ALA proposal

The cartographic community feels that the word “source” is too ambiguous and therefore is requesting it be replaced with the phrase “prescribed source(s)”. Additionally, statements concerning parallels and meridians associated with projections provide additional details about the projection and therefore should remain part of the projection statement, whereas information on ellipsoids is not associated with the projection and therefore should be given in a note.

#### CURRENT RULE

**3.3C2.** *Optional addition.* Give phrases associated with the projection statement in the source of information that concern, for example, meridians, parallels, and/or ellipsoid.

; transverse Mercator proj. Everest spheroid

; azimuthal equidistant proj. centered on Nicosia, N 35<sup>0</sup>10', E 33<sup>0</sup>22'

#### PROPOSED RULE

**3.3C2.** *Optional addition.* Give phrases associated with the projection statement in the prescribed source(s) ~~source~~ of information that concern meridians and/or parallels, ~~and/or~~ ellipsoid. Information about ellipsoids may be given in a note (see 3.7B8).

; transverse Mercator proj. ~~Everest spheroid,~~ central meridian 35<sup>0</sup>13'30"E

; azimuthal equidistant proj. centered on Nicosia, N 35<sup>0</sup>10', E 33<sup>0</sup>22'

### II. JSC responses

#### ACOC RESPONSE

The Australian Committee on Cataloguing supports the proposed revision.

#### CCC RESPONSE

**3.3C2.** CCC agrees.

### 3.3C2 (continued)

#### LC RESPONSE

**3.3C2:** (1) We do not agree that “in the source of information” should be replaced by “in the prescribed source(s) of information.” Since the 3.3C2 phrases must appear with the already selected projection statement, we recommend simplifying the rule by removing the statement “in the source of information.” (2) We agree with the other changes in the proposal. Suggested revision for the first sentence:

**3.3C2. *Optional addition.*** Give phrases associated with the projection statement ~~in the source of information~~ that concern, ~~for example,~~ meridians, and/or parallels, ~~and/or~~ ellipsoid. **[remainder of proposed revision not transcribed]**

### III. MAGERT response

We accept the LC revision.

## 3.3D1

### I. Original ALA proposal

Since the information is being recorded in longitude/latitude order, the rule should reflect that order in the second paragraph when providing instructions on the punctuation, which are also incomplete concerning spacing.

The cartographic community is requesting an addition to the rule to provide a more accurate description of the geographic coverage of a cartographic electronic resource. This includes the coordinates of a boundary other than a rectangle and/or an area within a boundary which are excluded. We also wish to provide instructions on recording decimal coordinates in a bibliographic record, since many cartographic electronic resources use decimal rather than sexagesimal coordinates, because of the ease of computer manipulation of the decimal coordinates.

If this information is considered to be too detailed for a general cataloguing manual, these additions could be replaced with a general statement allowing for this type of information for electronic resources under the rules but leaving the specific instructions to an interpretive manual for cartographic cataloguers.

### CURRENT RULE

**3.3D1.** For terrestrial maps, etc., give the coordinates in the following order:

westernmost extent of area covered by item (longitude)  
easternmost extent of area covered by item (longitude)  
northernmost extent of area covered by item (latitude)  
southernmost extent of area covered by item (latitude)

Express the coordinates in degrees (<sup>0</sup>), minutes (′), and seconds (″) of the sexagesimal system (360<sup>0</sup> circle) taken from the Greenwich prime meridian. Precede each coordinate by W, E, N, or S, as appropriate. Separate the two sets of latitude and longitude by a diagonal slash, neither preceded nor followed by a space. Separate each longitude or latitude from its counterpart by a dash.

(E 79<sup>0</sup>–E 86<sup>0</sup>/N 20<sup>0</sup>–N 12<sup>0</sup>)

(E 15<sup>0</sup>00′00″–E 17<sup>0</sup>30′45″/N 1<sup>0</sup>30′12″–S 2<sup>0</sup>30′35″)

(W 74<sup>0</sup>50′–W 74<sup>0</sup>40′/N 45<sup>0</sup>05′–N 45<sup>0</sup>00′)

*Optionally*, give other meridians found on the item in the note area (see 3.7B8).

