



N E W S L E T T E R

NSDI Competitive Cooperative Agreements Program

NSDI Agreements Awarded; '95 Program Begins Soon

The NSDI Competitive Cooperative Agreements Program provides funding to State and local government agencies, institutions of higher education, or private organizations to encourage the development of the National Spatial Data Infrastructure (NSDI). The 1994 program emphasized the development and implementation of the National Geospatial Data Clearinghouse and the implementation of FGDC-endorsed standards. The 9 awards were:

- New Jersey Department of Environmental Protection: "Contributing New Jersey's GIS user network and geographic information to the NSDI"
- Earth Data Analysis Center, University of New Mexico:

"Conversion of New Mexico's resource geographic information system metadata to FGDC metadata standards"

- Texas Water Development Board: "An internet node for the state of Texas"
- Wisconsin Land Information Board: "Wisconsin NSDI clearinghouse initiative"
- Alexandria Technical College, Minnesota: "Geospatial data standards education"
- Natural Resource Information System, Montana State Library: "Montana GIS data clearinghouse"
- North Carolina Center for Geographic Information and Analysis: "North Carolina geographic data clearinghouse"

- Florida State University: "The integration of citizens and state and local governments into the NSDI initiatives"
- Iowa Department of Natural Resources: "Establishing a national geospatial data clearinghouse node in Iowa"

The 1995 Program

The 1995 program will invite proposals on three elements of the NSDI: the development and implementation of the clearinghouse, implementation of FGDC-endorsed standards, and development of software tools or techniques to aid in the evaluation of geospatial metadata or data through the National Geospatial Data Clearinghouse. Proposals must involve two or more organizations. The participants must provide matching funds or resources. Funding for 1995 will total \$500,000.

Mark Your Calendars!

1995 National Geodata Forum Planned

Help develop the agenda for the National Spatial Data Infrastructure (NSDI)! Plan now to attend the 1995 National Geodata Forum. City, county, state, and federal officials, as well as members of the private and academic sectors, are invited to participate. The forum will help shape the next steps in the evolution of the NSDI, and forge intergovernmental and public-private partnerships in the development of the NSDI.

Persons attending the forum will hear keynote and plenary presentations, and will participate in panel sessions, public agency exhibits and poster sessions, workshops, special interest group discussions, and a debate on data cost and access issues. Applications from such areas as health and education, environmental management, disaster mitigation, regional and urban planning, economics, and transportation will be presented.

Many ideas from the 1993 forum were incorporated into the current plan for the NSDI, as well as President Clinton's NSDI executive order. Similarly, ideas resulting from the 1995 forum will be used to chart the next steps for the NSDI.

The 1995 National Geodata Forum will be held May 7 through 10, 1995, at the Hyatt Regency Hotel, Crystal City, Virginia (just south of Washington, DC). For more information, please contact the FGDC Secretariat by mail at 590 National Center, Reston, Virginia 22092, by facsimile at (703) 648-5755, or by Internet at gdc@usgs.gov.

An explanation of the program and application materials will be available in November 1994. The open period for proposals will be 90 days. Formal announcement of the program will be published in the Commerce Business Daily and the Federal Register, and also will be available from the FGDC anonymous FTP server. Copies of the materials may be requested in writing from Nedra Stallone, U.S. Geological Survey, Office of Procurements and Contracts, Mail Stop 205A, 12201 Sunrise Valley Drive, Reston, Virginia 22092. Requests also may be made by facsimile to Cindy Sather at (703) 648-7901. Please note **Program Announcement 8110** in the request.

National Geospatial Data Clearinghouse: The First 6 Months

In April, President Clinton signed an executive order on the NSDI. The executive order instructs the Secretary of the Interior, through the FGDC to "take steps within 6 months of the date of this order, to establish an electronic National Geospatial Data Clearinghouse." Some of the steps taken by FGDC and various federal agencies to comply include:

Department of Agriculture

Through the Agriculture Geographic Data Committee (AGDC), chaired by the Forest Service and the Soil Conservation Service, bureaus are drafting a clearinghouse implementation plan for review by the AGDC. In addition:

Agricultural Stabilization and Conservation Service — The ASCS is inventorying its geospatial data. Most holdings are located in the Aerial Photography Field Office. Once the inventory is completed and documented, this information will be made available. ASCS envisions that spatial data will be developed in its county offices by 1997.

Forest Service — The Forest Service is setting up a prototype public electronic information center using Gopher and World-Wide Web (WWW) protocols, and is evaluating Wide Area Information Servers (WAIS) and other technology. The bureau initiated an inventory of digital geospatial data holdings and resource data and the design for metadata data bases.

Soil Conservation Service — The SCS established a Strategic Database Planning Team made up of owners and managers of both spatial and attribute natural resource data bases. The SCS also developed a geospatial data base availability policy for soils and the National Resource Inventory data bases.

The bureau formed a team to complete an inventory of all agency data holdings. Tests of the FGDC metadata standards for documenting soils data bases are underway. The SCS established a WWW server to access

metadata about bureau data holdings and to order the data.

