**Report to the 29th General Assembly
FIG Congress in Munich, October 2006**

FIG Commission 3 – Spatial Information and Management

Report of Activities 2002-2006

Figure: FIG Commission 3 meeting at FIG-Working Week in Cairo, April 2005

1. General

In an service oriented information society the management of spatial information becomes an integral part of the business processes with human interaction as core using geo-tools and geo-data for shaping services. Parallel to that the public sector follows the same development with e-Government initiatives as trigger. FIG Commission 3 contributes to that development of integrating Spatial Information Management.

1.1 Mission

The mission of Commission is:
- Bringing awareness to successful Spatial Information Management (SIM) approaches in the "Information Age" for better decision making. Decision makers on all levels nowadays expect reliable spatial information and not only maps.
- Supporting the use of SIM-tools for decision makers and citizens to support the goals of participatory democracy.
- Share good practice on managerial processes and infrastructure needs for handling data, using information and distributing knowledge.
- Encouraging decision-makers for a more extensive use of spatial information in compliance with developments within e-government and e-commerce.

Criterion of success has been defined as:
- To initiate and provide activities so interesting that colleagues will regard the commission as one base on their professional lives.
- Progress activities mainly through working groups (WGs) and joint working groups (JWG), which contribute to workshops and seminars held during and outside FIG working weeks; submit progress reports about these events.
- Present the final outcomes of Commission work as reports, statements and/or publications accessible also through the web.

1.2   Work plan 2002-2006

The Commission 3 work plan is founded on the wider objectives defined in the FIG Councils´ work plan.

Commission 3 work plan focuses on contribution of spatial information for sustainable development. The following elements for achieving this goal formed the base for the Working groups of Commission 3:
- "**e-Government and e-Citizen**" focusing on the interactive information flow between providers, partners and customers (PPP);
- "**SIM infrastructure**" for harmonization of data, information, tools (LBS) and workflows;
- „**State of the art of SIM**" for sharing experience best practice;
- "**Knowledge in SIM**" provides the overarching principle for sharing and transferring knowledge achieved.

1.2.1   Implementation

According to the Work plan Commission 3 aimed at addressing these issues in various activities and structured the tasks into the following working groups:

Working Group 3.1: e-Government and e-Citizen
Chair: Kari Strande (kari.strande@statkart.no)

The decision of Commission 3 of focusing on those topics proved to be full in line with the development of increasing development in the e-government field. The pre-Conference Workshop as well as the session during Cairo WW focused on *SDI Legal and Policy Issues* and addressed the requirements for a *spatial component of e-Government.* The final result can be summarized as:
- WG3.1 members encouraged experts to present at various conferences good examples of e-government programmes where GI is an essential component.
- WG3.1 initiated and shaped the Cairo - Pre-Conference Workshop **WSE 1 – e-Government for e-Citizens: State of the Art on e-Government Initiatives.**
A position paper summarizing the progress is under development.

Working Group 3.2 - SIM infrastructure
Chair: Keith Murray (Keith.Murray@ordnancesurvey.co.uk)

Activities on SIM infrastructure resulted in several workshops:
- Milestones of the work of WG3.2 '**SIM infrastructure'** have been the conferences on *Improving the Positional Accuracy of GI Databases*, in Dublin in May 2004 (www.dit.ie/eurosdr), and in Munich in June 2005 (www.geodaten.bayern.de/bvv_web/geodatenonline/fachanwender/aktuelles_EuroSDR2005.html) , which was organized by EuroSDR jointly with WG3.2.
- In October 2006 a pre-conference workshop of COM3+5+7 will focus on *Quality Management for Geodata* will be held on the FIG-congress in Munich.
The outcome has been published within proceedings as well as on the web.

Working Group 3.3 - State of the art of SIM
Chair**:** Chryssy Potsiou (chryssyp@survey.ntua.gr)

The outcome of this WG resulted in:
- An inventory of *Good Practice within National Spatial Data Infrastructure* presented on the web: www.fig.net/commission3/wgroups/WG3_3/index.htm.
- An additional outcome has been the joint UN/ECE-WPLA, FIG Commission3 + 7 conference on "Spatial Information Management for Sustainable Real Estate Market "in Greece in June 2003.
- Chryssy Potsiou - as member of WPLA-steering board - and other Commission 3 members contributed to the publication: "*Land Administration in the ECE region - Development Trends and Basic Principles*".
- WG 5.4 - Cost Effective Surveying Technology and Techniques for Developing Countries has been supported by Chryssy Potsiou.
Most of the outcome has been published within proceedings as well as on the web.

