



## TECHNICAL AND MEETING PROGRAMME

**11 November 2006**

### **Friday 6 October 2006**

#### **FIG Council Meeting**

Commission: FIG Council

Time: **Friday, 6 October 09:00-17:30**

Venue: Forum 5, Holiday Inn City-Centre

- By invitation only

### **Saturday 7 October 2006**

#### **FIG ACCO Meeting**

Commission: FIG ACCO members

Time: **Friday, 6 October 09:00-17:30**

Venue: Forum 8, Holiday Inn City-Centre

- By invitation only

#### **Pre-Conference Workshop - History of Surveying and Measurement - Part 1**

Commission: International Institution for the History of Surveying and Measurement, Permanent Institution of FIG

Time: **Saturday, 7 October 09:00-17:30**

Venue: **Bavarian Office for Surveying and Geographic Information, Landesamt für Vermessung und Geoinformation Bayern**, Alexandrastr. 4, 80538 Munich, Germany, Room 500 and Museum

Chair: Mr. **Jim R. Smith**, United Kingdom

The workshop is organised by the officers of the International Institution for the History of Surveying and Measurement (IIHSM; A Permanent Institution within the International Federation of Surveyors), Prof. **Jan De Graeve** (Director), **Jim R. Smith** (Honorary Secretary) and **David Wallis** (Treasurer).

- Separate registration is required

#### **Registration**

Time: **08:30-09:00**

**Visit to the Museum "History of Surveying"** within the Office including a visit to the large collection of lithographic stones = about 30 000 Bavarian maps

Time: **09:00-10:15**

#### **Tea/ Coffee Break**

Time: **10:15-10:45**

## **HS 1 - Session I: Shaping the Earth**

Time: **10:45-12:15**

Chairman: Mr. **Jim R. Smith**, United Kingdom

HS1.1 Welcome: Prof. **Jan De Graeve** (Belgium)

HS1.2 Prof. Dr.-Ing. **Dieter Lelgemann** (Germany):

The Geodesist Carl Friedrich Gauß in the Novel of Daniel Kehlmann. Portrait of a Fictitious Figure? (0936)

This paper has not been presented at the congress

HS1.3 Dr. **Christine Mosselmans** (Belgium):

The Aztec Cadastre and Alexander von Humboldt (0945)

HS1.4 Prof. **Jan De Graeve** (Belgium):

Gerhard Mercator. The Surveyor and His Library (0944)

**Lunch** (Included for registered participants). In the Casino of the LVG

Time: **12:15-14:00**

## **HS 2 - Session II: Famous European Surveyors**

Time: **14:00-15:30**

Chairman: **Florian Huber**, Germany

HS2.1 Mr. **Thomas Glatthard** (Switzerland):

Swiss Pioneers of the Surveying of the Alps (0937)

HS2.2 Ms. **Madlena Cavelti Hammer** (Switzerland):

The Conquest of the Swiss Alps - The Survey and Engineering Work of Xaver Imfeld (1853-1909) (0943)

HS2.3 Mr. **John Brock** (Australia):

Australia's first Surveyor General and Governor, Alt and Phillip - The First Settlers of German Origin (0300)

HS2.4 Mr. **Bob Linke** (Australia):

The Influence of German Surveying on the Development of New Guinea (0976)

HS2.5 Mr. **George Baitch** (Australia):

Ludwig Leichhardt – the Life and the Legend (0942)

## **Tea/ Coffee Break**

Time: **15:30-16:00**

## **HS 3 - Session III: Meridian Measurements**

Time: **16:00-17:30**

Chairman: Prof. **Jan De Graeve**, Belgium

HS3.1 Prof. **Günter Nagel** (Germany):

Base-Line Measurements in Bavaria, 1801 (0939)

HS3.2 Mr. **Bjorn Geirr Harsson** (Norway) and Mr. **Vitali Kaptjug** (Russia):

The Struve Arc Inscribed on the World Heritage Monument List by UNESCO (0941)

