

PROPOSAL TITLE: Development of a National Shoreline Data Content Standard

DATE OF PROPOSAL: June 1 2004

TYPE OF STANDARD PROPOSED : Data Content Standard

SUBMITTING ORGANIZATION : NOAA Remote Sensing Division

POINT OF CONTACT: CDR. Brian K. Taggart, NOAA, Chief, Remote Sensing Division, NOS NMAO Route: N/NGS3, BLDG SSMC3 RM: 8209, 1315 East West Hwy. Silver Spring MD 20910-3282. 301-713-2663

OBJECTIVE

The location of our national shorelines is a baseline for legal boundaries, nautical charts, and commercial and natural-resource utilization and management. Effective use of shoreline data requires a highly defined logical data structure that is interoperable, efficient and applicable to a broad base of government and private sector demands. Current practices have lead to a highly variable shoreline data infrastructure. This standard is intended to enhance the shoreline framework by providing technical guidance on shoreline semantics, data structures and their relationships to builders and users of shoreline data.

SCOPE

The geographic scope to the proposed standard comprises shorelines within navigable coastal and inland waterways for the United States, its Commonwealths, and Territories.

The functional scope of the standard includes the definition of data models, schemas, entities, relationships, definitions, and cross walks to related standards. Legal controversy has historically surrounded shoreline definitions because of the boundary implications. This standard will provide a framework inclusive of multiple shoreline interpretations, and will not attempt to resolve disputed terminology. Data discovery, transmittal, display, and delivery are not currently part of this standard.

This shoreline standard is applicable to any U.S. organizations that generates or modifies shoreline delineations of the navigable coastal and inland waterways.

JUSTIFICATION

Shoreline definition protocols currently limit agencies and organizations from effectively sharing and using of shoreline and coincident data. Agencies have expressed an interest for greater cooperation and uniformity to shoreline data content. Enhancing shoreline content and interoperability is technically feasible and timely in relation to hydrographic, hydrologic and other related standards development. The proposed standard shall tie related protocols and existing shoreline content together in a new model using recognized reference material, definitions, semantics and structures. Harmonizing shoreline content will lead to cost savings by reducing the time in design, data re-use, training, and implementation.

DEVELOPMENT APPROACH

This standard will follow the guidelines as prescribed by the FGDC, and will be overseen by the Marine and Coastal Spatial Data Subcommittee. The standards development and modeling advisory team will direct the project on a daily basis and report to CDR. Brian K Taggart, NOAA, as the primary sponsor. Additional direction will be provided by subscribers, contributors and reviewers in their roles as defined in FGDC guidance. List-serve, email, teleconference and web-based communications will be used to reach a broad constituency. Project team meetings will be scheduled on an as-needed basis depending on available resources. The standards development and modeling advisory team will also present its findings and seek informal comments through presentations at regional and national conferences that are attended by the shoreline data community. Conferences of opportunity will be identified during the early development process.

Special attention will be given to evaluating the relationship of the proposed standard to the current Metadata Profile for Shoreline Data. The Metadata Profile contains valuable references related to the proposed standard, and is a result of an early and possibly pre-mature effort to develop a shoreline data content standard. A recommendation will be presented to the Standards Working Group during the development process for modifying or harmonizing with the Metadata Profile for Shoreline Data.

RELATED STANDARDS

Numerous logical relationships exist between the proposed standard and other standards currently published and in development. Shoreline features are currently part of several standards. One of the main activities in the proposed development process is to analyze the shoreline relationships between the available and proposed standard. The results of the analysis will provide direction for the standard development process.

Select related standards:

Metadata Profile for Shoreline Data, FGDC-STD-001.2-2001
Content Standard for Digital Geospatial Metadata (version 2.0), FGDC-STD-001-1998
Hydrographic Data Content Standard for Coastal and Inland Waterways
Content Standards for Framework Land Elevation Data
IHO Transfer Standard for Digital Hydrographic Data (S-57)
Cadastral Data Content Standard, FGDC-STD-003
Geographic Information Framework Data Content Standards for Hydrography (ANSI)

DEVELOPMENT AND COMPLETION SCHEDULE

The anticipated schedule is based on the general FGDC standard process requirements.

February 2004

Submit proposal to Chair of the Standard Working Group requesting a review and evaluation of the standard.

March 2004

Present proposal to the Standard Working Group.

July 2004

Complete 30 day public review of the proposal.

July 2004

Final approval of proposal sought from the Standard Working Group.

July - November 2004

Standard Development Working Group will begin development.

December 2004

Standards Development Group submits working draft for pre-public review and then prepares a committee draft for public review.

January 2005

Standard Working Group evaluates committee draft of the standard and makes a determination for public review to the FGDC Coordination Group.

February 2005

FGDC Coordination group approves the proposed standard for public review.

March 2005 - July 2005

Coordinate the public review and at this time testing and evaluation of the standard takes place by the participating partners. Responses to the public comments will be prepared after collecting, reviewing, and categorizing are complete. At this time documenting of the testing and evaluating of the standard is documented.

August 2005

The Standard Development Group requests approval from Standard Working Group. The Standard Working Group reviews and presents its findings to the FGDC Coordination Committee.

September - December 2005

The FGDC Coordination Group approves and endorses the proposed standard.

RESOURCES REQUIRED

The NOAA National Geodetic Survey and the NOAA Coastal Services Center have identified specific resources to complete this activity as planned. Part of this commitment is the dedication of one full-time, on-site contractor, and availability to several senior NGS staff on an as needed basis. Considerable source material already exists, and both organizations have previous experience in the standards process. Unexpected delays or changes to the proposed standard may require additional support and will be evaluated on a case-by-case basis.

POTENTIAL PARTICIPANTS

Representatives from the mapping, shoreline engineering, coastal zone management, flood insurance, and natural resource management community will contribute to the standards process. Many of these participants are currently active members of the Marine and Coastal Spatial Data Subcommittee, and plan to provide design and review support. A broad cross section of federal agencies will be encouraged to participate at various levels of commitment, including; the

National Oceanic and Atmospheric Administration, Geological Survey, Army Corps of Engineers, Minerals Management Service, Federal Emergency Management Agency, Environmental Protection Agency, Bureau of Land Management, Department of State, Bureau of the Census, and the National Geospatial Intelligence Agency. Regional and state participation will also be sought through federal agency regional programs, National States Geographic Information Council, and select state partners. Industry involvement will also be sought through current federal contractors and public communications.

TARGET AUTHORIZATION BODY

The Federal Geographic Data Committee is the target authorization body. The Marine and Coastal Spatial Data Subcommittee may at a later date consider submitting parts of the proposed standard to the American National Standards Institute and/or the International Standards Organization.

MAINTENANCE AUTHORITY

The National Oceanic and Atmospheric Administration shall be the maintenance authority for the National Shoreline Data Content Standard.