JWG 3.4 - Knowledge Transfer in SIM
Chair: Bela Markus (mb@geo.info.hu)

In April 2006 in Budapest, Commission 2+3+7 presented on a joint workshop on "*e-Governance, Knowledge Management and e-Learning*" (www.fig.hu) the outcome of Knowledge transfer in SIM and published the results within proceedings as well as on the web.

JWG of Commissions 3 and 7 on "3D-Cadastre"
Yerach Doytsher (doytsher@tx.technion.ac.il)

From Commission 3 point of view 3D-Cadaster is a milestone towards a multidimensional (geo-spatial and multi-temporal) information management. The WG intents to publish during the 2006 Congress in Munich a FIG publication on guidelines to establish a 3D Cadastre, addressing legal, technical and institutional issues. Several papers at the WW in Cairo are focusing on the multidimensional approach summarized up to now under "3D Cadastre".
The outcome has been published within proceedings.

JWG of Commissions on Informal Settlements

This activity will result in a joint workshop with UN-ECE-WPLA in 2007.

1.3   Communication and information exchange

Commission 3 contributes to Spatial **Information** Infrastructure which is considered as a wider approach than the Spatial **Data** Infrastructure. The cooperation with the thematic neighbouring GSDI-organisation resulted in a joint FIG-GSDI-Working Week 2005 in Cairo.
Last but not least Commission 3 promoted inter- and trans-disciplinary cooperation which is explained later on within the chapter on cooperation with sister organisations and with UN-bodies.

The internal information exchange and information management within Commission 3 was always an important issue during these years. The commission officers understood their contribution also as focal point for information sharing. Thus, the network of commission 3 community communicates intensively by emails on any upcoming requests from members. In addition Reinfried Mansberger (mansberger@boku.ac.at) Vice-Chair - Administration and Information of commission 3 coordinated these activities and maintained the content of our Commission 3 website (www.fig.net/figtree/commission3).

1.3.1 Commissions 3 digital Newsletter

Every year Commission 3 produced one CD containing publication, information, news, and links related to Spatial Information Management. About 500 copies of these CDs have been sent each time to beneficiaries all over the world including delegates, correspondents, academic members and to other persons within the international FIG Commission 3 community.

1.3.2 Beneficiaries

The beneficiaries addressed are as such:
- Surveyors, surveyors associations and users engaged with spatial data and spatial information;
- Citizens accessing and contributing to e-Government on national as well as on a local level;
- The educational sector, involving spatial information into their learning and training environment.

2. Cooperation

FIG Commission 3 has several forms of cooperation, namely internally arranged as Joint Working Groups; and externally like the co-operation with Sister Associations.

2.1 Cooperation with other Commissions within Joint Working Groups (JWG)

JWG of Commissions 2 and 3 on: "**Knowledge in SIM**"
JWG of Commissions 3 and 5 on "**Mobile society and Location based services**"
JWG on "**Low Cost Surveying Technology and Techniques for Developing Countries**"
JWG of Commissions 3 and 7 on "**3D-Cadastre**"
Inter-Commission-cooperation on "**Standardization**"

2.2 Cooperation within Sister Associations

Cooperation with **GSDI**: Commission 3 held close cooperation with GDSI contributing to 6th GSDI Conference in Budapest, 16-19 September 2002 as well as initiating the joint FIG-GSDI-event in Cairo 2005.

Cooperation with **ISO / CEN**: Prof. Dr.-Ing. Hans Knoop, member of Commission 3 contributed to international standards on spatial data with ISO and OPENGIS acting as co-chair of the Advisory Groups on Outreach of ISO/TC 211 and CEN/TC 287.

Cooperation with **EuroSDR**: Joint workshops with EuroSDR have been held on *Improving the Positional Accuracy of GI Databases*, in Dublin in May 2004 and on **Shifting maps for better quality**, Munich, June 2005.

Cooperation with **ICA**: Keith Murray, Chair of Commission 3 WG 3.2, attended the 21st International Cartographic Conference of the International Cartographic Association (ICA), in Durban, South Africa, August 2003.

Cooperation with **South American countries**: Erwin Heine, Institute of Surveying, Remote Sensing and Land Information at the University of Applied Life Sciences in Vienna represented FIG at the 2nd International Conference on GIS in Bogotá, Colombia September, 2003. (www.fig.net/news/news_2003/colombia_2003.htm)

2.3   Cooperation with United Nations Agencies

2.3.1   Cooperation with UN-ECE-WPLA

Commission 3 observed with interest the reorganization of UN-ECE adding the topic of Land Management into their agenda. *Chryssy POTSIOU*, as member of WPLA-steering board facilitated the information flow. She, together with other Commission 3 members contributed to the publication: "*Land Administration in the ECE region - Development Trends and Basic Principles*", which includes the experience gained through the last decade from UN, WPLA, World Bank, FIG, and other organizations.