HS3.3 Mr. **Jim R. Smith** (United Kingdom):

From LaCaille to Gill and the start of the Arc of the 30th Meridian (0940)

Concluding remarks

**Evening free or a Visit to a Bavarian Restaurant**

Time: **19:00-**

- [Not included in the fee] Dress code: casual

**Sunday 8 October 2006**

**FIG General Assembly – First Session**

Time: **Sunday, 8 October 10:00-12:30** (to be continued 14:00-15:30 and 16:00-17:30)

Venue: Main Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

- For FIG members
- Open for observers

**ESRI Pre-conference Workshop - Part I - ESRI GIS Technology for Map Production - AM Session 10:00-12:30**

Time: **Sunday, 8 October 10:00-12:30**

Venue: Forum 7, Holiday Inn City-Center, Hochstrasse 3, Munich

Coordinator: Mr. **Kevin Daugherty**, ESRI

ESRI will present a two part workshop, with different topics in the morning and afternoon:

- Part I - ESRI GIS Technology for Map Production - AM Session 10:00-12:30
- Part II - ESRI GIS Technology for Surveying - PM Session 14:00-17:30

In the morning, we invite mapping agencies to see our solutions:

Mapping organizations are under pressure to respond to numerous challenges: budget constraints, demands for new data products, faster turnaround times on existing data products, increased competition, and higher costs. Efficient data collection and management, data and cartographic editing and data dissemination, through an effective workflow, enable organizations to meet these demands. This workshop will present tools and solutions in these areas, demonstrate the new cartographic representations in ESRI's ArcGIS software, and show how we are marrying the science of GIS and the art of cartography.

Registration:

- Free of charge – lunch and two coffee breaks are included
- Registration for the morning workshop:  
<http://events.esri.com/info/index.cfm?fuseaction=showSeminar&shownumber=9804>
- Registration for the afternoon workshop:  
<http://events.esri.com/info/index.cfm?fuseaction=showSeminar&shownumber=9808>
- Participation is limited to 30 participants

**Pre-Conference Workshop - History of Surveying and Measurement - Part 2**

Commission: International Institution for the History of Surveying and Measurement, Permanent Institution of FIG

Time: **Sunday, 8 October 10:00-13:30**

Venue: Deutsches Museum, Museumsinsel 1, 80538 Munich

Chair: Mr. **Jim R. Smith**, United Kingdom

**Exhibition: "The Art of Surveying. 50 Surveying Books 1500 - 1700"**

Organised by the International Institution for the History of Surveying and Measurement in cooperation with Dr. **Helmut Hilz**, Director of the Library of the Deutsches Museum, and Dr. **Florian Huber**, Bavarian Office for Surveying and Geographic Information.

**Visit to four special exhibits in the Deutsches Museum** (Geodesy, Measures and Weights, Time Measurement, The Bavarian Craft - 1806-2006)

Time: **10:00-12:00**

**Opening of the Book Exhibit in the Library of the Deutsches Museum**, presentation of the catalogue and the FIG-History of Surveying Calendar for 2007, followed by drinks

Time: **12:30**

**Disperse**

Time: **Circa 13:30**

- Separate registration is required

**FIG General Assembly – First Session - continued**

Time: **Sunday, 8 October 14:00-15:30**

Venue: Main Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

- For FIG members
- Open for observers

**ESRI Pre-conference Workshop - Part II – ESRI GIS Technology for Surveying - PM Session 14:00-17:30**

Time: **Sunday, 8 October 14:00-17:30**

Venue: Forum 7, Holiday Inn City-Center, Hochstrasse 3, Munich

Coordinator: Mr. **Kevin Daugherty**, ESRI

ESRI will present a two part workshop, with different topics in the morning and afternoon:

- Part I - ESRI GIS Technology for Map Production - AM Session 10:00-12:30
- Part II - ESRI GIS Technology for Surveying - PM Session 14:00-17:30

In the afternoon:

GIS (Geographic Information Systems) were initially built for specific functions to support the entry and editing of parcel information, managing electric networks, land use mapping, natural resource management, and many others. The data collected for these different customer types was done with the accuracy that was required by the application and organizational needs. Over time, users began to use other layers of GIS, including geodetic and survey control points.

