

## Information Technology Resource Management Council (ITRMC)

### **ENTERPRISE STANDARDS – S4000 GEOGRAPHIC INFORMATION SYSTEMS (GIS) DATA**

**Category: S4220 – GEOSPATIAL METADATA**

#### **CONTENTS:**

- I. [Definition](#)
- II. [Rationale](#)
- III. [Approved Standard\(s\)](#)
- IV. [Approved Product\(s\)](#)
- V. [Technical and Implementation Considerations](#)
- VI. [Emerging Trends and Architectural Directions](#)
- VII. [Review Cycle](#)
- VIII. [Time Line](#)
- IX. [Revision History](#)

#### **I. DEFINITION**

1. Geographic Metadata – An information file on the geospatial data.
2. Geographic Information System (GIS) – As defined in *ITRMC Policy 1070 – Geographic Information Systems (GIS)*, GIS are digital databases in which a geographic coordinate system is used to reference the location of features represented by the data. In general, typical components of a GIS are the tools used to capture, store, transform, analyze, model, simulate, and display spatial and tabular data.
3. Federal Geographic Data Committee (FGDC) – A nineteen (19) member interagency committee composed of representatives from the Executive Office of the President of the United States, Cabinet-level and independent agencies. FGDC authority and directions are established through Revised Circular No. A-16 and Presidential Executive Order 12906.

#### **II. RATIONALE**

Metadata facilitates the location and use of geospatial data.

Creation and maintenance of metadata allows the discovery of geospatial resources through the State and federal geospatial data clearinghouses.

Adoption of the FGDC metadata standard puts State agencies in harmony with Federal Government counter parts. All GIS data providers: county, cities, tribal, university and private persons, are encouraged to adhere to the Federal geospatial metadata standards.

FGDC states that the purpose of the standard is for potential users to determine:

1. The availability of a set of geospatial data;
2. The fitness of the set of geospatial data for an intended use; and
3. The means of accessing the set of geospatial data and to successfully transfer the set of geospatial data.

### **III. APPROVED STANDARD(S)**

1. Geospatial data (any data with a geographic component) must be documented using the Federal Geographic Data Committee's (FGDC); and
2. Content Standard for Digital Geospatial Metadata (CSDGM) Version 2 - FGDC-STD-001-1998 <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/metadata/base-metadata/index.html>.

### **IV. APPROVED PRODUCT(S)**

Metadata can be created using widely available basic text packages. Also, leading GIS software packages include metadata creation tools that utilize the FGDC standards.

### **V. TECHNICAL AND IMPLEMENTATION CONSIDERATIONS**

The FGDC Content Standard defined guidelines to follow for different data themes and identifies them as profiles. A key feature of the CSDGM Version 2 is the ability of geospatial data communities to develop profiles of the base standard. Many of these profiles have extended the base standard by adding metadata elements to meet their specific community metadata requirements.

Some of the FGDC Endorsed Profiles of the CSDGM Version 2 (FGDC-STD-001-1998) can be located at:

1. Shoreline Data – <http://www.csc.noaa.gov/metadata/sprofile.pdf>;
2. Classification of Wetlands and Deep Water Habitats – [http://www.fws.gov/nwi/Pubs/Reports/Class\\_Manual/class\\_titlepg.htm](http://www.fws.gov/nwi/Pubs/Reports/Class_Manual/class_titlepg.htm);
3. Digital Orthoimagery – [http://www.fgdc.gov/standards/projects/FGDC-standards-projects/orthoimagery/orth\\_299.pdf](http://www.fgdc.gov/standards/projects/FGDC-standards-projects/orthoimagery/orth_299.pdf);
4. Soils – <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/soils/soil997.PDF>;

5. Vegetation – <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/vegclass.pdf>; and
6. Content Standard for Biological Information – Biological data should be documented with the National Biological Information Infrastructure's (NBII), <http://www.fgdc.gov/standards/projects/FGDC-standards-projects/metadata/biometadata/biodatap.pdf>, which is based on the FGDC Content Standard for Digital Geospatial Metadata.

## **VI. EMERGING TRENDS AND ARCHITECTURAL DIRECTIONS**

ISO 19139, Geographic information - Metadata - Implementation specification. National and International Geospatial Metadata Standards Committees are currently working to recognize and update the current FGDC CSDGM standard. The Idaho Geospatial Committee will monitor developments and standards as information becomes available.

External resources for implementation and training are under review at this time and will be incorporated into this standard as they become available.

## **VII. REVIEW CYCLE**

Twelve (12) Months

## **VIII. TIME LINE**

Last Reviewed: May 15, 2007

Last Revised: May 15, 2007

Effective Date: July 20, 2005

## **IX. REVISION HISTORY**

5/15/07 – Review cycle adjusted to 12 months.