### 3.3D1 (continued)

#### PROPOSED RULE

**3.3D1.** For terrestrial maps, etc., give the coordinates in the following order:

westernmost extent of area covered by item (longitude)  
easternmost extent of area covered by item (longitude)  
northernmost extent of area covered by item (latitude)  
southernmost extent of area covered by item (latitude)

Express the coordinates in degrees (<sup>0</sup>), minutes (′), and seconds (″) of the sexagesimal system (360<sup>0</sup> circle) taken from the Greenwich prime meridian. Precede each coordinate by W, E, N, or S, as appropriate. Separate the two sets of longitude and latitude ~~latitude and longitude~~ by a diagonal slash, neither preceded nor followed by a space. Separate each longitude or latitude from its counterpart by a dash, neither preceded nor followed by a space.

(E 79<sup>0</sup>–E 86<sup>0</sup>/N 20<sup>0</sup>–N 12<sup>0</sup>)

(E 15<sup>00′00″</sup>–E 17<sup>30′45″</sup>/N 1<sup>30′12″</sup>–S 2<sup>0′30′35″</sup>)

(W 74<sup>0</sup>50′–W 74<sup>0</sup>40′/N 45<sup>0</sup>05′–N 45<sup>0</sup>00′)

Optional addition. In situations where a more precise indication of geographic coverage is desired, describe each polygon using a string of coordinate pairs, in which each pair represents a vertex of the polygon.

List coordinate pairs in clockwise order, starting with the southeasternmost vertex of the polygon. In each coordinate pair, give longitude, followed by latitude, and express each in degrees, minutes, and seconds as appropriate to the size of the area being described.

Enclose each coordinate-pair string in parentheses; separate longitude from latitude in any one pair with a slash, and separate coordinate pairs within a string with space, semicolon, space.

Polygons must be closed and have non-intersecting boundaries. The first and last coordinate pairs must be the same to close the polygon.

(W 114<sup>0</sup>/N 32<sup>0</sup> ; W 117<sup>0</sup>/N 33<sup>0</sup> ; W 121<sup>0</sup>/N 35<sup>0</sup> ; W 125<sup>0</sup>/N 43<sup>0</sup> ; W 120<sup>0</sup>/N 42<sup>0</sup> ; W 120<sup>0</sup>/N 39<sup>0</sup> ; W 115<sup>0</sup>/N 34<sup>0</sup> ; W 114<sup>0</sup>/N 32<sup>0</sup>)

For situations in which an area or areas within a given polygon are excluded, list the coordinate pairs for any excluded area as given above, but in counterclockwise order.

(W 115<sup>0</sup>40′/N 33<sup>0</sup>15′ ; W 115<sup>0</sup>35′/N 33<sup>0</sup>20′ ; W 115<sup>0</sup>55′/N 33<sup>0</sup>32′ ; W 116<sup>0</sup>5′/N 33<sup>0</sup>32′ ; W 116<sup>0</sup>10′/N 33<sup>0</sup>30′ ; W 115<sup>0</sup>50′/N 33<sup>0</sup>20′ ; W 115<sup>0</sup>40′/N 33<sup>0</sup>15′)

### 3.3D1 (continued)

Optionally, for electronic resources, coordinates may be recorded as decimal. Coordinates given in decimal degrees for locations east of Greenwich and north of the equator are expressed as positive numbers and may be preceded by a plus sign. Locations west of Greenwich and south of the equator are expressed as negative numbers and are preceded by a minus sign. Do not include the plus or minus sign, but follow each coordinate by W, E, N, or S, as appropriate.

(95.15<sup>0</sup> W-74.35<sup>0</sup> W/56.85<sup>0</sup> N-41.73<sup>0</sup> N)

~~Optionally~~ Optional addition. Give other meridians found on the item in the note area (see 3.7B8).

## II. JSC responses

### ACOC RESPONSE

**3.3D1** The Australian Committee on Cataloguing supports the proposal to change the second paragraph to mention the longitude and latitude in the order they are recorded, and to make the punctuation explicit.

We also agree in principle with expanding the rule to include information on describing the coverage of electronic resources and on recording decimal coordinates. We would prefer a revision of the AACR2 rule rather than only including the information in an interpretive manual for cartographic cataloguers.