ESRI, through its work with FIG and other prominent survey organizations, set a course to bridge the gap between GIS and Survey. ESRI has added new tools for the improvement of the spatial data in GIS. These new tools employ survey techniques and data; engaging the surveyor into the GIS community. This workshop will discuss how surveyors can leverage GIS, and how the GIS user community will benefit from the services and data of the professional surveyor.

Registration:

- Free of charge – lunch and two coffee breaks are included

- Registration for the morning workshop:  
<http://events.esri.com/info/index.cfm?fuseaction=showSeminar&shownumber=9804>
- Registration for the afternoon workshop:  
<http://events.esri.com/info/index.cfm?fuseaction=showSeminar&shownumber=9808>
- Participation is limited to 30 participants

### **FIG General Assembly – First Session - continued**

Time: **Sunday, 8 October 16:00-17:30**

Venue: Main Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

- For FIG members
- Open for observers

### **Welcome Reception**

Time: **Sunday, 8 October 18:00-20:30**

Venue: Ballroom and Foyer, Holiday Inn City-Center, Hochstrasse 3, Munich

- All participants – registration required
- Dress code: smart casual

## **Monday 9 October 2006**

### **Commission Meetings**

Time: **Monday 09:00-10:30**

Venue: Rooms 11a, 11b, 12a, 12b, 21a, 21b, 22a, 22b, 4a, 4b

Commission: Commissions 1-10

- Commission 1 – Room 11a
- Commission 2 – Room 11b
- Commission 3 – Room 12a
- Commission 4 – Room 12b
- Commission 5 – Room 21a
- Commission 6 – Room 21b
- Commission 7 – Room 22a
- Commission 8 – Room 22b
- Commission 9 – Room 04a
- Commission 10 – Room 04b

### **International Students Meeting – Young Professionals Are Part of the Change**

Time: **Monday 09:00-10:30**

Venue: Room 03

Commission: ARGEOS, KonVerS and Commission 2

### **Podium Discussion “Student Society”**

Introductions by:

**Cemal Özgür Kivilcim** (Turkey)

**Thorsten Schwing** (Germany)

**Maren Friedrich** (Germany)

### **WS 1 – Workshop 1 - Quality Management for Geodata**

Time: **Monday 10:30-13:00**

Venue: Room 21a and breakout sessions in Room 22b and Commission Room

Commission: FIG Commission 3, 5 and 7

Chair: Dr. **Martin Scheu**, Germany

Rapporteur: Dr.-Ing. **Gerhard Joos**, Germany

The hosting group of two similar events in Dublin (2004) and Munich (2005) invites you to join the workshop "Quality Management for Geodata". The workshop addresses anyone involved in one or more of the following topics:

1. Redesign and data model harmonisation: Application Redesign and migration of existing GI-databases into a new data model
2. Change of Reference Frame: Introduction of a new spatial reference system and migration of captured geodata
3. Improvement of geometrical Accuracy: Increasing the geometrical quality of existing geo-objects

We want to share experiences from national mapping organisations, data providers and data users like utility companies. The workshop will have the following agenda:

10:30: Introduction, setting the scene

11:00: Breakout sessions in three groups about topics suggested above

12:00: Break

12:30: Summary of breakout sessions, review of workshop success and next steps

The workshop enables participants to share experience and benefit from business cases and best practice projects. FIG Commissions 3, 5 and 7 support this workshop. Further information and registration form is available on the workshop website: [.QM4GEODATA.com](http://.QM4GEODATA.com) or by contacting Bernd Stary ([bernd.stary@technet-gmbh.com](mailto:bernd.stary@technet-gmbh.com)) or Martin Scheu ([scheu@grit.de](mailto:scheu@grit.de)).

