



Directive #6: FGDC Standards Documents

Standards Working Group
Federal Geographic Data Committee

April 2002

Federal Geographic Data Committee

Department of Agriculture • Department of Commerce • Department of Defense • Department of Energy
Department of Housing and Urban Development • Department of the Interior • Department of State
Department of Transportation • Environmental Protection Agency
Federal Emergency Management Agency • Library of Congress
National Aeronautics and Space Administration • National Archives and Records Administration
Tennessee Valley Authority

Federal Geographic Data Committee

Established by Office of Management and Budget Circular A-16, the Federal Geographic Data Committee (FGDC) promotes the coordinated development, use, sharing, and dissemination of geographic data.

The FGDC is composed of representatives from the Departments of Agriculture, Commerce, Defense, Energy, Housing and Urban Development, the Interior, State, and Transportation; the Environmental Protection Agency; the Federal Emergency Management Agency; the Library of Congress; the National Aeronautics and Space Administration; the National Archives and Records Administration; and the Tennessee Valley Authority. Additional Federal agencies participate on FGDC subcommittees and working groups. The Department of the Interior chairs the committee.

FGDC subcommittees work on issues related to data categories coordinated under the circular. Subcommittees establish and implement standards for data content, quality, and transfer; encourage the exchange of information and the transfer of data; and organize the collection of geographic data to reduce duplication of effort. Working groups are established for issues that transcend data categories.

For more information about the committee, or to be added to the committee's newsletter mailing list, please contact:

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1. GENERAL INFORMATION

The purpose of this directive is to help ensure consistency in the appearance of FGDC standards. This directive shall be used when preparing standards documents for submittal to the FGDC Secretariat. This document follows the formatting guidelines.

1.1 Page Layout

Margins:

- Top - 1 inch
- Bottom - 1 inch
- Left - 1 inch
- Right - 1-½ inches

Line Spacing:

- Double space for public review and final review drafts
- Single space for final publication

Line Numbering:

- Number the lines 1 through n for public review and final drafts.
- Remove the line numbers for publication following FGDC endorsement.

Paper Size:

- Standard 8 1/2" by 11" - white

Type Style:

- Times Roman

1.2 Page Numbering

The cover page, FGDC information page (see section 2.2, FGDC information page) and pages showing table of contents, list of figures, and list of tables are numbered sequentially with lowercase Roman numerals. The page number is not shown on the cover page. Pages in the body of the standard are numbered with Hindu-Arabic numerals, starting on the number 1.

Page numbers are centered at the bottom of each page. Reference and Appendices pages are numbered consecutively with the body of the standard. If a standard is in parts (see Section 4.3), the part number shall precede all page numbers. For example Part 3 of a standard shall have page numbering as follows: 3-ii, 3-iii, 3-1, 3-2, etc.

1.3 Headers

Starting with the Table of Contents, a header is placed on each page of the standard. A point size of 10 is recommended. Text is aligned left. The header includes the following:

Line #1: “Federal Geographic Data Committee” followed by “FGDC document number,” which shall be flush right of the text. For FGDC-endorsed standards only, the FGDC document number assigned by the FGDC Secretariat shall follow the text “FGDC Document Number.” (see section 1.5, Document Numbering).

Line #2: Title of the standard.

If the standard does not yet have final endorsement, the title shall include the status and version date (month and year) of the standard. The following additions shall be added to the title to indicate status of the standard:

Working Draft - documents within working group
Public Review Draft - documents in public review
Final Draft - documents in review for final endorsement

Within each of these drafts there may be versions such as 1.0, 2.0, 3.0, etc.

For FGDC-endorsed standards, the version date shall be omitted.

Line #3: If applicable, the word “Part” and part number and title.

Line #4: Appendix pages shall include the word “Appendix” and Appendix number and title.

Line #5: Closure bar

1.4 Footer

The title page shall contain the FGDC participating agencies. All subsequent pages shall be numbered (see section 1.2, Page numbering).

1.5 Document Numbering

The FGDC Secretariat assigns the document number upon FGDC endorsement of the standard. The document numbering scheme shall follow the convention: FGDC-STD-NNN.P-CCYY, where:

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- FGDC- indicates the FGDC as the endorsing organization for the document.
 - STD- indicates the document to be part of the suite of FGDC standards documents.
 - NNN- indicates the overall document number, normally assigned sequentially.
 - P- indicates the part number for those documents composed of parts (see Section 4.3).
 - CCYY- indicates the four-digit calendar year when the FGDC endorsed the standard.

