

Commission 3

Spatial Information Management

Annual Report 2013

FIG General Assembly, June 2014, Kuala Lumpur, Malaysia

General

Commission 3 2011-2014 work-plan is based on several concrete terms of reference:

- Management of spatial information concerned with land and property (data, tools, policies, standards, and regulations);
- Spatial data infrastructure (SDI) – collection technologies, integration processes, maintenance, visualization, standardization, and dissemination;
- Management and dissemination of knowledge and skills for SIM (Spatial Information Management);
- Impacts on organizational structure, business models, Public-Private-Partnerships, professional practice, and administration; and,
- Management of spatial information in supporting good governance.

Within these terms of reference Commission 3 2011-2014 work-plan consists of the following main mission statements, namely:

- Increasing awareness about successful and qualitative SIM approaches and achievements within the “e-Society” framework by demonstrating good practice, including availability, reliability, efficiency, and accessibility of spatial information for better decision making and processes;
- Support of spatial information and SIM-tools usage by surveyors and by all decision-making participants to serve the goals of good governance;
- Share good practice on managerial processes and infrastructure required for data handling, using of information and knowledge distribution;
- Share good practice and develop high-level methods and techniques for merging and managing updated spatial information at various levels according to market requirements;
- Establish and maintain data - and data-quality-standards - relevant to SIM, while cooperating with international spatial data standards committees; and,
- Encourage the use of spatial information within e-government and e-commerce.

Based on these terms of reference and missions, Commission 3 Working Groups focus on the contribution of spatial information for sustainable development. Commission 3 continues to address the phenomenon of rapid urbanization and its impacts with emphasizing on the identification of spatial tools and general principles, norms and standards designed for good governance whilst using reliable and accessible spatial information.

Commission 3 delegates have expressed their strong interest in organizing annual meetings and workshops while concentrating on the specifically identified needs/topics. As in last couple of years, Commission 3 continued the peer review option at its own symposia, and in addition to publishing the accepted peer reviewed papers in special issues of international professional journals (currently in the Survey Review Journal and the Surveying and Land Information Science Journal).

Organization and Working Groups

Commission Chair: Prof. Dr. Yerach Doytsher

Administration and Communication

Vice-Chair for Administration (Communication): Dr. Sagi Dalyot

Vice-Chair for Administration (Events): Mr. Gerasimos Apostolatos

Working Groups

Vice-Chair and Chair of WG 3.1: Prof. Dr. Hartmut Mueller

Vice-Chair and Chair of WG 3.2: Prof. Dr. Ioannidis Charalabos

Vice-Chair and Chair of WG 3.3: Prof. Dr. Peter van Oosterom

Working Group 3.1 – SIM Infrastructure

Chair: Prof. Dr. Hartmut Mueller

WG 3.1 focuses on SIM policy issues; within the information society domain SIM serves as an integrator of components designed for Spatial Information Infrastructure, mainly in urban areas. SIM is a facilitator for IT-based services used by planners, administrators as well as by the public. Thus, the general topics of the WG 3.1 activity involve: NSDI / GSDI - Spatial Data and Information Infrastructure; modelling and geo-visualization; legal aspects related to SIM; and, SIM in respect to LBS.

The national delegates and members of WG 3.1 actively participated in the FIGWW'2013 held on May 2013, Abuja, Nigeria, and in the Annual Commission 3 workshop ("Spatial Data Infrastructures & Spatial Information Management 2013") held on November in Skopje, FYROM/Macedonia (see more details below).

The activity of WG 3.1 is oriented to a FIG-publication on guidelines to establish an efficient SIM Infrastructure in urban areas. The publication planned as a joint publication with WG 3.2 to be published close to the FIG Congress 2014 will be titled "New Trends in Spatial Information: Geospatial Crowdsourcing and VGI".

Working Group 3.2 – Technical Aspects of SIM

Chair: Prof. Dr. Ioannidis Charalabos

WG 3.2 focuses on SIM technical issues. New tools, techniques and policies are required to baseline and integrate the social, economic and environmental factors associated with spatially managing urban areas in general, and cities/megacities in

particular. Technical aspects are concerned with: 2D, 3D, and 4D spatial data collection and management; integration and update of spatial data-bases; standardization of information and metadata; and, visualization of information.