### **Plenary Session 1 – Urban and Rural Inter-relationship in Land Administration**

Time: **Monday 9 October 11:00-12:30**

Venue: Room 14b

Commission: FIG

Chair: Prof. **Holger Magel**, FIG President

Rapporteur: Mr. **András Oskó**, Chair Elect of Commission 7, Hungary

PLEN1.1 Dr. **Lars Reutersward**, Director, Global Division, UN-HABITAT:  
Urban-Rural Interrelationship in Land Administration – Urban Perspective (0926)

PLEN1.2 Dipl.-Ing. **Maximilian Geierhos**, Head of the Bavarian Administration for Rural Development:  
Sustainability, Subsidiarity, Civic Responsibility – Guidelines for the development of vital rural areas (0924)

PLEN1.3 Mr. **Rob Mahoney** FRICS FBCartS, Principal, MahGeo, United Kingdom:  
The FIG Marrakech Declaration – A vision and challenge to shape the future of Urban Rural Interrelationships (0919)

### **TS 1 – Commission 4 Hydrography Reports**

Time: **Monday 11:00-12:30**

Venue: Room 22a

Commission: 4

Chair: Mr. **Andrew Leyzack**, Chair Elect of Commission 4, Canada

Rapporteur: Mr. **David Neale**, Trinidad and Tobago

TS1.1 Mr. **Adam Greenland**, Chair of FIG Commission 4 (New Zealand):  
FIG Commission 4 Report and Launching of Commission 4 Publications and Commission 4 CD (0930)

TS1.2 Director **Hugo Gorziglia**, International Hydrographic Bureau (IHB):  
IHO Report (0931)

TS1.3 Ms. **Venessa O'Connell**, IFHS (Australia):  
IFHS Strategic Plan and How to Attract Young Professionals to Hydrographic Surveying  
(0932)

TS1.4 Mr. **Andrew Armstrong** (USA) and **Gordon Johnston** (United Kingdom),  
IHO/FIG/ICA International Advisory Board (IAB):  
The Prospect for an FIG/IHO/ICA Program for Recognition of Individual Hydrographers  
(0953)

### **Commission Meetings – Commission 9**

Time: **Monday 11:00-12:30**

Venue: Meeting Room 1

Commission: 9

Meetings of

- WG 9.1 - Compulsory Purchase and Compensations in Land Acquisition and Takings
- WG 9.3 - Diagnostic Tools and Prescriptive Practices for the Valuation Profession

### **Reception of the Lord Mayor of Munich**

Time: **Monday 13:15-14:45**

Venue: City Hall, Munich

- By special invitation only
- Dress code: business suit

### **Joint Board of Geospatial Information Societies - Ad hoc Committee on Risk and Disaster Management**

Time: **Monday 13:00-18:00**

Venue: Meeting Room 2

- By special invitation only

### **TS 2 – Institutional Change and Land Administration**

Time: **Monday 14:00-15:30**

Venue: Room 05

Commission: 7

Chair: Prof. **Paul van der Molen**, Chair of Commission 7, The Netherlands

Rapporteur: Mr. **András Osskó**, Chair Elect of Commission 7, Hungary

TS2.1 Mr. **Arco Groothedde** (The Netherlands):

ICT Trends and Institutional Change, with a Special Attention to the Land Administration Sector (0839)

TS2.2 Prof. **Vo Dang Hung** and Mr. **Trung Tran Nhu** (Viet Nam):

Land Policy for Foodless Cancellation and Poverty Reduction in Vietnam (0518)

TS2.3 Dr. **Don Grant** and Mr. **Anselm Haanen** (New Zealand):

Cadastral Regulation – as Little as Possible, as Much as Necessary (0501)

TS2.4 Mr. **Tryggvi Már Ingvarsson**, Mr. **Tom Barry**, Ms. **Margrét Hauksdóttir**, Mr. **Örn Ingvarsson** and Mr. **Björn Magnússon** (Iceland):

