Report to the 32nd General Assembly FIG Working Week in Eilat, Israel 2009

FIG Commission 3 – Spatial Information Management

Report of Activities 2008-2009

1. General

The main general activity of Commission 3 since the Working Week 2008 in Stockholm was the Commission 3 2009 Annual Meeting and Workshop on "Spatial Information for Management of Sustainable Urban Areas", which took place in Mainz, Germany, from 2nd to 4th February 2009. The Workshop was organized and sponsored by the German Association of Surveyors (DVW) and the Institute for Spatial Information and Surveying Technology of the Mainz University of Applied Sciences, and was under the aegis of EARSeL, UNECE WPLA, Lantmäteriet, and the Appraisal Institute, USA.

The meeting in Mainz was third in series that started in 2007 with a Workshop in Sounio, which addressed the urgent social and accompanying technical and legal aspects related to the emerging informal settlements as a result of rapid urban growth; and in 2008 in Valencia, where the important subject of environmental protection was added on Commission 3 agenda and it was agreed that regulations on private rights in the use of land in terms of air, soil, and water pollution must be accepted and applied by all market participants through participatory democratic procedures.

The 2009 Workshop in Mainz, with a global economy facing its worst recession in decades, focussed on new aspects related to a restricted credit-financed economic activity, increased unemployment and a shortage of affordable housing are introduced into urban management. As conclusion, today more reliable spatial information related to social/legal, environmental and economic aspects exists, and advanced tools are provided for urban information capturing and integration (various types of sensors, geoportals, etc) that allow us to deal with the emerging problems more efficiently. That is an optimistic conclusion derived from several presentations in the Workshop. It was identified, though, that many of the surveying and building regulations in countries are too rigid, expensive and outdated. This leads to the suppression of innovation in approaches, products and services, and it hinders the activity of the private sector. It also adds a considerable and often unnecessary financial overhead to the administration and raises the question of how appropriate the government institutional arrangements are in this modern age, especially since such arrangements were designed 60 years ago and have not fundamentally changed. Several papers identified the enormous scale and expansion of slums and/or informal developments in urban areas.

The technical program included the opening session, 9 technical sessions, and the closing session; in total 55 papers were presented. In total 73 participants had registered to the workshop coming from 24 countries. A full report from the workshop is available on Commission 3 web site: www.fig.net/news/news 2009/mainz february 2009.htm

2. Working Groups

Working Group 3.1 – eGovernment for eCitizens

Chair: Kari Strande (Norway)

Co-Chair: Peter Laarakker (the Netherlands)

Active WG members: (Rob Mahoney (UK), Robin A. McLaren (UK), Daniel Roberge, (Canada), Uzo Okafur (also vice chair of WG3.3), Jes Ryttersgaard (Denmark), Jens Hollænder (Denmark), Tarja Myllymäki (Finland), Jan Bares (Czech Republic), Bela Markus (Hungary), Bo Lauri (Sweden), Gerhard Muggenhuber (Austria), and Khaled Nabbout (Lebanon).

WG3.1. members have encouraged speakers to participate and present papers to FIG and other GI meetings. Examples of e-Government projects and programs can be found on the websites of FIG Workshops and Working Weeks e.g., Commission 3 Workshop Istanbul 2002, Working Week Paris 2003, Regional Conference Morocco 2003, Working Week Athens 2004, Workshop on GeoPortal solutions Warsaw 2004, Workshop on e-Land administration Vienna 2004, Regional Conference Jakarta 2004, Workshop on eGovernment Cairo 2005, 2006 Budapest (Booklet report by Bela Markus), Congress Munich 2006, Comm. 3 Workshop Athens 2007, Working Week Hong Kong 2007, Regional Conference Costa Rica 2007, Comm. 3 Workshop Valencia 2008, and Working Week Stockholm 2008.

A list of useful papers and publications on the topic will be provided soon. An attempt is made to provide links to eGovernment web sites where SIM is an important part. (e.g., Links to global/regional assessment sites, UN, WB, EU, Links to some national sites).

The production of a WG3.1. CD including all the above mentioned work is in process. Lessons learned...

The importance of political support and commitment

- to insure inclusion and interaction
- to secure data sharing and distribution
- to facilitate equal opportunities
- to invite for participation

Working Group 3.2 – Spatial Data Infrastructure (SDI)

Chair: Paul Kelly (Australia)

Co- chair: Hartmut Mueller (Germany)

This year for the first time in history, over half of the world's population now live in urban areas. This equates to 1.6 billion people. It is estimated that 500 million people will be urbanised in the next five years and projections indicate that the percentage of the world's population that is urbanised will be 60% by 2030. Urbanisation is a major change that is taking place globally. There are 19 Megacities (over 10 million population) now, expected to be 27 by 2020. Thirty percent of urban populations live in slums; providing affordable housing is a major challenge in all cities.

A specific work item that has been selected is the use of SDI in *managing mega cities*. A working group has been set up to identify relevant spatial tools that will support development and use of SDI by city authorities.

Based on cooperation with other working groups this WG will:

- Support discussion on the role of local and regional SDI in managing mega cities
- Identify institutional, policy and legal frameworks that can be incorporated in SDI to address mega city issues
- Identify specific technical innovations in SIM that can improve management of mega cities

The working group has adopted a pragmatic approach, based on working with administrations in mega cities to identify key problems they face both now and in the future; use an international network of experienced spatial information practitioners to identify potential solutions; and then develop materials that provide a practical guide to international best practice in the use of SDI to better manage our cities. Commission 3 plans to provide a major report on its findings at the FIG Congress in Sydney in 2010.

