

Commission3
(Commission 3の最近の活動状況)

27/Mar./2017

平田 更一
日本大学生物資源科学部

Terms of Reference

(2011-2014) , (2015-2018)

- The use of **Spatial Information Management** (data, tools, procedures, regulations, standards);
- The support of **Good governance** (sustainable development, poverty reduction, social and economic growth, social security);
- Spatial data infrastructure;
- Research on the use of **crowdsourced VGI** data and derived information to geoscientific disciplines that make use of mapping, GIS, and Geo-SDI systems and procedures;
- The research of the methods for the sustainable development especially of mega cities and emerging countries with high index of development;
- The study and monitoring, as control of the fragility and vulnerability of the territory.

The mission of commission 3

- ◆ Increase awareness about successful SIM approaches and achievements within the e-Society by showing good practice like availability, reliability, efficiency and accessibility of spatial information for better decision making and processes.
- ◆ **Support the use of spatial information and SIM-tools** by surveyors and by all participants in decision-making to serve the goals of good governance.
- ◆ Share good practice on managerial processes and infrastructure required for data handling, using information and distributing knowledge.
- ◆ **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 standard committees.
- ◆ **Encourage the use of spatial information** within e-government and e-commerce.
- ◆ Cooperate and coordinate with the related United Nations Committees and other geospatial information societies and organizations active in the field based on request from the Council, they key focus will be in co-operation with ISPRS (Commission IV on Geodatabases and Digital Mapping), ICA (commission on Geospatial Data Standards), GSDI, EUROGI .

コミッション3の任務

- ◆ 空間情報がより良き意思決定とプロセスを経験するうえで、その有効性、信頼性、効率かつアクセスのしやすさを電子業界内で成功した事例を示すことにより、SIMアプローチと業績の認識を増加させること
- ◆ 良い統治の目標に適合するために、意思決定を目指す測量士、あるいは参加者のすべてが空間情報とSIM-ツールを使用するよう支援すること
- ◆ 情報を使用する、あるいは知識を普及するために必要な経営過程や基盤のためにより良い実行例を共有すること
- ◆ 市場条件に基づき様々なレベルによりマーキングや更新した空間情報を統合し、最高級の手法、技術を開発し、より良き実行例を共有すること
- ◆ データ – そして、国際的空間データ標準化委員会と協力して、SIMに関連するデータ品質基準 – を確立・維持すること
- ◆ 電子政府と電子商取引の領域において、空間情報の使用の促進を目指す
- ◆ 国連の委員会やその他の空間情報社会の分野にて組織的な活動を行っている組織で協力と調和を図ることに焦点を当てた国際写真測量学会(ISPRS、ジオデータベースとデジタルマッピングに関するコミッションIV)、国際地図学会(ICA、地理空間データの標準化に関するコミッション)、地理空間情報に関する国際学会(GSDI)、地理的情報のためのヨーロッパの上部機構(EUROGI)などと協力や調和を図る関係を維持する

FIG Commission 3 Annual Meeting and Workshop

“Crowdsourcing of Land Information – The Role of Citizens and Experts in Sensing Geographical Information”

16-20 November 2015 in Malta

This year it was a joint event organized with FIG Commission 7. In total more than 80 participants were present representing 26 Countries and the program was composed by joint sessions and parallel sessions of both Commissions.

Commission 3 had 43 participants, 16 were young Surveyors.



The three days event program offered 6 technical sessions, 5 joint sessions, more than 20 authors and 2 keynote speakers.

While the workshop **focused on effective utilization of VGI** within the framework of SDI and SIM, many different and interesting topics related to SDI, SIM, VGI and crowdsourcing were discussed. Other topics included also:

- **National Mapping Agencies (NMAs)**: practices with VGI and managing of spatial information; theory, applications and best practice studies
- Land management tools and innovative spatial information solutions addressing global and national challenges
- **Utilization of VGI and crowdsourcing with SDI and SIM on collection, dissemination, analysis, maintenance, and visualization**
- Applications of VGI in managing the built environment, legalization monitoring, property registration, planning reforms
- Early warning systems, climate change, natural disasters and environmental protection: adapting working paradigms; case studies and possibilities
- Tackling VGI and PM credibility issues: interoperability, uncertainty, quality, authenticity, validity PM and Citizens Science – case studies and processes

From Volume to Quality: Bridging the Gap for Spatial Data Infrastructure

**Commission 3 meeting and Geomat 2016
3-7 November 2016, Iasi, Romania**

The workshop was organized jointly with the International Symposium Geomat 2016 and with the EGoS General Assembly by the Department of Surveying and Cadastre, Faculty of Hydrotechnics, Geodesy and Environmental Engineering from Technical University of Iasi and co-organized by the Romanian Association of Romanian Surveyors.