Department of Commerce

National Oceanic and Atmospheric Administration — NOAA organized an agency-wide effort to address the requirements of the executive order. NOAA is building on its NOAA Directory which already supports Internet access using a variety of protocols (Gopher, WAIS, WWW). Recent modifications to the interface will directly support future additions of data sets described using the FGDC metadata standards. The current NOAA Catalog System supports over 26,000 data set descriptors. A Z39.50-based approach for cross-referencing equivalent fields between the FGDC metadata standards and other standards, such as Data Interchange Format (DIF), has been developed to support access via the clearinghouse.

Geospatial data sets are being identified within the Nautical Chart Division. The existing formats and data structures are being examined and a strategy for abstracting metadata is being developed.

Department of Defense

Army Corps of Engineers — Members of the USACE Geospatial Data Advisory Group are developing sample metadata files to test the FGDC metadata standards and document lessons learned. The Construction Engineering and Research Laboratory (CERL) is beginning work on a metadata support package to be provided to all USACE activities. CERL has added capabilities to the GRASS software to generate metadata files.

All agency activities are connected to the Internet. Efforts are underway to improve usage with training and additional software. Several servers have been established providing WWW access to the agency's headquarters, the Waterways Experiment Station, the Cold Regions Research and Engineering Laboratory, and CERL.

Information packets on the executive order and supporting

materials have been distributed to the points of contact for Surveying and Mapping and Geographic Information Systems. An Engineering Circular providing policy and guidance relating to geospatial data should be complete by December. Workshops on the FGDC metadata standards and the clearinghouse were provided at the USACE Training Symposium on Surveying and Mapping, Remote Sensing, and GIS.

Defense Mapping Agency — Hardware and software to support a WWW server are expected to be in place October, 1994. A spatial metadata implementation team has been established to develop a plan for making DMA's metadata accessible to the clearinghouse. The agency initiated contacts with other Defense agencies to discuss the implementation of the executive order.

Department of the Interior

Bureaus are preparing individual implementation plan for the executive order in coordination with the Interior Geographic Data Committee. Several plans are complete. In addition:

Bureau of Indian Affairs — The bureau presented information about the order to the Intertribal GIS Council and began discussions with tribes about the implementation of the clearinghouse and tribal concerns about data security. The tribes are being polled to determine which will allow access to their data through the clearinghouse. The poll will be completed in December.

The BIA actively uses DOINet and is reviewing the use of Internet to access other agencies' servers. The equipment has been identified for use as a firewall and planning is underway to install the equipment. Discussions also have been held with other Interior agencies about using their facilities to serve BIA clearinghouse data.

Bureau of Land Management — Policies for data sharing, exchange, cooperative data collection, and external access to BLM information are

in place. The BLM established a team to develop bureauwide guidance for implementing the metadata standards on both the existing Prime hardware and new IBM hardware. In April the BLM required its State Offices to prepare Spatial Data Transition Plans, which will include documenting current data holdings with the FGDC metadata standards during data conversion.

The bureau is testing the use of the Internet for the clearinghouse and a Government Information Locator System (GILS). The results will be used to refine the bureau's Internet policy and to develop technical guidance for implementation of the Clearinghouse and GILS on recently acquired hardware and software.

The BLM disseminates information related to the NSDI, the FGDC metadata standards, and GILS using BLM directives to all offices.

Bureau of Reclamation — The bureau will complete an inventory of existing digital data by October, 1994. Metadata will be managed and served to the Internet community from five regional offices and its service center. The bureau's information resources management organization will coordinate the Reclamation effort.

A hardware and software inventory and tests for the clearinghouse should be complete by the end of 1994.

Fish and Wildlife Service — The FWS Director charged the Service GIS Steering Committee with developing a plan for implementing the executive order and integrating this effort with ecosystem management.

The bureau actively participated in the development of the metadata standards, and helped develop training aids and examples to facilitate the use of the standards. It also served as one of the primary participants in the FGDC's prototype clearinghouse efforts, including the test of Wide Area Information Servers (WAIS) as a means of serving data and metadata. With the National Park Service, the bureau conducted training on the creation of metadata using the FGDC metadata standards and serving information by means of WAIS servers.

The FWS established the following servers on the Internet as a means of making agency data more accessible: National Wetlands Inventory (FTP, WAIS, WWW) (see sidebar); Division of Information Resources Management (WAIS); Division of Refuges (WWW); and Forensics Laboratory (FTP, WWW). FWS personnel assisted two organizations of the National Biological Survey (the National Wetlands Research Center and the Global Change Research Program) in establishing prototype WAIS servers.

Minerals Management Service — The bureau's mapping and survey staff has begun work on an inventory of data holdings. The bureau also is relocating a senior mapping and survey professional to the Washington, DC area to serve as the lead MMS coordination person for NSDI activities.

National Biological Survey — The NBS includes geospatial data as part of its National Biological Information Infrastructure (NBII) initiative, and established an NBII task force to focus implementation activities within NBS. A strategic plan and criteria for types of biological data and information to include in the NBII are expected to be completed by December, 1994. An NBII bulletin board and quarterly newsletter provide information materials.