We support the proposal given in *4JSC/ALA/31/CCC response* to precede the co-ordinates by W, E, N, or S, as then the method of recording decimal degrees would be consistent with that used to record degrees, minutes and seconds. The change of *Optionally* to *Optional addition* in the final paragraph does not seem warranted, for the reasons given in *4JSC/ALA/31/CCC response*.

### 3.3D1 (continued)

#### CCC RESPONSE

**3.3D1.** CCC agrees in principle with the rule. However, we do not agree with the last sentence of the penultimate paragraph or its example. We feel that this will be confusing to the average researcher and also for the cataloguer who must remember that there are two different ways of entering this information. We would prefer the following modification to the wording and example:

*Optionally*, coordinates may be recorded as decimal degrees for electronic resources. Coordinates given in decimal degrees for locations east of Greenwich and north of the equator are expressed as positive numbers and may be preceded by a plus sign. Locations west of Greenwich and south of the equator are expressed as negative numbers and are preceded by a minus sign. Do not include the plus or minus sign, but precede each coordinate by W, E, N, or S, as appropriate.

(W 95.15°—W 74.35°/N 56.85°—N 41.73°)

Additionally, CCC does not support the proposal to revise “*Optionally*” in the last paragraph to “*Optional addition*”. Generally speaking, “*optional addition*” implies that additional information is added on to existing information (e.g., 1.1C (addition of GMD), 1.2C4 (addition of statement of responsibility to edition statement), 9.4E (addition of statement of function to the publisher). In this instance, it appears that additional information is to be given in a note and, therefore, “*Optionally*” would be the more appropriate term.

#### LC RESPONSE

**3.3D1:** We agree with the proposal.

### III. MAGERT response

1. We accept placing letters (N;S;E;W), in all cases, in front of the coordinates to which the letters apply.
2. We accept CCC’s substitution of “Option addition” with “Optionally.”

Re the ACOC comment: we agree to leaving the rule as it is in the proposal, with the amendments as suggested by CCC.

## **3.3E**

### **I. Original ALA proposal**

The cartographic community is requesting this addition to assist in understanding the order of information for Area 3 for cartographic items which fall into multiple formats, e.g. cartographic electronic resource.

#### **NEW RULE**

##### **3.3E. File characteristics.**

**3.3E1. Give the file characteristics for the item as instructed in 9.3.**

### **II. JSC responses**

#### **ACOC RESPONSE**

**3.3E** The Australian Committee on Cataloguing agrees to the addition of new rules 3.3E and 3.3H.

However, we believe many cataloguers will find it difficult to construct an area 3 incorporating all the possible elements. For this reason we would like examples for cartographic materials to be added to Chapters 9 and 12.

#### **CCC RESPONSE**

**3.3E. and 3.3E1.** CCC has no comments except to note that these revisions should be coordinated with any changes to chapter 9 currently underway (e.g., possible deletion of area 3, revision of terminology).

#### **LC RESPONSE**

**3.3E:** We wish to defer consideration of including "file characteristics" until a decision regarding area 3 for chapter 9 has been made.

### **III. MAGERT response**

Thanks to ACOC for volunteering to come up with examples.

## 3.3F and 3.3F1

### I. Original ALA proposal

The cartographic community is requesting this rule to include information about the method used to store the geospatial data. This information is generally supplied as metadata by the creator of an electronic resource and provides information on how the item can be used. The specifics of recording the information will be provided in an interpretive manual for cartographic materials.

#### NEW RULES

##### 3.3F. Digital graphic representation

3.3F1. For an electronic resource, if the information is readily available, give the mechanism or storage technique (e.g., raster, vector, point) and the number of objects used to represent spatial information.

Raster : pixel (5,000 x 5,000)

Vector : edge (70) ; VPF2

Vector : GT-polygon composed of chains (70)

### II. JSC responses

#### ACOC RESPONSE

**3.3F** The Australian Committee on Cataloguing supports the proposed revision. However, we would prefer this element to be 3.3G, as noted under 3.3 above. We would also like additional examples to further illustrate the rule, as proposed by CCC.

