National Mapping Program
Technical Instructions

Part 1
General

Standards for the Preparation of Digital Geospatial Metadata

U.S. Department of the Interior
U.S. Geological Survey
National Mapping Division

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INTRODUCTION

The document "Content Standards for Digital Geospatial Metadata" approved by the Federal Geographic Data Committee (FGDC) on June 8, 1994, specifies the content of the metadata for digital geospatial data. The standard provides a common set of terms and definitions for the documentation of geospatial data. The FGDC standard establishes the names of data elements and groups of data elements to be used for these purposes, the definitions of these data elements and groups, and the values that are to be provided for the data elements. Information is provided about terms that are mandatory, mandatory under certain conditions, and optional.

Major uses of metadata include the following:

To help organize and maintain an organization's internal investment in spatial data,

To provide information about an organization's data holdings to data catalogues, clearinghouses, and other users, and

To provide information to process and interpret data received from an external source.

The information included was selected on the basis of four characteristics that define the role of metadata:

Availability - data needed to determine the sets of data that exist for a geographic location,

Fitness for use - data needed to determine if a set of data meets a specified need,

Access - data needed to acquire an identified set of data, and

Transfer - data needed to process and use a set of data.

The FGDC standard defines the data elements for identification, data quality,

spatial data organization, spatial reference, entities and attributes, distribution, and metadata reference. Further information and clarification for metadata elements can be found in the FGDC “Content Standards for Digital Geospatial Metadata Workbook,” Version 1.0, March 24, 1995.

This standard explains the above elements and provides examples of how the NMD can implement the standards for products of the National Mapping Program (NMP).

The FGDC-compliant metadata for each standard product of the NMP are documented in this standard in parts 2 through 9.

Any element included in metadata files by the U.S. Geological Survey (USGS) is required for USGS data; however, it may be mandatory, mandatory if applicable, or optional in the FGDC standard. **Bold** type identifies USGS metadata elements that are mandatory in the FGDC standard. Elements shown in regular type identify USGS metadata elements that are mandatory if applicable or optional in the FGDC standard. Where a major element in USGS metadata files is mandatory if applicable or optional in the FGDC standard, the major element is shown by regular type and mandatory subelements are shown in **bold** type.

> Example: in 1.6, Keywords, the element Place is optional in the FGDC standard and is shown in regular type; however, becauseUSGS metadata files use the Place element, the mandatory subelements **Place_Keyword_Thesaurus** and **Place_Keyword** are shown in bold type.

Standard (boilerplate) entries for all data sets in a series are shown in *italic* to distinguish them from entries that are unique or specific to a given data set. However, this does not mean that the standard entries are to be shown in italic in metadata files. The standard entries are the approved descriptions of the NMP products and processes, and shall be used in documenting NMP data.

FGDC elements not applicable to or not used by the USGS are not included in this standard. This document sequentially numbers only elements and subelements actually used in USGS metadata.

LIST OF PAGES

A complete and current copy of part 1 of the “Standards for the Preparation of Digital Geospatial Metadata” consists of the pages (and most recent creation or revision dates) listed below.