An NSDI for Spain

The Spanish NSDI, named IDEE for 'Infra-estructura de Datos Espaciales de España' (www.idee.es), is a SDI of SDIs following the decentralised structure of Spanish Government: national, regional and local. It connects in a transparent and seamless way geospatial catalogues, gazetteers and services distributed via several servers all across Spain at different levels of detail.

Common Ideas

ISO19100 standards, the INSPIRE initiative and OGC specifications provide the background of common ideas and practical standards that make possible the Spanish NSDI. These include things such as Reference Data, Catalogue Web Service, Web Map Service, Web Feature Service, Web Coverage Service and Gazetteers. This framework has been the basis of further harmonisation processes ongoing in Spain:

- Core Metadata standard (NEM: 'Núcleo Español de Metadatos')
- minimum set of ISO19115 metadata items
- Gazetteer Model (MNE: 'Modelo de Nomenclátor de España')
- Common schema for Gazetteers compliant with ISO19112
- Data Model for geographic vector data (MDE: 'Modelo de Datos Español') based on ISO19107 and GML.

All are based on consensus and recommended in Spain by the National Geographic High Council.

Feverish Activity

Looking to the future, we can think of further expanding the Spanish NSDI by building on new OGC initiatives and specifications, for example:

- Geolinked Data Access Service and GeoLinking Service: locating on the Web all kinds of attribute tables and combining them with geographic data
- Gazetteer, Geoparser and Geocoder: to exploit geographical names repositories
- Sensor Web Enablement: making available via the Web all kinds of sensor data
- Integrated Client for Multiple Services: the old concepts of 'toolbox' and 'macros' are coming back with a new and powerful meaning. We can think in terms of amazing services 'palimpsests'.

SDI technologies in Spain are evolving rapidly. There is not only a well established and powerful regional SDI in Catalonia (IDEC), but also several other Regional and Local SDIs, National Agency Reference Nodes and other projects underway in an exciting atmosphere of feverish activity. One project named †GeoPista†is developing a GIS for local government, following OGC and ISO standards. In its first phase this covers a portion of our territory but the final objective is for it to extend to the more than 4,000 local authorities, or †Ayuntamientos†in Spain.

The Spanish NSDI (IDEE) is a powerful emerging reality based on strong technical support and flourishing national and regional initiatives, proceeding in a spirit of co-ordination, collaboration and sharing of knowledge. This environment has been reached partly due to the OGC galaxy of ideas, approaches and solutions which constitute a new paradigm (in the Thomas Kuhn sense) for the world of GI.

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https://www.gim-international.com/content/article/an-nsdi-for-spain