The Development of a Spatial Component to the Icelandic Cadastre (0786)

TS2.5 Mr. **Arve Leiknes** and Mr. **Leiv Bjarte Mjøs** (Norway):  
Cadastral Mapping in Norway in Transition from Municipal Responsibility to Central Cadastre (0629)

### **TS 3 – Forum for Providers and Users of Real Time Correction Services from Continuously Operating Reference Stations (CORS) – Session I**

Time: **Monday 14:00-15:30**

Venue: Room 02

Commission: 5

Chair: Mr. **Matt Higgins**, Chair of Commission 5, Australia

Rapporteur: Mr. **Mikael Lilje**, Sweden

TS3.1 Mr. **Bo Jonsson**, Mr. **Gunnar Hedling** and Mr. **Peter Wiklund** (Sweden):  
SWEPOS Positioning Services – Status, Applications and Experiences (0626)

TS3.2 Mr. **Mark Burbidge** (United Kingdom):  
Leica SmartNet GB (0342)

TS3.3 Dr. **Rahmi Nurhan Çelik**, Ms. **Tekdal Esra** and Mr. **Özgür Avci** (Turkey):  
What is the CORS Situation in Turkey? (0639)

TS3.4 Mr. **Colin Bray** and Mr. **Iain Greenway** (Ireland):  
The Ordnance Survey Ireland Real-time Positioning Solution (0348)

TS3.5 Dr. **Oleg Odalovic** and Dr. **Ivan Aleksic** (Serbia):  
Active Geodetic Network of Serbia (0798)

TS3.6 Ms. **Daniele Barroca Marra Alves**, Dr. **João Francisco Galera Monico**, Mr. **Luiz Fernando Antonio Dalbello**, Dr. **Luiz Fernando Sapucci** and Dr. **Paulo de Oliveira Camargo** (Brazil):  
VRS Concept Using NWP and Mod\_Ion\_FK: Preliminary Results in Brazil (0326)

TS3.7 Prof. **Gershon Steinberg** and Dr. **Gilad Even-Tzur** (Israel):  
Permanent GNSS Networks and Official Geoid Undulations Model as a Substitute for Orthometric Control (0382)

### **TS 4 – Quality Management and Optimizing**

Time: **Monday 14:00-15:30**

Venue: Room 03

Commission: 3

Chair: Mr. **Keith Murray**, United Kingdom

Rapporteur: Ms. **Hanna Lauhkonen**, Finland

TS4.1 Mr. **Kari Ingberg** (Finland):  
Geographic Information Quality Management and Standardization in Finnish Defence Forces (0859)

TS4.2 Mr. **Christos Papadopoulos** (Sweden):  
Quality Improvements of the Cadastral Information in Sweden (0534)

TS4.3 Mr. **Eliyahu Safra** and Prof. **Yerach Doytsher** (Israel):  
Using Matching Algorithms for Improving Locations in Cadastral Maps (0860)

TS4.4 Mr. **Kapil Aggarwal** (India):

Development of Efficient and Optimized Algorithm for Knowledge Discovery in Spatial Database Systems (0211)

This paper has not been presented at the congress.

TS4.5 Mr. **Hussein Abdulmuttalib** (United Arab Emirates):  
Quality Aspects of Monitoring Environmental Variations Using Combined GIS & Remote Sensing Techniques with Emphases on Data Modelling (0349)

TS4.6 Mr. **Yoo JaeJun**, Mr. **Sung KyoungBok** and Ms. **Kim JungSook** (Republic of Korea):  
Efficient Transferring of Spatial/Geographical Information Using Streaming Technology (0854)

This paper has not been presented at the congress.