The methodology adopted by the working group has three stages:

- 1. Review SDI developments in existing mega cities, identify current problems and issues and use of SDI (by August 2008).
- 2. Document case studies, including lessons learned about solutions to problems (by April 2009).
- 3. Develop a toolkit for use of best practices in SDI in managing mega cities, including frameworks for policy, institutions, legal and technical (by April 2010).

The working group has developed a questionnaire on the needs and use of SDI by mega cities. The questionnaire and covering letter signed by the President of FIG are currently being sent to a shortlist of mega cities, including Delhi, Istanbul, London, Mexico City, Hong Kong and Seoul. The working group will firstly make use of voluntary time of its members and seek to involve administrators in selected mega cities. However, the work plan can be accelerated and encompass more cities with a modest injection of funds from interested bodies. A submission has been prepared to the World Bank. The working group can provide specific proposals to bodies expressing interest in aspects of the work plan.

WG 3.2. chair Mr Paul Kelly was supported by FIG Commission 3 to participate to 9th Congress of Metropolis on "*Trends in Megacities – Metropolis*" Congress 2008, in Sydney, Australia, 22-25 October 2008. The report can be found on: http://www.fig.net/news/news_2008/sydney_oct_2008.htm. You may read more about the Metropolis Congress on: http://www.metropoliscongress2008.com/

A very successful additional FIG WG 3.2 activity took place immediately after the Workshop. On 13th and 14th February 2009 a follow-up meeting took place at the Mainz FIG Commission 3 Workshop's location. The Local Organising Committee and the co-chair of FIG WG 3.2 Prof Dr Ing Hartmut Mueller provided for a two-day summary of the Workshop to the Nigerian delegation. The follow-up meeting was attended by the Honourable Speaker of the Nigerian Katsina State House of Assembly Mr Yau Umar Gojo-gojo, along with twelve of his Housing and Urban Development Committee members. In the context of summarizing several presentations given by some Workshop speakers, the similarities and discrepancies between the African and European Land Administration and Spatial Planning Systems were thoroughly discussed. In that way, an excellent opportunity was taken to transfer the

Workshop's results to a delegation of high-level political representatives of an African developing country. Workshop's web site: http://www.i3mainz.fh-mainz.de/FIG-Workshop/

Working Group 3.3 – Multi Dimensional Aspects in Spatial Information Management Chair: M. Roic (Croatia)

The Working Group 3.3 (WG) was formed in 2006. The goals of the Working Group are:

- 1. Expansion and development of existing data models;
- 2. Increase the involvement of surveyors in development of data models; and
- 3. Disseminate accumulated knowledge and experience.

The WG was structured to include members with technical expertise as well as participants who are familiar with the development of SDI. In pursuit of these goals, the WG has met first time in Athens in early 2007. This meeting has provided an opportunity for the WG not only to analyse issues directly related to mentioned goals, but also to identify a number issues for cooperation with WG2. The members of the WG also participated in Stockholm in 2008 and presented papers covering technical and multidimensional aspects of SDI in order to assure broader dissemination of the WG's work.

3. Cooperation

3.1 Cooperation with other commissions

Some cooperation is established with Commission 2 for the Workshop in Valencia. More cooperation is under discussion with Commission 9 and with Eurogeographics in future.

3.2 Cooperation with UN agencies

- Commission 3 is closely cooperating with UNECE Working Party on Land Administration especially on the issue of handling Informal Settlements and managing unplanned urban development in the region of Europe: http://www.unece.org/hlm/documents/2008/informal.notice.1.pdf
- Commission 3 has cooperated with UN-HABITAT by organizing an Experts Group Meeting to discuss informal development in Albania and Greece: http://www.fig.net/news/news_2008/athens_november_2008.htm http://www.gltn.net/en/newspage/tools-for-legal-integration-and-provision-of-environmental-improvements-in-informal-settlements.html

4. Events

2008

- Commission 3 Annual Meeting and Workshop "Spatial Information Management Toward Environmental Management of Mega Cities", Valencia, Spain, 18-21 February 2008
- UNECE WPLA Workshop in Bergen, Norway, April 2008
- FIG Working Week 2008, Stockholm Sweden, 14-19 June 2008.

- VSMM 2008, 14th International Conference on Virtual Systems and Multimedia, dedicated on "Digital Heritage: our HI-tech STORY for future", 20-26 October 2008, Cyprus
- FIG/UN-HABITAT Expert Group Meeting in Athens, Greece, 27-28 November 2008

2009

- FIG Commission 3 Workshop on "Spatial Information for Management of Sustainable Urban Areas", Mainz, Germany, 2-4 February 2009
- FIG WG 3.2 follow-up meeting, Mainz, Germany, 13-14 February 2009
- FIG/World Bank Conference on "Land Governance in Support of the MDGs", 9-10 March 2009
- FIG Working Week, Eilat, 3-8 May 2009
- Expert group meeting in Paris, November 2009, on "SIM for Megacities and Metropolitan Areas Management"

5. Communication and Publications

- The proceedings of the 2007 and 2008 Workshops are in publishing process.
- "Technika Chronika", the peer-reviewed journal of the Technical Chamber of Greece will publish, in its second version of 200, the peer reviewed papers of Sounio 2007 workshop.
- SaLIS journal has published a special issue, June 2008, vol 68, No 2, with some of the peer-reviewed papers of the Valencia 2008 Workshop. The rest peer reviewed papers of that workshop are also been published in following SaLIS issues
- Commission 3 delegates are working on a publication on "SIM for Megacities and Metropolitan Areas Management"

Dr. Chryssy Potsiou Chair of FIG Commission 3

February 2009