Note: An initial group of documents endorsed by the FGDC did not utilize this CCYY notation in the document number. However, a month and year indicator does appear in the document title for these documents.

2. COVER PAGES

The cover pages consist of a title page and a FGDC information page. A template for these pages is available from the FGDC Secretariat.

2.1 Title Page

The title page shall clearly and adequately describe the project and contain the following:

- “FGDC Document Number,” followed by the FGDC document number assigned by the FGDC Secretariat (see section 1.5, Document numbering), is positioned flush right for publication of FGDC-endorsed standards. For public review drafts and final drafts, the text “FGDC Document Number” is included as a placeholder.
- National Spatial Data Infrastructure logo.
- Title of the Standard. Title is left justified with a recommended point size of 18. If the FGDC has not endorsed the standard, the title shall include the status of the standard. The following additions shall be added to the title to indicate status:

Working Draft - documents within working group

Public Review Draft - documents in public review

Final Draft - documents in review for final endorsement

Within each of these drafts there may be versions such as 1.0, 2.0, 3.0, etc.

- Name of the sponsoring FGDC subcommittee or working group. This is left justified with recommended point size of 12.

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- Date of Standard. The month and year are left justified, recommended point size of 12. DO NOT use an automatic date code. The date must reflect the date of that version of the document, not the date the standard was printed.

For FGDC-endorsed standards, the version date shall be omitted.

- Footer indicating FGDC participating agencies, center justified, recommend point size of 8.

2.2 FGDC Information Page

The FGDC information page contains information on FGDC and contact information.

3. TABLE OF CONTENTS

The table of contents shall correctly identify the contents of the document and contain:

- Title “CONTENTS,” centered
- Numeric list of first-, second-, and third-rank section headings exactly as they appear in the standard.
- Section and subsection headings shall reflect any part number. For example, a Part 3 document table of contents would look as follows:

3.1 Introduction

3.1.1 Objective

3.1.2 Scope

- Second- and third-rank section headings are indented to differentiate between the ranks.
- At the top of each table of contents page the word “Page” shall appear above the page number column. Page numbers shall be preceded by leading dots.
- Following the table of contents for the standard, include a list of all figures, tables, and appendices. Place the titles “Figures,” “Tables,” and “Appendices” before list and left justify.

4. BODY OF THE STANDARD

4.1 Introductory Material

The introductory material shall contain the following sections:

4.1.1 Objective

The objective shall clearly state the purpose of the standard.

4.1.2 Scope

The scope shall be clearly defined, including what is within and not within the scope of the standard.

4.1.3 Applicability

The applicability shall identify who should use the standard and for what applications.

4.1.4 Related Standards

The related standards subsection shall identify any related standards and describe their relationship to this standard.

4.1.5 Standards development procedures

The standards development procedures shall adequately describe the process by which the standard was developed. For example, is this an existing standard, a modification of an existing standard or a new standard? Also include any other organizations participating in this standard.

4.1.6 Maintenance authority

The maintenance authority for this standard shall be clearly stated. If a maintenance strategy is described, it should be understandable, reasonable, and follow FGDC process guidelines.

4.2 Sections

The body of the standard shall be clearly organized and presented in an understandable manner. Sections and subsections may be viewed as paragraphs, or a collection of paragraphs that describe one aspect of a subject, such as: Introduction, Background, and Objectives. Sections shall not be viewed as stand-alone documents.

Section numbers and headings are used to help the users easily access specific information. First-rank section headings are numbered 1, 2, 3, etc.; second-rank section headings are numbered 1.1, 1.2, 1.3, etc.; and third-rank section headings are numbered 1.1.1, 1.1.2, 1.1.3, etc. If a standard is in parts, the part number shall precede all section and subsection numbers. Numbered headings are left justified using the following:

- First-rank section headings: font, Arial size 16, bold
- Second-rank section headings: font, Arial size 14, bold, italicized
- Third-rank section headings: font, Arial size 13, bold

4.3 Parts

Parts may be viewed as stand-alone documents that contain the information necessary for a reader to comprehend a very specific application, or subject, of the standard from beginning to end. The stand-alone parts shall each include a title page, FGDC information page and table of contents along with the specific part information. Additionally, in instances of individual parts, the part number shall precede all page numbering and section and subsection numbering within the part. For the entire suite of parts, a title page, FGDC information page and table of contents shall be developed which shall list the suite of parts within the standard.

