

Global Spatial Data Infrastructure and national and regional SDI

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Key words: Global Spatial Data Infrastructure, National SDI

SUMMARY

The Global Spatial Data Infrastructure Association is dedicated to international cooperation and collaboration in support of local, national and international spatial data infrastructure developments that would allow nations to better address social, economic, and environmental issues of pressing importance. Its purpose is to focus on communication, education, scientific, research, and partnership efforts to achieve these aims. One of the achievements of the association is the GSDI Cookbook. The objective of the Cookbooks is to define a reference environment for building compatible spatial data infrastructures for use by all communities and to promote best practices, technologies, and guidance for their implementation in a changing Internet environment with low-cost reference implementations. The next International Conference of the Global Spatial Data Infrastructure will be held in Santiago, Chile, on November 3 – 11, 2006.

Many nations have produced national spatial data infrastructures, or at least plans for it. The Finnish National Geographic Information Strategy 2005-2010 focuses on describing principles, objectives and measures deemed appropriate for the development of a spatial data infrastructure in Finland. When formulating the strategy, the ongoing preparation of a EU directive for the creation of a spatial data infrastructure in the community (INSPIRE) was taken into account.

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1. WHAT IS THE GSDI ASSOCIATION?

The Global Spatial Data Infrastructure Association is dedicated to international cooperation and collaboration in support of local, national and international spatial data infrastructure developments that would allow nations to better address social, economic, and environmental issues of pressing importance. Its purpose is to focus on communication, education, scientific, research, and partnership efforts to achieve these aims. The GSDI Association is a non-profit organization, registered in the United States.

The mission of the GSDI Association is to

- serve as a point of contact and effective voice for those in the global community involved in developing, implementing and advancing spatial data infrastructure concepts,
- foster spatial data infrastructures that support sustainable social, economic, and environmental systems integrated from local to global scales, and
- promote the informed and responsible use of geographic information and spatial technologies for the benefit of society.

The GSDI works toward this vision through five main goals.

1. Promote and develop awareness and exchanges on infrastructure issues for all relevant levels from local to global.
2. Promote and facilitate standards-based data access/discovery through the Internet.
3. Promote, encourage, support, and conduct capacity building.
4. Promote and conduct SDI development research.
5. Collaborate with others to accomplish its Vision and Goals.

1.1 Members and Activities

The GSDI Association has 33 full members. Those are mainly organizations (agencies, businesses, non-profits, universities, etc.) with at least a nation-wide influence. The major GSDI member organisations in the European level are EuroGeographics (the association of the National Mapping and Cadastral Organizations) and EUROGI (the European Umbrella Organization for Geographic Information).

The activities of the GSDI Association include:

- Working Groups – Technical, Legal & Economic, Standing Committees etc.
- the GSDI Cookbook
- Monthly Regional Newsletters – by the permanent committees for Africa, Latin America, Asia/Pacific (electronic)
- Email Discussion Forums
- Annual Meeting plus Training Workshops

- Small Grants Program, ESRI Global Map Grants, Intergraph Open Interoperability Grant Program

The GSDI Cookbook is a compendium produced by the many members of the GSDI Technical Working Group and the Editor in Chief is Douglas Nebert (USGS). Version 2.0 was published in January of 2004. The objective of the Cookbooks is to define a reference environment for building compatible spatial data infrastructures for use by all communities and to promote best practices, technologies, and guidance for their implementation in a changing Internet environment with low-cost reference implementations. Each chapter is devoted to a component of a spatial data infrastructure such as geo-data, metadata, clearinghouse, framework, partnerships, standards, and others along with chapters on terminology and case studies. The Cookbook has been translated to Spanish, Polish and Chinese. It can be found on the GSDI site under “publications” at www.gsdi.org.

The Association has published electronic newsletters in conjunction with the permanent committees. The content highlights SDI and GIS activities of the region to include conferences, workshops, training, etc; the outcomes of those activities; and websites for donors who support SDI development in the region(s.) One can find the newsletters by going to www.gsdi.org, newsletters.

The next GSDI conference, which is the 9th International Conference of the Global Spatial Data Infrastructure, will be held in Santiago, Chile, on November 3 – 11, 2006. The theme for the conference is Spatial Information: Tool for reducing poverty. More information on the conference can be found at: <http://www.gsdi9.cl>

2. NATIONAL AND REGIONAL SDI

2.1 The Finnish National Geographic Information Strategy 2005-2010

The National Geographic Information Strategy focuses on describing principles, objectives and measures deemed appropriate for the development of a spatial data infrastructure in Finland. It has been approved by the Government.

A successful implementation of the strategy will result in a more efficient and diverse use of the databases available, the emergence of new services and better access to information. It will also, for its part, provide a good framework for the development of a national information society and for international cooperation. The strategy also takes into account the preparation of the INSPIRE directive (COM (2004) 516) for the establishment of a European Spatial Data Infrastructure.

Aspects of the strategy are:

1. Systematic cooperation (between the organisations responsible for core geographic datasets and services)
2. Preparation and implementation of common recommendations
3. Harmonization and improved maintenance of core geographic datasets
4. Maintenance of metadata and metadata services
5. Geographic information services

6. Principles of use and distribution
7. User applications
8. Research and education
9. Communication

Various parties that use, produce or research in geographic information or offer related training or support services on a large scale were asked to give their opinion on the draft strategy and the guidelines on development contained therein. A final strategy drafted in light of the responses received was subsequently approved by the National Council for Geographic Information. To facilitate the implementation of the strategy, a development programme for quality management and standardisation was prepared and a survey was carried out to establish the needs associated with the development of the sharing of core geographic information.

When formulating the strategy, the council took into account the ongoing preparation of a EU directive (COM (2004) 516) for the creation of a spatial data infrastructure in the community (INSPIRE).

2.2 The INSPIRE Concept

INSPIRE is a proposal from the European Commission for a directive on establishing an infrastructure for spatial information in the Community. The proposed directive creates a legal framework for establishing and operating the infrastructure, for the purpose of formulating, implementing, monitoring and evaluating community policies at all levels. INSPIRE focuses on environmental policy but is open for use by and future extension to other sectors such as agriculture, transport and energy.

The initiative intends to trigger the creation of a European spatial information infrastructure that delivers to the users integrated spatial information services. INSPIRE will not set off an extensive programme of new spatial data collection. The overall aim of the proposal is to improve the way in which spatial data held by public authorities supports environmental policy, by improving the harmonisation of spatial data and the interoperability of spatial services and ensuring greater sharing of the data between public authorities and on-line access by the public. The type of spatial data covered is specified in three annexes to the proposal.

At the time of the writing of this text the INSPIRE directive is going through the co-decision process, during which Parliament and Council have to agree on the definitive text of the Directive. If successful, the INSPIRE directive could enter into force in 2007.

REFERENCES

Finnish National Geographic Information Strategy 2005-2010

http://www.mmm.fi/fi/index/etusivu/maanmittaus_paikkatiedot/paikkatietojenyhteiskaytto/kaansallinenpaikkatietostrategia.html

Global Spatial Data Infrastructure (GSDI), <http://www.gsdiassociation.org/>

Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing an infrastructure for spatial information in the Community (INSPIRE) (COM (2004) 516).

<http://www.ec-gis.org/inspire/>

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