2.3.2   Cooperation with UN-ECA-CODI

Reinfried Mansberger, Vice-Chair of Administration of FIG Commission 3, presented FIG at the 3rd Meeting of the Committee on Development Information (CODI) of the UN/ECA, Addis Ababa May, 2003 (www.fig.net/figtree/news/news_2003/CODI_III_2003.htm).

3.   Events

3.1   Meetings

The Commission 3 organized, held or contributed to the following meetings:

Year	Meetings and Symposia	Meetings at FIG-Congresses / FIG-Working Weeks
2002	- Annual COM3-meeting, Istanbul, Turkey, Sept. 2002,	- COM3-meeting, Washington
2003	- Joint Workshop of UN/ECE-WPLA – FIG-COM3: "*Spatial Information Management for Sustainable Real Estate Market*", June 2003. - Annual COM3-meeting, Marrakech, Morocco, December 2003.	- COM3-meeting, Paris
2004	- Conference on *Impacts of Improving the Positional Accuracy of GI Databases*, in Dublin, May, 2004, jointly with EuroSDR. - Annual COM3-meeting, Jakarta, Indonesia, October 2004.	- COM3-meeting, Athens
2005	- Workshop on **Shifting maps for better quality**, Munich, June 2005, jointly with EuroSDR. - Contribution to the International Summer School "*GI in agricultural monitoring and land use planning*" in Székesfehérvár, Hungary, August 2005.	- COM3-meeting, Cairo, April 2005 - Pre-Conference Workshop on **e-Government for e-Citizens**, Cairo, April 2005
2006	- Workshop: "**e-Governance, Knowledge Management and e-Learning**",Budapest, Hungary, April 2006 - Annual COM3-meeting, Budapest, Hungary, April 2006	- COM3-meeting, Munich, Oct.2006 - Pre-Conference COM3-5-7 Workshop: *Quality Management for Geodata*, Munich, Oct.2006

4. Publications

Four FIG-Commission 3 CD (Year 2003, 2004, 2005, 2006) have been produced and about 500 copies of each have been sent to beneficiaries all over the world.

"**Marrakech Declaration** - Urban-Rural Interrelationship for Sustainable Development". published in English, French, Arablic, Copenhagen, Denmark, FIG Publication No.33, ISBN 87-90907-32-9, was prepared by an expert group under the leadership of Gerhard Muggenhuber.www.fig.net/pub/figpub/pub33/figpub33.htm

Keith Murray, Robert Mahoney (2003). Interoperability in Geographic Information – technological idealism or business critical? Féderation Internationale des Géomètres (FIG), Paris 2003

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www.fig.net/com_3_istanbul/PDF/R.Mansberger.pdf Istanbul 2002.

Muggenhuber G. (2003): Lands and Mapping - Impact of the EU accession, Conference on"GIS and Development of Cyprus Infrastructure", Nicosia, 2003

Muggenhuber G., (2004): Build, share shape…Spatial Information for human well-being. Proceedings of the GIS-2004 Conference, Bahrain, Sept.2004.

Muggenhuber G., Mahoney R. (2006). Changing Minds in an Evolving Society, FIG-article of the month July 2006.

Muggenhuber G., Mansberger R. (2003). Impact of decentralisation and community empowerment to spatial information management. Proceedings of the 2nd FIG Regional Conference, Marrakech, Morocco, Dec.2003.

Muggenhuber G., Mansberger R. (2004): Spatial Information for Risk Management. Proceedings of the 3rd FIG Regional Conference, Jakarta, Indonesia, Oct.2004.

5. Acknowledgments

As chair of FIG Commission 3 2002-2006 I would like to thank all delegates, correspondents and friends of Commission3 for their active contribution and participation in workshops and meetings sharing their ideas and experiences within the network of Commission 3.

My special tank goes to all Commission 3 officers, especially to the chairs and co-chairs of Working groups and Commission 3 representatives in Inter-Commission activities. They committed themselves to a certain task, which was the trigger for the progress of this commission during the recent years.

Reinfried Mansberger, Vice-Chair of Administration, facilitated on so many occasions the smooth progress. He initiated communications, managed our website, supported any kind of publications and gave advice to all kind of activities. Many thanks for all his energy invested.

I would also like to thank the Austrian institutions supporting me in my role as Commission chair, especially BEV – the Federal Office of Metrology and Surveying and the ÖVG - the Austrian Society for Surveying and Geoinformation.

Last but not least the good cooperation with FIG Council in my role as representative of ACCO and the support and hints from FIG Office supported to achieve the aimed results.

I could only fulfil the task and role as a chair of Commission 3 closely cooperating with these partners. I gained experience and unexpected gratification from that task.

Gerhard Muggenhuber
Chair of Commission 3

July 2006