Report to the 33rd General Assembly FIG Congress in Sydney, Australia 2010

FIG Commission 7 – Cadastre and Land Management

Report of Activities 2009

1. General

Commission 7 deals with land administration ("the process of determining recording and disseminating information about the ownership, value and use of land when implementing land management policies", ref. UNECE Land Administration Guidelines 1996). Commission 7 established its concept of activities about 15 years ago. It is in line with the FIG long term strategy and selected topics to deal with

- advanced cadastre
- creating secure land tenure
- application of innovative, advance technology in land administration

Commission 7 aims

- to provide a forum for enhancing knowledge about cadastre, land administration and land management world wide
- to encourage the development of pro poor land management and land administration
- to promote the importance of development of sustainable land administration as infrastructure for sustainable development to underpin economic growth
- to promote the application of innovative and advanced technology in cadastre, land administration
- to promote awareness of the role of surveyors in land administration matters to the public and among stakeholders

2. Work Plan 2007-2010

The Commission activities followed the work plan basically but extended its work supporting participating and contributing actively in many FIG and other events relevant to Commission 7.

3. Annual meeting

The Commission 7 Annual meeting has been traditionally an important event for the Commission since many years. Commission 7 Annual meeting 2009 was held in Kuala Lumpur, Malaysia in October 12-16, 2009, together with a one-day International Open Symposium on "Progressing Towards Ubiquitous Cadastre". The meeting was organized by the Commission in Cooperation with the Association of Authorised Land Surveyors Malaysia, PEJUTA. The chief organizer was Mr. Teo Chee Hai, Malaysian delegate and FIG Vice president who did an excellent job. The FIG Office helped the Commission in the registration for the Annual meeting.

More than 40 delegates from 22 countries participated in the event. The program followed the tradition of the Commission 7 Annual Meetings, three days meeting, one day open symposium and one day technical tour.

The meeting always starts with the introduction of the host country, information about the land surveyor profession, land administration activities, education, etc. These presentations used to be given by top officials but this time 4 young surveyors informed us about the current situation in Malaysia. It was a very good idea, delegates very much enjoyed it and Commission 7 followed FIG strategy to involve young surveyors in the FIG activities.

Commission chair András Osskó and working group chairs gave reports on the Commission 7 activities, including information about the major FIG events for those who were not able to attend. Working group chairs spoke about the progress of ongoing initiatives of the commission (Land Administration Domain Model-ISO acceptance, Social Tenure Domain Model, Cadastral Template, FLOSS Cadastre, etc.

Richard Grover UK delegate introduced a questionnaire on "Public, State Land management" which was circulated after the Annual meeting. The questionnaire was proposed by the Cyprus delegate Elia Elikkos. The topic is very live in every country hoping to have sufficient number of response to continue the work. All of the 22 national delegates gave a country report about the new developments in land administration and cadastre in 2008-2009.

The One-Day Open International Symposium on "Progressing towards Ubiquitous Cadastre" was a successful event. Besides the international delegates, more than 200 professionals attended from the host and neighbouring countries. Ubiquitous Cadastre is the next step after the e-Cadastre requires a very advanced e-technology. We could follow 12 very interesting presentations by Commission 7 delegates, Malaysian and other international professionals. FIG President Stig Enemark also participated in the Open Symposium presenting an excellent keynote paper "Facing the Global Challenges: the Importance of Land Governance and the Significance of the Cadastre". Delegates visited the historical Malacca town. The technical tour included the visit to the Regional Cadastre Office and enjoyable sightseeing. In the Regional Cadastre Office we received many information about the development of e-cadastre in the region.

4. Working Groups

Working Group 7.1 – Development of Pro Poor Land Management and Land Administration

Chair: Christiaan Lemmen (The Netherlands)

Pro Poor Land Management approaches have been recognized and supported by the development of the specifications of a first prototype of the Social Tenure Domain Model. The STDM is intended to introduce new, unconventional approaches in land administration by providing a land information management framework that would integrate formal, informal and customary land systems, as well as integrate administrative and spatial components. The STDM makes this possible through tools that facilitate recording all forms of land rights, all types of rights holders and all kinds of land and property objects (spatial units) regardless of the level of formality. The thinking behind the STDM also goes beyond

some established convention. Traditional or conventional land administration systems, for example, relate names or addresses of persons to land parcels via rights. An alternative option is being provided by the STDM, which instead relates personal identifiers, such as fingerprints, to a coordinate point inside a plot of land through a social tenure relationship such as tenancy. The STDM thus provides an extensible basis for an efficient and effective system of land rights recording.

