

Spatially Enabled Society – Issues and Key Elements

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SUMMARY

This presentation will be the final report of the «FIG-Task Force on Spatially Enabled Societies» (SES). In cooperation with other global organizations, the aim was threefold, namely to focus on the term of "Spatially Enabled Societies" and the issues around it; to come up with a definition of SES; and to make the surveying profession aware of the topic and its relevance.

The Task Force was active for three years and the most relevant activities involved:

- cooperation with GSDI;
- Task Force meeting in Melbourne in October 2011 in order to discuss draft report and prepare Expert Group Meeting in Kuala Lumpur;
- contributions of six world renowned experts;
- Expert Group Meeting in Kuala Lumpur in February 2012, in cooperation with UN-RCC, PCGIAP, GSDI and FIG; a group of some 20 experts discussed the proposed elements and provided the input for the KL Declaration on SES, adopted for the Symposium on SEGS in KL, 16 Feb. 2012.

The Task Force now concludes its work by the publication of the final report, which is launched at the FIG-Working Week 2012 in Rome and at the GSDI-13 conference in Quebec, both taking place in May 2012.

The following text is therefore not a full paper, but just gives the Executive Summary of the final report.

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Executive Summary of Publication to be launched at FIG-Working Week 2012

The needs of societies are increasingly of global scale and require spatial data and information about their land, water and other resources – on and under ground – in order to monitor, plan, and manage them in sustainable ways. Spatial data and information, land administration, land management, and land governance play crucial roles in this.

Spatial enablement is a concept that adds location to existing information, thereby unlocking the wealth of existing knowledge about land and water, its legal and economical situation, its resources, access, and potential use and hazards. Societies and their governments need to become spatially enabled in order to have the right tools and information at hand to take the right decisions. SES – including its government – is one that makes use and benefits from a wide array of spatial data, information, and services as a means to organize its land and water related activities.

This publication focuses essentially on six fundamental elements, which are required to realize the vision of a SES:

1. a **legal framework** to provide the institutional structure for data sharing, discovery, and access;
2. a sound **data integration concept** to ensure multi-sourced data integration and interoperability;
3. a **positioning infrastructure** to enable and benefit from precise positioning possibilities;
4. a **spatial data infrastructure** to facilitate data sharing, to reduce duplication and to link data producers, providers and value adders to data users based on a common goal of data sharing;
5. **land ownership information**, as the dominant issue in the interactions between government, businesses and citizens relating to land and water resources; and
6. **data and information** to respect certain basic principles and to increase the availability and interoperability of free to re-use spatial data from different actors and sectors.

Land and spatial information professionals play a primary role in translating raw data into useable spatial knowledge resources. These professions should ensure that both the social and technical systems in which spatial enablement will operate within are well understood. Spatial enablement can only be effective when it is designed with the specific needs of the jurisdiction in mind.

The concept of SES is offering new opportunities for government and the wider society, but it needs to move beyond the current tendency for the responsibility to achieve SES to lie solely with governments. SES will be more readily achieved by increasing involvement from the private sector, and in the same vein, if the surveying and spatial industries start to look toward other industries for best practices in service delivery.

Future activities need to take into account emerging trends in spatial information and the new opportunities they present for the application of spatial technologies and geographic information. These trends include among others:

- location as the fourth element of decision making;
- differentiating between authoritative and volunteered information, yet recognizing the importance and value of both types of information towards spatial enablement and the enrichment of societies;
- growing awareness for openness of data e.g. licensing, and resultant improvements in data quality;
- move towards service provision.

BIOGRAPHICAL NOTES

Dr. Daniel Steudler graduated from the Swiss Federal Institute of Technology (ETH) in Zurich in 1983, earned the Swiss license for licensed land surveyor in 1985, and did a M.Sc.Eng. degree at the University of New Brunswick, Canada from 1989-91. In 2004, he completed a PhD degree at the University of Melbourne, Australia. Since 1991 he is working for the Swiss Federal Directorate of Cadastral Surveying and since 1994 he is involved in the activities of FIG-Commission 7.

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