

DRAFT

Metadata Theme Keywords

June 18, 2001

ABSTRACT:

In April 2000, LAGIC presented the first draft of a list of categorized keywords for use in metadata documents. Hugh Phillips (3001, Inc.) and David Gisclair (LOSCO) met in March 2000 for their LOSCO Environmental Baseline Inventory (EBI) wrap-up meeting. They worked on developing a theme classification scheme based on the 8 FGDC Framework Data Layers and the Proposed Data Themes LAGIC developed. Following some substitutions, a new classification scheme was developed. Because some data sets could be classified on multiple data layers, and because most of the EBI layers fall under the "MISCELLEANOUS" category of the FGDC Framework, the LOSCO EBI demonstrates that more than 8 FGDC data layers are needed.

BACKGROUND:

The FGDC data layers consist of 7 core layers (*Geodetic Control, Orthoimagery, Elevation, Transportation, Hydrography, Governmental Units, and Cadastral Information*) plus *Miscellaneous*. However, these data layers are too limited as a data theme classification and keyword scheme due to the fact that most data layers produced by the LOSCO EBI and other organizations have fallen under the category "Miscellaneous."

In February 2000, LAGIC proposed its own 7-category theme classification scheme (*Administrative, Biological, Environmental, Geophysical, Infrastructure, Reference, Socio-Economic*). This scheme, submitted to the LA Geographic Information Systems Council, was implemented to aid in the organization and search of data sets. However, this scheme remained limited in scope.

In March 2000 Hugh Phillips (3001, Inc.) and David Gisclair (LOSCO) used the FGDC framework layers and LAGIC theme categories to develop a more encompassing classification scheme that would best serve the GIS community in general. (See LOSCO / 3001 PROPOSED DATA THEME CATEOGORY chart below.)

This new theme classification scheme represents the complexity associated with categorizing geospatial data themes. Even now, data sets can be categorized under multiple headings. And while this scheme is not expected to receive endorsement from the FGDC, it does represent a starting point for the development of a more global classification scheme that will be used to generate a geospatial data thesaurus.

It is LAGIC's recommendation that the LGISC Digital Data Committee review, propose, and present the necessary changes and updates to the data themes.

DRAFT METADATA THEME CATEGORIES

Combined FGDC Data Framework Layers and LOSCO Data Categories

Orthoimagery (NSDI framework)

Digital Orthophoto Quarter Quadrangles
(DOQ/DOQQs)
Satellite Imagery

Governmental Units (NSDI framework)

Political Boundaries

Transportation (NSDI framework)

Airports
Navigation
Ports
Railroads
Roads

Cadastral (NSDI framework)

Parcels

Geodetic Control (NSDI framework)

Bench Marks

Hydrography (NSDI framework)

Elevation and Bathymetry (NSDI framework)

DEMs
Oceanic
Rivers
Lakes

Miscellaneous (NSDI framework)

Land Use – Land Cover (Polygonal)

Land Cover
Leasing Areas

Map Reference

DRG's
Quad Index
GNIS – Place Names

Biological

Wildlife
Fisheries
Vegetation (Eliminate Plants)
Endangered Species

Cultural

Health / Epidemiology
Parks and Recreation
Archaeological
Legal
Demographic

Environmental

Air Quality
Water Quality
Hazardous Materials
Industrial Discharge
Nuclear
Sampling
Mitigation & Remediation

Economic

Development
Employment
Business and Industry
Oil and Gas
Agriculture
Forestry

Geophysical

Geology
Soils
Oceanography
Shoreline
Geomorphology
Climate / Atmospheric

Infrastructure (Points & Lines)

Utilities
Levees / Flood Control
Pipelines
Industrial Facilities
Water Wells

UNDERLINED = ORIGINAL NSDI Framework Layer

NSDI FRAMEWORK:

The National Spatial Data Infrastructure (NSDI) is a means to assemble geographic data nationwide to serve a variety of users. The NSDI provides an environment within which organizations and technology interact to foster activities for using, managing, and producing geographic data.

Why is the framework needed?

The framework forms the data backbone of the NSDI. It has three aspects: data, procedures and technology for building and using the data, and institutional relationships and business practices that support the environment. The framework is designed to facilitate production and use of geographic data, to reduce operating costs, and to improve service and decision-making.

What are the framework data themes?

The framework's seven geographic data themes are geodetic control, orthoimagery, elevation, transportation, hydrography, governmental units, and cadastral information.

Why were these specific themes selected?

The seven themes of geographic data are those that are produced and used by most organizations. Various surveys indicate that they are required by a majority of users, form a critical foundation for the NSDI, and have widespread usefulness. A cooperative approach to producing and sharing these common data benefits most organizations that use geographic data.

PROPOSED GEOSPATIAL DATA THEMES

Environmental

- Air Quality
- Water Quality
- Hazardous Materials
- Industrial Production /Discharge
- Nuclear
- Coastal/Wetlands

Biological

- Wildlife
- Fisheries
- Plants
- Endangered Species

Infrastructure

- Roads
- Airports
- Railroads
- Navigation
- Utilities
- Levees/Flood Control
- Pipelines
- Industrial Facilities

Administrative

- Personnel
- Fiscal/Budget
- Cadastral
- Political Boundaries
- Leasing Areas
- Place Names

Geophysical

- Geology
- Soils
- Vegetation
- Elevation/Topography
- Bathymetry
- Oceanography
- Hydrography
- Land Use / Cover
- Land Water Interface
- Shoreline types
- Geomorphology
- Climate

Socio-Economic

- Health/Epidemiology
- Hospitals
- Veterinary Health
- Parks and Recreation
- Archaeological
- Economic Development
- Employment
- Law
- Demographic

Reference

- Quad Index
- DLG's
- DRG's
- Imagery/photography