The STDM development activity has generated conceptual, functional and technical designs. The prototype is under development at the Faculty of Geo-Information Science and Earth Observation (ITC) in close co-operation with Global Land Tool Network (GLTN, UNHABITAT) and the International Federation of Surveyors (FIG)

The STDM concept may be implemented in both commercial and open source GIS software or database management software, or a combination of both.

The STDM prototype initiative is based on open source software (PostgreSQL database, ILWIS remote sensing software as GIS and Apache Tomcat to support a client/server environment)

The communication of FIG concepts in land policy and land management has been actively done by presentations at international conferences and meetings, e.g. during the symposia related to annual meeting of the Commission, during meetings at the World Bank in Washington, and many occasions as well. Presentations are published at the FIG website and a series of papers have been published. An overview of these papers can be found in the annual reports of the OICRF, the International Office of Cadastre and Land Records, see www.oicrf.org. The OICRF is one of the permanent institutes of FIG. The annual reports have been reported to the General Assembly

The identification of (geometric) aspects related to social, informal land tenures has been performed by the introduction of continuum in the representation of spatial units in the Land Administration Domain Model (LADM), from text based, point based, line based (spaghetti based) and polygon based spatial units. These concepts have been introduced in several papers, amongst them a paper presented at this congress in Sydney. Within the development of the International Standard for the LADM, efforts have been made to fully integrate the STDM. FIG submitted in 2008 a proposal to develop this International Standard to the Technical Committee 211 on Geographic Information (TC 211) of the International Organization for Standardization (ISO). There was a positive vote for the Draft International Standard (DIS) at the ISO/TC 211 plenary meeting in Quebec City (Canada) in November 2009. an Editing Committee is now working on the final document.

The support in the development of low cost, innovative data acquisition methods has been achieved by doing a field test with enlarged satellite images (Quickbird) in collecting land use rights in Ethiopia. This approach has been presented at the FIG/World Bank conference "Land Governance in Support of the Millennium Development Goals: Responding to New challenges", Washington DC, 9-10 March 2009 (see the proceedings on FIG website). Similar approaches have been presented during this conference as being successful.

All of Section 5 is related to the GLTN activities and to GLTN concepts, e.g. the implementation of continuum of land rights.

A capacity building approach has been supported in developing networks, e.g. a closer cooperation between the United Nations University School for Land Administration Studies at ITC with the Technical University of Munich. During and international workshop on "Sharing Good Practices-E-learning in Surveying, Geo-information Sciences and Land Administration" there was agreement that this type of networks have to be extended. The results of this workshop are presented at the congress in Sydney.

Working Group 7.2 – Land Administration to Support Sustainable Development Chair: Soren Christensen (Denmark)

The chair of the Working Group 7.2 has a dream, a need for humanitarian arm of FIG-Surveyors without Frontiers. The idea of working on the Surveyors without Frontiers was to some extend supported by FIG. In 2009 the Working group 7.2 worked together with Working group 7.1.

Working Group 7.3 – Application of Innovative Technology in Land Administration Chair: Daniel Steudler (Switzerland)

Over the last four years, Working Group 7.3 has mainly focussed on topic of open source software and its potential for cadastre and land registry systems. The working group has a working relation with UN/FAO supporting "FLOSS Cadastre" Project, since 2007. Working group has been active in several events.

The Working Group decided to complete a publication that explores this field, and to look at risks and opportunities of open source software. The title and table of content of the publication look as follows.

FLOSS Cadastre and Land Registration – Opportunities and Risks

1. Introduction

2. Background on Open-Source and Linkage to Cadastre

- 2.1 Open-Source Software and Responsible Governance of Cadastral Systems
- 2.2 Free and Open-Source Software
- 2.3 Open-Source Software for Geospatial Data- The Birth of OSGeo

3. Tools and Initiatives

- 3.1 Existing Open-Source Tools- Possibilities for Cadastre Systems
- 3.2 The Story of an Open-Source Software project- GeoNetwork
- 3.3 The OSCAR Project
- 3.4 Piloting Open-Source Cadastre and Registration Software
- 3.5 The Social Tenure Domain Model- Pro Poor Land Rights Recording System

4. Country Experiences

- 4.1 Bavaria, Germany
- 4.2 Bosnia and Herzegovina
- 4.3 Cambodia
- 4.4 Ghana
- 4.5 Samoa
- 4.6 Solothurn, Switzerland

5. Conclusions

The publication has contributions from some 15 authors, who give an insight in the need and developments worldwide. This publication will be launched at the FIG Congress in Sydney with a dedicated Technical session, where a selection of contributing authors will also present their chapter.

