

Solutions For National Spatial Data Infrastructree

**Sanjay Singh,
Dr.C.R.Bannur &
Dr.M.K.Munshi ***

The development of national infrastructures for geographic data has received considerable attention by the Dept. of Science and Technology, govt. of India and the department of space, govt. of India. The major imperatives behind establishment of NSDI in India are:

- To enable the establishment of a national repository of a digital “ware-house” of the national map data holdings
- To facilitate Sharing and access to the digital spatial data generated by various agencies such as Department of Space, government of India, Survey of India, National Bureau of Soil Survey and Land Use Planning, Geological Survey of India and many other data generating agencies.

Creation of metadata, storing, retrieval and publishing the same along with spatial information are the key components of NSDI. Since data is being generated by various agencies and the same is available in digital format on various platforms, the participating agencies needs to have user friendly solutions to create, manage and publish metadata as well as spatial data with corresponding attributes. Hence an attempt is made in this paper to present various tools required to meet the objectives of NSDI. The application potential of the various tools to be used for the purpose will give rise to the followings:

- Creation of NSDI compliant metadata from various Geospatial data formats
- Automatic extraction of metadata elements like bounding coordinates, point and vector object counts, native data environment and entity / attributes directly from the GIS data
- Viewing, searching and evaluation of GIS data and metadata simultaneously
- Bridging the gap between spatial data and metadata which provides a new level of access to and control over users GIS data library
- A user-friendly Internet search engine that allows geodata resources to be searched from the Web.
- Geodata administrator’s for efficiently delivering and controlling Web access to geodata.

The proposed solution presented in this paper will makes it easy for anyone, regardless of prior knowledge of the NSDI standards, to create, manage and publish NSDI compliant metadata. The meta data can be searched using keywords, attributes, time-period of the data layer and extent of the data layer. Users can create custom metadata profiles to ensure accurate and adequate documentation for GIS data holdings.

Full paper not available