#### CCC RESPONSE

**3.3F. and 3.3F1.** CCC wishes to note that area 3 in chapter 9 is under discussion; these revisions should, therefore, be coordinated with any changes to chapter 9 currently underway. However, we would like to suggest the addition of the following examples at 3.3F1 to further illustrate the rule:

Point : entity point

Raster : pixel ; GIF 87

### 3.3F and 3.3F1 (continued)

#### LC RESPONSE

**3.3F-3.3G:** We agree with the proposed additions for “digital graphic representation” and for “geospatial reference data.” We also agree with the decision that the specifics for these data elements are best provided for in an interpretative manual for cartographic materials. Nevertheless, we recommend that at least the punctuation of the data elements be included in AACR2. Suggested revision for 3.3A1:

#### **3.3A1. 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.
- Precede the projection statement by a semicolon.
- Enclose the statement of coordinates and equinox in one pair of parentheses.
- If both coordinates and equinox are given, precede the statement in one pair of parentheses.
- Precede the statement of epoch by a comma.
- Precede the object type by a space, colon, space.
- Precede the format name by a space, semicolon, space.
- Enclose each statement on the number of objects in parentheses after the object type.
- If both point/vector object count and VPF level are given, precede the VPF level by a space, semicolon, space.
- Enclose each set of projection or ellipsoid parameters in parentheses.
- Separate the multiple parameters by a space, semicolon, space.
- Precede the secondary/related reference method by a space, colon, space.

### 3.3F and 3.3F1 (continued)

#### III. MAGERT response

MAGERT thanks the Canadian contingent of AACCCM for the following response. We looked at this rule again and had difficulty with some of the terms. We have come up with revised the words “mechanism” and “storage technique,” especially as these terms are not reflected in MARC and may make it difficult for cataloguers to code correctly. Clean copy follows.

**3.3F1.** For an electronic resource, if the information is readily available, give the data type (e.g., raster, vector, point), the number of objects used to represent spatial information, and the object type (e.g., point, line, polygon, pixel).

New examples as requested:

Vector : points, lines and polygons ; 3

Vector : network chains

Vector : point (13671), string (20171), GT-polygon composed of chains (13672)

Raster ; TIF

Or, with print constants inserted:

Vector : object type: points, lines and polygons ; VPF topology level: 3  
*(Note: topology level is not mentioned in the rule)*

Vector : object type: network chains

Vector : object type: point (13671), string (20171), GT-polygon composed of chains (13672)

Raster ; format: TIF

## 3.3G and 3.3G1

### I. Original ALA proposal

The cartographic community is requesting this rule to include information about the method for geo-referencing in the electronic resource. This information is generally supplied as metadata by the creator of an electronic resource and provides information on how the item can be used. The specifics of recording the information will be provided in an interpretive manual for cartographic materials.

#### NEW RULES

##### 3.3G. Geospatial reference data

3.3G1. For an electronic resource, if the information is readily available, give a statement of the spatial reference dimension (horizontal and/or vertical) and the reference method for coordinates (e.g., geographic, projection, grid, geodetic model).

Geographic system: coordinates ; longitude resolution: 0.0004 ; latitude resolution: 0.0004 ; unit of measure: decimal degrees

Projection: Lambert conformal conic (standard parallels: 38.3 ; 39.4 ; longitude of central meridian: -77 ; latitude of projection origin: 37.8333 ; false easting: 800000 ; false northing 0)

Horizontal datum name: North American datum of 1927 ; ellipsoid name: Clarke 1866 (semi-major axis: 6378206.4 ; flattening ratio: 294.98

### II. JSC responses

#### ACOC RESPONSE

**3.3G** The Australian Committee on Cataloguing would prefer this element to be 3.3F, as noted under 3.3 above.

We would also support the revision of the proposed rule offered in *4JSC/ALA/31/CCC response*.

### 3.3G and 3.3G1 (continued)

#### CCC RESPONSE

**3.3G. and 3.3G1.** CCC does not agree with the CC:DA wording and feels that the rule is incomplete given the omission of the important term, “datum”. We suggest the following rewording of the rule and the addition of an example:

**3.3G1.** For electronic resources, if the information is readily available, give the horizontal coordinate system (geographic system or map projection or grid coordinate system) and the name of the geodetic datum, and, if applicable, the vertical co-ordinate system (e.g., for digital elevation models).