The FGDC-endorsed Geospatial Positioning Accuracy Standards is an example of a standard that is developed in parts. These standards contain several parts, each of which discusses very different applications, or subjects, for accuracy such as: Part 1: Reporting Methodology, FGDC-STD-007.1-1998; Part 2: Standards for Geodetic Networks, FGDC-STD-007.2-1998; and Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998. Not every standard will have a need for using parts.

4.4 Usage

Rules on wording of provisions of the standard may be found in Appendix A.

5. REFERENCES

References are listed alphabetically by names of authors. All reports by an author are listed in chronological order. The United States Government Printing Office Style Manual 2000 [<http://www.access.gpo.gov/styleman/2000/style001.html>] refers to several books of reference.

Suggestions:

When including FGDC documents within a bibliographic reference section of a document, the following format is suggested:

Author, Date, Title of Publication, Number of Pages

Followed by the electronic address (URL) for the document (in brackets if available in BOTH electronic and hardcopy form.)

EXAMPLE:

FGDC, 1997, Vegetation Classification Standard, FGDC-STD-005, 61pgs.
[<http://www.fgdc.gov/standards/documents/standards/vegetation>]

When citing FGDC documents within the body of a document, the following format is suggested:

“Title of Publication, Page Number(s)”

EXAMPLE:

“Vegetation Classification Standard, FGDC-STD-005, pg. 28”

6. APPENDICES

Large tables shall be removed from the body of the standard and placed in a normative appendix if the tables would interrupt the reader’s train of thought. Appendices have a title page that identifies the full title of the appendix. The header, beginning with the title page of the appendix, shall include the same information as in the body of the standard, and additionally include the title of the appendix.

6.1 Normative

The *ANSI Style Manual 3/1/91*

[<http://www.ansi.org/public/library/guides/pdf/STYLEMAN.PDF>] defines normative annexes as integral parts of the standard that, for reasons of convenience, shall be placed after all other normative elements.

6.2 Informative

The *ANSI Style Manual 3/1/91* defines informative annexes as giving additional information, and being placed after the normative elements of the standard. They shall be provided only for the purposes of clarification, illustration, and general information in respect to the standard. They shall be within the scope of the project under which the standard is being developed and promulgated, and they shall not be inconsistent with the standard itself. They shall not contain requirements: mandatory (shall) requirements are rightfully a part of a standard and shall not be placed in an informative annex.

APPENDIX A (Normative): Rules for Wording of Provisions in FGDC Standards

NOTE Only singular forms are shown.

A.1 Requirement

The verbal forms shown in Table A.1 shall be used to indicate requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted.

Table A.1 — Requirement

Verbal form	Equivalent expressions for use in exceptional cases
shall	is to is required to it is required that has to only ... is permitted it is necessary
shall not	is not allowed [permitted] [acceptable] [permissible] is required to be not is required that ... be not is not to be
Do not use “must” as an alternative for “shall”. (This will avoid any confusion between the requirements of a standard and external statutory obligations.) Do not use “may not” instead of “shall not” to express a prohibition. To express a direct instruction, for example referring to steps to be taken in a test method, use the imperative mood in English. EXAMPLE “Switch on the recorder.”	

A.2 Recommendation

The verbal forms shown in Table A.2 shall be used to indicate that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.

Table A.2 — Recommendation

Verbal form	Equivalent expressions for use in exceptional cases
should	it is recommended that ought to
should not	it is not recommended that ought not to

A.3 Permission

The verbal forms shown in Table A.3 are used to indicate a course of action permissible within the limits of the standard.

Table A.3 — Permission

Verbal form	Equivalent expressions for use in exceptional cases
may	is permitted is allowed is permissible
need not	it is not required that no ... is required
Do not use "possible" or "impossible" in this context. Do not use "can" instead of "may" in this context. NOTE 1 "May" signifies permission expressed by the standard, whereas "can" refers to the ability of a user of the standard or to a possibility open to him.	

A.4 Possibility and capability

The verbal forms shown in Table A.4 are used for statements of possibility and capability, whether material, physical or causal.

Table A.4 — Possibility and capability

Verbal form	Equivalent expressions for use in exceptional cases
can	be able to there is a possibility of it is possible to
cannot	be unable to there is no possibility of it is not possible to