### **TS 5 – Education and Training**

Time: **Monday 14:00-15:30**

Venue: Room 04a

Commission: 2

Chair: Prof. **Pedro Caverio**, Chair of Commission 2, Spain

Rapporteur: Mr. **Chris Lunnay**, Australia

TS5.1 Mr. **Thomas Andersson**, Ms. **Angelica Oscarsson** and Ms. **Lisa Hydrén** (Sweden):

A New Way to Provide Strategic Competence at Lantmäteriet (0417)

TS5.2 Mr. **Glendon Newsome** (Jamaica):

Surveying Education and Training in Jamaica (0333)

TS5.3 Mr. **Peter Andree**, Dr. **Volker Böder**, Dr. **Delf Egge** and Dr. **Peter Bruns** (Germany):

New Developments for the Professional Education in Hydrography at Harbour City University Hamburg (HCU) (0468)

TS5.4 Prof. **Gheorghe Mugurel T. Radulescu**, Dr. **Stefan Ovidiu**, Dr. **Corina Michaela Radulescu** and Dr. **Eduard Keller** (Romania):

GIS Educational and Training Courses in the Northwestern Region of Romania (0697)

### **TS 6 – Environmental Practice: Issues in Spatial Planning**

Time: **Monday 14:00-15:30**

Venue: Room 04b

Commission: 8 and 3

Chair: Dr. **Diane Dumashie**, Chair of Commission 8, United Kingdom

Rapporteur: Mr. **Wafula Nabutola**, Kenya

TS6.1 Prof. **John Parker** (Australia):

Waste Management, a Role for Surveyors – Linking the Environment and Planning (0743)

TS6.2 Mr. **Michael Doran** (United Kingdom):

The Use of Land as a Biofilter (0878)

TS6.3 Ms. **Alexandra Weitkamp** (Germany):

Disturbed Circulation of Land Use – Supporting Brownfield Sites for Sustainable Development of Land (0583)

TS6.4 Mr. **Graham Bocking** (Germany):

International Environmental Impact Assessment (0855)

TS6.5 Mr. **Tim Elliot** (United Kingdom):  
The Future of Environmental Practice for Surveyors (0880)

TS6.6 Mr. **Philip Wilbourn** (United Kingdom):  
Spatial Information Leads to Environmental Choice for Consumers (0856)

TS6.7 Mr. **Christian Aunsborg** and Dr. **Michael Tophoej Soerensen** (Denmark):  
Environmental Conflicts in Urban Regeneration Areas (0800)

### **TS 7 – GIS and Valuation**

Time: **Monday 14:00-15:30**

Venue: Room 11a

Commission: 9 and 3

Chair: Mr. **David Smejkal**, Czech Republic

Rapporteur: Dr. **Reinfried Mansberger**, Austria

TS7.1 Mr. **Ruud Kathmann** and Mr. **Marco Kuijper** (The Netherlands):  
How to Evaluate Valuation Models (0490)

TS7.2 Mr **Henrik Roos** (Sweden):  
The Use of Geographic Information Systems for Property Valuation and Tax Assessment  
(0400)

TS7.3 Mr. **Risto Peltola** (Finland):  
The Interaction of Land Markets and Housing Markets in a Spatial Context: A Case Study  
of Helsinki (0666)

TS7.4 Dr. **Piotr Cichociński** and Dr. **Piotr Parzych** (Poland):  
Application of Geographic Information Systems for Real Estate Valuation Support (0336)

TS7.5 Mr. **Olof Färnkvist** (Sweden):  
Market Data Collection for Mass Valuation of Commercial Real Estate (0589)

TS7.6 Mr. **Olaniyi Saheed Salawudeen**, Mr. **Benjamin A. Oyedare**, Mr. **Ekanem  
Anaefiok Udoh** and Mr. **Adegoke Quadri** (Nigeria):  
Application of GIS in Estate Management (0586)  
This paper has not been presented at the congress.

### **TS 8 – Commercial Management I**

Time: **Monday 14:00-15:30**

Venue: Room 11b

Commission: 10

Chair: Mr. **Philip Shearer**, Chair of Commission 10, United Kingdom

Rapporteur: Mr. **Paul Brooks**, United Kingdom

TS8.1 Mr. **John M. D. Bacon** (United Kingdom):  
The Way Forward? (0698)

TS8.2 Mr. **Geoffrey Schmitt** (United Kingdom):  
Contracting in the Global Market Place (0741)

TS8.3 Mr. **Martin Kennard** (United Kingdom):  
Sustainable Procurement (0843)  
This paper has been presented by Andrew Morley.