The national delegates and members of WG 3.2 actively participated in the FIGWW'2013 held on May 2013, Abuja, Nigeria, and in the Annual Commission 3 workshop ("Spatial Data Infrastructures & Spatial Information Management 2013") held on November in Skopje, FYROM/Macedonia (see more details below).

Together with WG 3.1, the activity of WG 3.2 is oriented to a FIG-publication on guidelines to establish an efficient SIM Infrastructure in urban areas. The publication planned to be published close to the FIG Congress 2014 will be titled "New Trends in Spatial Information: Geospatial Crowdsourcing and VGI".

Working Group 3.3 – 3D Cadastre (Joint Working Group with Commission 7)

Chair: Prof. Dr. Peter van Oosterom

WG 3.3 focuses on 3D Cadastres issues. The increasing complexity of infrastructures and densely built-up areas requires a proper registration of the legal status (private and public), which can be provided to a limited extent by the existing 2D-cadastral registrations. An on-going main objective of WG 3.3 is to establish an operational SIM infrastructure framework for 3D-Cadastres. The operational aspect addresses: a common understanding of the terms and issues; and, a description of issues that have to be considered before 3D-cadastres can be implemented. Topics dealt within the activity of WG 3.3 are: 3D-Cadastre - models, SDI and time; 3D-Cadastre and its usability; and, analysing alternatives for the realization of a 3D cadastre model. An important work has been done by the WG in preparing a very detailed questionnaire and gathering information regarding the status of 3D Cadastre in many different countries worldwide. More detailed information can be found on the WG 3.3 website <http://www.gdmc.nl/3DCadastres/>

The activity of WG 3.3 is oriented, inter alia, to a FIG-publication on guidelines to establish 3D-cadastres (a "Primer on 3D-Cadastres"), addressing legal, institutional and technical issues (to be published at or close to the FIG Congress 2014).

Events

In 2013 Commission 3 has been active in 2 international events and has participated in a third event:

(a) Participation in the annual FIGWW 2013 conference (May 6-10), Abuja, Nigeria with 4 technical sessions:

3 technical sessions

- TS01D: GeoSpatial Applications
- TS02D: GIS, Mapping Technology and GeoSpatial Implementations
- TS07C: Geospatial Analysis Tool

A joint session

- Joint YSN/Commission 3, 7, 8 Session on Social Tenure

The total number of presentations by commission 3 members at the event was about 20. More detailed information can be found on

https://www.fig.net/fig2013/technical_program.htm

(b) The annual 2013 FIG Commission 3 workshop/conference 2013, (November 13-16), Skopje, FYROM/Macedonia, jointly with FIG Task Force on Property and Housing, and the South-East European Research Association on Geo-Sciences (Geo-SEE). The event was defined as "International Conference: Spatial Data Infrastructures & Spatial Information Management 2013". About 60 participants arriving from close to 20 countries worldwide have attended 9 technical sessions:

- TS1: Cadastre and land management
- TS2: Real estate management
- TS3: Geographic Information
- TS4: Task Force on Properties and Housing
- TS5: Surveying and Mapping
- TS6: INSPIRE and WebGIS
- TS7: Usage of geospatial Information
- TS8: Spatial Information Management
- TS9: Application of GeoInformation

The total number of presentations at the event was more than 40. More information that is detailed can be found on the conference website:

<http://conf2013.geo-see.org>

(c) In addition to these two events, Commission 3 has participated in the "FIG Pacific Small Island Developing States Symposium", held Fiji, 18–20 September 2013. Its participating was by initiating a technical session (including a panel Discussion):

- TS1A: FIG Commission 3 Technical Session - The Importance of Geospatial Information

Planned Events for 2014

Commission 3 will participate and/or organize two conferences and workshops:

- (a) Will participate in the XXV FIG Congress 2014 (June 16-21), Kuala Lumpur, Malaysia.
- (c) Will organize the Annual FIG Commission 3 workshop/conference, Bologna, Italy, 4-7 November 2014. A call for participation and submission of papers will be published shortly.

Prof. Dr. Yerach Doytscher, Chair
FIG Commission 3

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