*Additional example to be included with examples in proposal:*

Altitude datum name: National Geodetic Vertical Datum of 1929 ; altitude resolution: not given ; units of measurement: feet ; vertical encoding method: explicit elevation coordinate included with horizontal coordinates

#### LC RESPONSE

**3.3F-3.3G:** We agree with the proposed additions for “digital graphic representation” and for “geospatial reference data.” We also agree with the decision that the specifics for these data elements are best provided for in an interpretative manual for cartographic materials. Nevertheless, we recommend that at least the punctuation of the data elements be included in AACR2. Suggested revision for 3.3A1:

##### **3.3A1. 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.
- Precede the projection statement by a semicolon.
- Enclose the statement of coordinates and equinox in one pair of parentheses.
- If both coordinates and equinox are given, precede the statement in one pair of parentheses.
- Precede the statement of epoch by a comma.
- Precede the object type by a space, colon, space.
- Precede the format name by a space, semicolon, space.
- Enclose each statement on the number of objects in parentheses after the object type.
- If both point/vector object count and VPF level are given, precede the VPF level by a space, semicolon, space.
- Enclose each set of projection or ellipsoid parameters in parentheses.
- Separate the multiple parameters by a space, semicolon, space.
- Precede the secondary/related reference method by a space, colon, space.

### **3.3G and 3.3G1 (continued)**

#### **III. MAGERT response**

See comment for 3.3.

## **3.3H**

### **I. Original ALA proposal**

The cartographic community is requesting this addition to assist in understanding the order of information for Area 3 for cartographic items which fall into multiple formats, e.g., serially issued cartographic material.

#### **NEW RULES**

##### **3.3H. Numeric and other data related to serials.**

**3.3H1. Give the numeric and/or alphabetic, chronological, or other designation information for the item as instructed in 12.3.**

### **II. JSC responses**

#### **ACOC RESPONSE**

**3.3H** Please see response under 3.3E.

#### **CCC RESPONSE**

**3.3H. and 3.3H1.** CCC agrees.

#### **LC RESPONSE**

**3.3H:** We do not object to adding information about area 3 for serials to chapter 3, but we wish to point out that the same provision will need to be added to 5.3, 9.3 (if retained), and 11.3.

### **III. MAGERT response**

We find it to be of considerable value to users to have this information in area 3.

### 3.7B2 ALA proposal

The cartographic community is requesting a revision to the final example as it is written in a style that a cataloger would not normally use.

#### CURRENT RULE

**3.7B2. Language.** Give the language(s) of captions, etc., and text, unless this is apparent from the rest of the description.

In Esperanto

Includes text in Finnish, Swedish, English, and German

Place names in Italian

Legend in English and Afrikaans

Except for title and “La mer du Nord” the map is in English

#### PROPOSED RULE

**3.7B2. Language.** Give the language(s) of captions, etc., and text, unless this is apparent from the rest of the description.

In Esperanto

Includes text in Finnish, Swedish, English, and German

Place names in Italian

Legend in English and Afrikaans

In English, ~~Except for title and “La mer du Nord” the map is in English~~

### 3.7B8 ALA proposal

Because of the requested rule revisions for 3.3B5 and 3.3B6, to change *Scales vary* to *Scales differ*, the cartographic community is requesting that this corresponding note be revised to reflect this change as well.

#### CURRENT RULE

**3.7B8.** Mathematical and other cartographic data. Make notes on the magnitude of celestial charts.

Limiting magnitude 3.5

Give mathematical data not already included in the mathematical data area for remote-sensing images.

f5.844, alt. 12,000 ft.

Give other mathematical and cartographic data additional to, or elaborating on, that given in the mathematical data area.

Scale of original: ca. 1:1,300

Oriented with north to right

Prime meridians: Ferro and Paris

Scale departure graph: "Statute miles, Mercator projection"

Military grid

If the scales vary (see 3.3B5) and if one or more of the scales is readily discernible and can be expressed concisely, give the scale(s).

Scale of third and fourth maps: 1:540 000

Scales: 1:250 000, 1:200 000, 1:150 000

Predominant scale: 1:250,000

### 3.7B8 (continued)

#### PROPOSED RULE

**3.7B8. Mathematical and other cartographic data.** Make notes on the magnitude of celestial charts.

Limiting magnitude 3.5

Give mathematical data not already included in the mathematical data area for remote-sensing images.

f5.844, alt. 12,000 ft.