At the Joint Opening Ceremony of FIG Commission 3 WorkShop and of the International Symposium “**GEOMAT**” the following authorities were present: the Vice Ministry of Finances of Romania; Prof. Florian Stătescu - **the Dean of Faculty of Hydrotechnics, Geodesy and Environmental Engineering**; Mihai Busuioc - the Gen. Secretary **MDRAP** (Ministry of Regional Development and Public Administration); Radu Codruț Ștefănescu - President General Director of **ANCPI** (National Agency for Cadastre and Land Registry, Romania); the President of **INIS** Board for Romania; Maricel Popa - President of **IASI County Council**; Marian Grigoraș – Prefect’s Institution of Iasi County; Mihai Chirica - Mayor of **IASI CITY**; Prof. Dan Cașcaval - Rector of “Gheorghe Asachi” **Technical University of Iasi**; Prof. Cornel Păunescu - President Romanian Association of Surveyors; Chryssy Potsiou, - President of the **International Federation of Surveyors**; Nikolaos Zacharias - President of **EGoS** (European Group of Surveyors); Vasile Chiriac - Secretary General of **CLGE** (Council of European Geodetic Surveyors).

The workshop was an opportunity for delegates and partners to present their research and experiences in the field of development and use of VGI, GIS systems and SIM and SDI procedures.

The program included three days of technical sessions with a wide variety of presentations focusing on the latest news and was a good opportunity to meet colleagues and exchange knowledge in the field of satellite tracking and of Spatial Information Management.

The delegates of Commission 3 who were present in Iasi were **about 30** while participants in the International Symposium Geomat were **about 200**. Participants included professionals, cadastral managers, university teachers and young surveyors.

The President of FIG, Chryssy Potsiou, presented the current initiatives of FIG Council, focusing on the politics about how involving more and more delegates representing the members associations, the task Forces and the different Networks.

The program of Commission 3 included 7 technical sessions with a total of 20 papers, all about the topic of the Workshop and of Commission 3. As it usually happens during the FIG Commission Annual Meetings and Workshops, during the Closing Ceremonies there is the proclamation of the Best Paper. This year in Iasi as Best Paper was elected “ **Rectilinear Approach to 3D Generalization of Building Models**” by Alexey NOSKOV and Yerach DOYTSHER (Israel).

Recent events of Commission 3:

2017

- **FIG Working Week 2017, 29 May- 2 June 2017, Helsinki, Finland**
- **The Annual FIG Commission 3 Conference and Workshop, location tbd. November 2017**

2018

- **FIG Congress 2018, 6-11 May 2018, Istanbul, Turkey**

BIM FOR SURVEYORS

Sunday 28 May 2017 at Messukeskus Exhibition & Convention Centre

Building Information Modeling (BIM) is changing the way how surveyors work, think, collaborate and earn money. Using and sharing multidimensional digital representations of buildings are the driving forces for the digitalization of our work. This affects many tasks surveyors and GIS professionals perform, e. g. cost estimation, GIS analysis, engineering surveying, construction work, land management and facilities management.

Scope of the Workshop:

- Teaching theoretical background of the BIM method (concepts, workflows and standards)**
- Best practice presentations from large projects and SME (from surveyor's point of view)**
- Presentation of the latest software (surveying, integration and collaboration with BIM, CAD, GIS)**

Preliminary Program:

BIM - Building Information Modeling

Introduction, Motivation, Examples, Strategies, international projects

Craig Hancock, University of Nottingham Ningbo, China

3D Modeling

3D Object extraction from survey data – challenges and solutions

Jan Boehm, University College London, United Kingdom

Collaboration

Standards for BIM information exchange and process management

Christian Clemen, University of Applied Sciences, Dresden, Germany

BIM and GIS

Digital Terrain Models, Topographic Information Models, City Models, Formats and Standards

Robert Kaden, University of Applied Sciences Dresden, Dresden, Germany

BIM and Surveying I – Total Station

Coordinate systems, measured surveys for BIM, total station for BIM, as-built surveys, setting-out

Andrej Mocicka , LISTECH Pty. Ltd., Australia

BIM and Surveying II – Laserscanning

Methods and software for BIM models from point clouds, manual and semi-automatic approaches

Jan Boehm, University College London, United Kingdom

BIM and Surveying III – Point Clouds

Efficient point cloud segmentation techniques to support BIM or GIS

Michael Olsen, Oregon State University, USA

BIM for Urban Land Administration

3D-cadaster and BIM, Land and Property Information, Subdivision

Mohsen Kalantari, Melbourne School of Engineering, Australia

BIM and Construction Management

Cost estimation, International Construction Measurement Standards (ICMS)

SeeLian Ong, FIG Chair Commission 10, Malaysia

A Constructive Approach to Surveying in a BIM Environment: Justice Precinct Christchurch

Alex Harrington, Beca Infrastructure, New Zealand

BIM to Construction Site

Artemis Valanis, Norconsult AS, Norway

3D laser scanning along the building lifecycle

Faro Technologies Europe, Germany