

## ANNUAL REPORT COMMISSION 3 - 2016

The activities of the FIG Commission 3 during the year 2016 is continuing in the study, research and experiences in the field of development and use of VGI, GIS systems and SIM and SDI procedures.

Commission 3, through the contribution of the four working groups, composed of professionals and academics from around the world, has achieved excellent results in the search for simple and reliable method of collecting, monitoring and managing data concerning the territory (geographical, aero photogrammetric, geomorphological, economic, land, statistics, etc.).

Thanks to the cooperation of the chairs of the working groups, more research have been discussed under the following matters:

- 1) SIM Infrastructure;
- 2) Technical Aspects of SIM;
- 3) 3D Cadastre;
- 4) Crowdsourcing and VGI supporting SDI.
- 5) SDI at all levels – local, regional, national and global;
- 6) SIM challenges – natural and environmental risk prevention and disaster management, mitigation, waste management, etc.;
- 7) VGI collection, dissemination, analysis, applications, maintenance and visualization;
- 8) e-Governance and SDI in supporting decision making – theory, applications and best practice;
- 9) Integration of SDIs – cadastre, land use, utilities, environment, socio-economic;
- 10) SDI interoperability – standards, technical tools, metadata, portals;
- 11) 3D/4D Cadastre;
- 12) Utilization of VGI and Crowdsourcing with SDI, SIM and environmental information;
- 13) 2D/3D/4D geospatial models, algorithms, visualization, standards and applications;
- 14) Web and mobile GIS – challenges, services and real-time capabilities;
- 15) Business models and SDI, public-private partnerships and economic aspect.

The importance of the general topics as SDI, SIM, GIS, etc. together with VGI has drawn the attention of many delegates who have allowed to carry out interesting working sessions during the FIG Working Week in New Zealand and during the Commission 3 Annual Meeting and Workshop.

**Talking about New Zealand**, FIG Commission 3 participated in Christchurch for the FIG Working Week with 6 technical sessions, 2 joint sessions with Commission 7 and with about 50 presentations.

All presentations were of high scientific level, well linked to both the traditional topics of Commission 3 and the topic of the FIG WW 2016 “Recovery from Disaster”. In the technical sessions of Commission 3 significant results were illustrated coming from the latest research about how we collect, compare, control and manage the data concerning the territory. The speakers, coming from professional or academic world, reported and commented on their specific research or work. Such research has been the concrete contribution to the activity of the territorial administration of the relative countries. In particular, some researches have pointed out the existence and identification of conditions of "vocation" or "repulsion " that on one hand promote sustainable development or, on the other hand, represent the cause of impact or of environmental damage. Governments which decide and make the choices need more updated spatial data for sustainable development, environmental protection and, above all, for the prevention of disasters.

During the week, on Wednesday 4th May, the Annual Meeting of the Commission was held.

During this meeting, where also new delegates participated in, the chair of the Commission, Enrico Rispoli, presented the structure of the Commission, gave the floor to each of the chair of the Working Groups to present their plans, presented the current work plan, the results of the past events held in Sofia for the FIG WW 2015 and above all the results of the event in Malta in November 2015 for the Annual Meeting of Commission 3 and Workshop.

Enrico Rispoli underlined to the delegates the future commitment of the researchers participating in the working groups of Commission that will be to identify systems that facilitate the transition from the considerable amount of data to be selected and controlled to the availability of useful, accurate and of quality spatial information.

Before closing the Annual Meeting the venue of the next meeting and workshop of the Commission was discussed and it was decided to held this meeting in Iasi (Romania) from 3rd till 7th November 2016 joint to GEOMAT 2016 International Symposium organized by Gheorghe Asachi Technical University of Iasi in Romania in collaboration with the Union of Surveyors and other institutions and joint to the General Assembly of EGoS (European Association of Surveyors).

**The aim of this commission 3 workshop theme in Iasi** was to investigate the processes and conventions dealing with geospatial data (and big geodata), mainly in respect to land administration (e.g., good governance, efficient operations of property markets, affordable planning and appropriate environmental management), but more generally in respect to the collection, processing, interpretation, administrative, and analysis levels. In the workshop theme, ideas and discussions was made and presented in relation to the new exploitation, development and use methodologies of VGI derived information to various geographic and social scientific disciplines that make use of mapping, GIS, SIM and SDI systems and procedures related to environmental and sustainable infrastructure, on local, as well as on global, scales.

This workshop provided an opportunity to discuss acquisition, synthesis, integration, use, archiving, and the place of VGI, PM and crowdsourcing in SDI and SIM workflows, and also give stage to general theoretical, scientific and practical research associated with SDI and SIM.

FIG Commission 3 was particularly honored to organize its Annual Workshop in Iasi, Romanian city candidate as the European Capital of Culture for the year 2021.

Iasi, the most important and friendly city in Moldova, was also chosen for its architectural beauty that “charms the eye and seduces the heart”, particularly by visiting the places of Orthodox worship. In this context was organized the Workshop "From Volume to Quality: Bridging the Gap for Spatial Data Infrastructure" (3-7 November 2016). The workshop was organized in joint 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.

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 workshop aimed to focus on the role of Geographic Information Systems in relation to the correct forms of managing spatial data over the Internet. The gap is resulting from processing of large volumes of spatial data (quantity) in the informatics environment, often uncontrollable, and thus must be filled by an appropriate approach to ensure to users the reliability of information and to prevent incorrect decisions. The exchange of knowledge between the various members will also facilitate the synergy between public administrations that fulfill specific activities on the territory: from urbanism to spatial planning, from the environment to civil defense, from roads to construction, from agriculture to forestry, from tourism to culture.

This workshop explored ideas and methods on how we can engage citizens through crowdsourcing within reliable new models of collaboration.

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 Secretary General of CLGE and the President of EGoS were present in all sessions of Commission 3 Workshop and International Symposium together with the representatives from Germany, Greece, Italy, Moldova, Romania, Israel, UK, Malta, ecc.

On Saturday morning the EGoS GA took place

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 (the program can be downloaded from FIG website [www.fig.net](http://www.fig.net)).

As it usually happens during the FIG Commission Annual Meetings and Workshops, during the Closing Ceremonies there was 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 DOYTHER (Israel).

The initiative to organize Commission 3 Workshop joint with other events of high scientific and professional interest was very successful cause it attracted the participation of all representatives within the field of Spatial Information Management.

**As planned activities of Commission 3 in 2017** there will be the participation in the FIG WW 2017 with 5 technical sessions and some joint sessions with Commission 7 and the organization of the Commission Annual Meeting and Workshop that will be held in Lisbon in autumn 2017.

**In 2018** there will be the participation in the FIG Congress in Istanbul and the organization of the Commission Annual Meeting and Workshop in autumn 2018 (venue tbd).

**Warm thanks** to the Vice Chairs of the Working Groups of Commission 3 for their contribution, in particular Vice Chair of the Working Group 3.4, Sagi Daylot, and the Vice Chair for Administration, Maria Grazia Scorza.

Warm thanks to FIG Office and its staff for the excellent work in supporting Commission 3.