5. Events

5.1 Contribution to major FIG events

The Commission actively participated in the major FIG events:

FIG Working Week, and XXXII. General Assembly-Surveyors Key Role in Accelerated Development, Eilat, Israel, 3-8 May 2009.

Commission 7 have been involved in 13 technical sessions, 7 full Commission 7 sessions with about 30 presentations and 6 joint sessions with Commission 1, 3 and 8 with about 30 speakers.

7th. FIG Regional Conference- Hanoi, Vietnam, 19-22 October 2009

Commission 7 was the major contributor to the technical sessions. There were six "clear" Commission 7 sessions and several joint sessions with Commission 3, 8 and 9 which means about 40 papers.

Thanks a lot for all Commission 7 delegates and speakers for their active contribution to the success of the events.

5.2 Contribution to other events

Joint FIG/World Bank Conference "Land Governance in Support of the Millennium Goals: Responding to New Challenges"-Washington DC. USA, 9-10 March 2009

Commission 7 was represented by Paul van der Molen (as one of the chief organisers of the conference), András Osskó, Daniel Roberge, Richard Grover, Odame Larbi, Christiaan Lemmen, Tommy Österberg and Daniel Steudler presenting papers and chairing sessions.

Conference on "Citizens' Rights to the Real Property" Chisinau, Moldova, 30 November - 1 December 2009

The conference was organized by the State Cadastre Agency of Moldova" and supported by FIG Commission 7 and 3.András Osskó chair, and Daniel Steudler chair of Working group 7.3 participated in the event and presented papers. Commission 3 was represented by the chair Chryssy Potsiou.

1st. National and International Cadastral Congress of Argentina, Cordoba, Argentina, 8-11 September 2009

Invitation made by the Organisation of American States (OAS) and the Federal Council of Argentina to Daniel Steudler chair of Working group 7.3 to represent FIG Commission 7 but Daniel Roberge chair elect of the Commission participated in the congress. The aim of our attendance was to encourage Latin American professionals to participate in FIG events more frequently and increase their activities in FIG.

6. Other activities

In May 2009, the national delegate of Cyprus, Mr. Elikkos Elia offered to work out questionnaire on public and state land/property management to be circulated among the delegates, friends of Commission 7. The aim is to collect basic information on state and public land properties in different countries and compare best practices as a basis for improving state and public land /property management policies. He also contacted Richard Grover UK delegate to Commission 7 who is an expert in the theme to revise the questionnaire and give presentation during the Annual meeting 2009 in Kuala Lumpur. Richard Grover gave a presentation about the topic and finalized questionnaire which was circulated in January 2010. I encourage Commission 7 delegates to complete and return it to Richard Grover allowing Commission 7 to deal with this important topic in the future.

7. Communications

Commission 7 holds a website within the FIG website. One of our aims to keep the interested professionals informed about the Commission 7 activities and events. The website is being maintained regularly by FIG Office.

We also inform Commission 7 delegates and friends through Newsletters. The Commission published and circulated two newsletters in June and December in 2009 via e-mail to delegates and friends. We kept them informed about FIG events, news, developments related to Commission 7 activities. We have been using the list of the Commission 7 e-mail addresses. We try to update the list based on reported changes by delegates.

8. Future activities

The Commission will be one of the major contributors, with the number of presentations to the FIG Congress "Facing Challenges-Building the Capacity", Sydney, Australia, 11-16 April 2010.

The Commission, in co-operation with the Czech Union of Surveyors and Cartographers, will organize its **Annual meeting in Karlovy Vary, Czech Republic, 6-11 September 2010.** We circulated the letter of invitation in January 2010 and also available on the FIG Commission 7 website.

Commission 7 and 3, in co-operation with the Association of Bulgarian Private Surveyors organize a Conference and Workshop on "Information and Land management. A Decade after the Millennium" 15-17 November 2010. Sofia, Bulgaria.

9. OICRF

The OICRF will report separately to the General Assembly.

András Osskó

Chair, FIG Commission 7 January 2010

Website: www.fig.net/commission7