The NBS will inventory existing data bases produced or maintained by NBS and will develop a plan for documenting selected data bases. A prioritized list of data bases to be documented and served is expected by May, 1995.

A training plan and program in data documentation and maintenance, and access to the data available through networks (including the clearinghouse) should be complete by December, 1994.

U.S. Geological Survey — The USGS created an Action Plan Implementation Team to coordinate and oversee activities related to January, 1995, implementation of FGDC metadata standards and clearinghouse. Inventories of existing data holdings have been initiated, and metadata

Build it and they will come?

Concerns have been expressed about the dependence on the use of the Internet for the clearinghouse. The fear was that few members of the geospatial data community would have access. Early reports of clearinghouse use, however, show that someone is out there:

- The FWS National Wetlands Inventory provides digital wetlands data by anonymous FTP. The program distributed 29,000 digital maps via this server during the first month of operation.
- The USGS EROS Data Center provides data from the National Digital Cartographic Data Base by anonymous FTP and WWW. The center recorded nearly 40,000 downloads during its first three months.

Imagine what things will be like when the community does have access!

examples for the standard geospatial data products of the USGS developed.

A number of servers for geospatial data and metadata have been established. Parts of the National Digital Cartographic Data Base are available by FTP and WWW (see sidebar).

The Distributed Spatial Data Library (WAIS, WWW) serves as the testbed for WAIS server software development and enhancements. The USGS supports and participates in the development of spatial enhancements to the WAIS software. It initiated development of software tools to allow the interactive entry of metadata that complies with the metadata standards. It also developed and held a series of workshops on both the WAIS client and server software.

Environmental Protection Agency — The EPA established an agency WWW public access server and serves data via anonymous FTP, Gopher, and WAIS. The WWW home page provides access to geospatial data sets in which the metadata standards have been implemented.

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(National Geospatial Data Clearinghouse: The first 6 months (continued from the previous page))

The EPA's Spatial Data Management Plan was reviewed for inclusion of the FGDC standards and alignment with the clearinghouse. A developing agency-wide spatial data certification process incorporates the use of FGDC standards.

An agency Internet Working Group develops procedures and needed policy for distributing information and data on the Internet, disseminates information and technology tools to EPA users, and provides a focal point for program offices and regions to participate in developing a public access server.

National Aeronautics and Space Administration — Earth Observing System Data Information System (EOSDIS) version zero came online for use and evaluation in August, 1994. EOSDIS will be electronically connected to the clearinghouse. Changes to EOSDIS metadata standard caused by the DIF to the FGDC metadata standards have been made to ensure compatibility with these standards.

Federal Geographic Data Committee — The FGDC server provides documents and other information related to the FGDC, NSDI, metadata standards, clearinghouse, framework, and other activities. It also provides pointers to known sources of geospatial data and information about obtaining geospatial data.

The FGDC helps agencies hold workshops on both the metadata standard and the clearinghouse. Plans for additional workshops during the next year are under development.

Most of the recently awarded NSDI Competitive Cooperative Agreements partly fund the deployment of clearinghouse nodes.

Landsat Advisory Process: Invitation for Public Advice and Comments

The Landsat Program Management is seeking advice and comments from individuals regarding the status, effectiveness, and operation of the Landsat system. This request is issued pursuant to Public Law 102-555, the Land Remote Sensing Policy Act of 1992. Advice and comments are sought from a diversity of individuals and a full spectrum of interests in the Landsat program and the data and services it provides. Those wishing to provide such advice and comments, via a survey which will be used as input for a report to Congress, can obtain further information on the Landsat advisory process and a copy of the survey questionnaire by contacting George J. Komar by mail at Landsat Advisory Process Coordinator, NASA Code YDO, 300 E Street, SW, Washington, DC 20546; or by facsimile at (202) 358-3098. Be sure to include a complete postal address in the request. Requests received before January 1, 1995 will be honored.

FGDC Contact Information

The *FGDC Newsletter* describes activities of the geospatial data community and the ongoing development of the National Spatial Data Infrastructure. Subscriptions are free of charge. Subscription requests, correspondence, or contributed articles may be directed to the FGDC Secretariat by mail at 590 National Center, Reston, Virginia 22092; by telephone at (703) 648-5514; by facsimile at (703) 648-5755; or by Internet at gdc@usgs.gov

To receive FGDC information by anonymous FTP: [fgdc.er.usgs.gov](ftp://fgdc.er.usgs.gov)
(130.11.52.153);

User name: anonymous;
After connecting: `cd gdc`
(File README has information on the files in each subdirectory.)

Users with a World Wide Web browser (such as Mosaic) can also access the server with the URL:

<ftp://fgdc.er.usgs.gov/gdc/html/fgdc.html>

FGDC Publication Requests

To subscribe to the newsletter or request a the FGDC's publication list, please complete the information below and return it to the FGDC secretariat by facsimile or mail (see contact information on this page). You also may request publications through the Internet (gdc@usgs.gov). Be sure to provide the information requested below in your message.

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