Give other mathematical and cartographic data additional to, or elaborating on, that given in the mathematical data area.

Scale of original: ca. 1:1,300

Oriented with north to right

Prime meridians: Ferro and Paris

Scale departure graph: "Statute miles, Mercator projection"

Military grid

If the scales vary differ (see 3.3B5 and 3.3B6) and if one or more of the scales is readily discernible and can be expressed concisely, give the scale(s).

Scale of third and fourth maps: 1:540,000

Scales: 1:250,000, 1:200,000, 1:150,000

Predominant scale: 1:250,000

### 3.7B10 ALA proposal

Because of the requested rule revision for 3.5C1 and the addition of new rules 3.5C4 and 3.5C5 (see CC:DA/MAGERT/1999/1 or 4JSC/ALA/31), to include more of the physical details in the physical description area, the cartographic community is requesting that the rule and examples be modified to reflect this change.

#### CURRENT RULE

**3.7B10. Physical description.** Make notes on important physical details that are not included in the physical description area, especially if these affect the use of the item. If the item is a photoreproduction, give the method of reproduction if it is likely to affect the use of the item (e.g., when it is a blueline print).

Irregularly shaped

Hand coloured

Printed on both sides of sheet

Photocopy

Blueprint

Photocopy, negative

Watermark: C. & I. Honig

In wooden case bearing, on its inner faces, representations of the celestial hemispheres

Bound in vellum

Legends in braille

County boundaries tactile

Mounted map created from several segments

### 3.7B10 (continued)

#### PROPOSED RULE

**3.7B10. Physical description.** Make notes on important physical details that are not included in the physical description area, especially if these affect the use of the item. If the item is a photoreproduction and the general term (*photocopy*) is used in the physical description area (see 3.5C5), give the ~~method of reproduction~~ generic name of the process, if it is likely to affect the use of the item (e.g., when it is a blueline print).

Irregularly shaped

Hand coloured

~~Printed on both sides of sheet~~

~~Photocopy~~

Blueprint

~~Photocopy, negative~~

Watermark: C. & I. Honig

In wooden case bearing, on its inner faces, representations of the celestial hemispheres

Bound in vellum

Legends in braille

County boundaries tactile

Mounted map created from several segments

### **3.7B12 ALA proposal**

Although the note, as written, could be used for the maps in an atlas, the more common situation for a series statement to appear on some items and not all would be in a map series. The normal description for this situation is sheets rather than maps. Therefore the cartographic community requests that the example be changed to reflect this terminology.

#### **CURRENT RULE**

**3.7B12. Series.** Make notes on series data that cannot be given in the series area.

Some maps have series designation: Direct route map

#### **PROPOSED RULE**

**3.7B12. Series.** Make notes on series data that cannot be given in the series area.

Some ~~maps~~ sheets have series designation: Direct route map

## Glossary ALA proposal

While reviewing the glossary it was found that the definition for cartographic materials included a misused term and that the definition of a cartographic chart, a synonym for map, is inaccurate. Therefore the cartographic community is requesting that the three definitions be revised.

### CURRENT RULE

**Cartographic material.** Any material representing the whole or part of the earth or any celestial body at any scale. Cartographic materials include two- and three-dimensional maps and plans (including maps of imaginary places); aeronautical, navigational, and celestial charts; atlases; globes; block diagrams; sections; aerial photographs with a cartographic purpose; bird's-eye views (map views), etc.

**Chart (Cartography).** *See* Map.

**Map.** A representation, normally to scale and on a flat medium, of a selection of material or abstract features on, or in relation to, the surface of the earth or of another celestial body.

### PROPOSED RULE

**Cartographic material.** Any material representing the whole or part of the earth or any celestial body at any scale. Cartographic materials include two- and three-dimensional maps and plans (including maps of imaginary places); aeronautical, nautical ~~navigational~~, and celestial charts; atlases; globes; block diagrams; sections; aerial photographs with a cartographic purpose; bird's-eye views (map views), etc.

**Chart (Cartography).** A map designed primarily for navigation through water, air, or space. *See also* Map.

**Map.** A representation, normally to scale and on a flat medium, of a selection of material or abstract features on, or in relation to, the surface of the earth or of another celestial body. *See also* Chart (Cartography).