TS8.4 Mr. **Howard Klein** (United Kingdom):  
Alternative Dispute Resolution Procedures Used to Resolve Construction Disputes in the UK (0862)

### **TS 9 – Hydrography I**

Time: **Monday 14:00-15:30**

Venue: Room 12a

Commission: 4

Chair: Mr. **Adam Greenland**, Chair of Commission 4, New Zealand

Rapporteur: Ms. **Ruth Adams**, United Kingdom

TS9.1 Dr. **Chen Yong Qi** (Hong Kong SAR), Dr. **Zhou Xinghua**, Mr. **Wu Yongting** and Mr **Tang Qiuhua** (China P.R.):

An Approach to Seafloor Classification with a GA-based Neural Network (0288)

This paper has not been presented at the congress.

TS9.2 Dr. **Wilfried Ellmer** and Dr. **Patrick Goffinet** (Germany):

Tidal Correction Using GPS - Determination of the Chart Datum (0346)

TS9.3 Mr. **Chai Ben-Michael** and Dr. **Gilad Even-Tzur** (Israel):

Monitoring Sea Level Using GPS – The Difference between the Mediterranean and the Red Sea Levels as a Test Case (0381)

TS9.4 Mr. **Andrew Leyzack** (Canada):

Efficiencies in Data Acquisition and Transformation (0621)

TS9.5 Dr. **Erwin Heine** and Dr. **Peter Mayr** (Austria):

Hydrographic Surveying of Small Alpine Rivers (0677)

### **TS 10 – Rural Transformation and Land Administration**

Time: **Monday 14:00-15:30**

Venue: Room 12b

Commission: 7 and 8

Chair: Prof. **Joachim Thomas**, Germany

Rapporteur: Mr. **Rainer Müller-Jökel**, Germany

TS10.1 Dr. **Saban Inam** and Mr. **Hasan Cagla** (Turkey):

A Research on the Contribution of Urban Transformation Projects to the Renewal of Cadastral Activities in Turkey (0370)

TS10.2 Dr. **Mustafa Atasoy** and Dr. **Cemal Biyik** (Turkey):

Spatial and Temporal Variation in Distribution of Pasture and Highland: A Change Detection Analyses Based on Aerial Photographs (0347)

This paper has not been presented at the congress.

TS10.3 Ms. **Maria Contoman** (Romania):

The Importance of Land Systematization for the Achievement of Highly Productive Agricultural Exploitations (0353)

This paper has not been presented at the congress.

TS10.4 Mr. **Francis Chigiinge** (Botswana):

TLIMS as a Vehicle for Long Term Sustainable Development and Land Management in Botswana (0442)

This paper has not been presented at the congress.

TS10.5 Prof. **Ionita Radure**, Prof. **Maricel Palamariu** and Dr. **Mircea Puscas** (Romania):  
Vicinity in Cadastre (0432)  
This paper has not been presented at the congress.

### **TS 11 – Coastal Areas: Administering and Planning Marine Spaces**

Time: **Monday 14:00-15:30**

Venue: Room Königsee

Commission: 4 and 8

Chair: Mr. **Simon Adcock**, Chair Elect of Commission 8, Australia

Rapporteur: Mr. **David Neale**, Trinidad and Tobago

TS11.1 Mr. **Johanes Tamtomo** (Indonesia):

A Method to Assess the Financial Value of Sea Parcels and the Economy of Coastal and Marine Areas within a Marine Cadastre Framework (0257)

This paper has not been presented at the congress.

TS11.2 Dr. **Michael Sutherland** (Canada):

An Update on the Status of Canada's Administration of Its Marine Spaces (0280)

TS11.3 Mr. **Thomas Ihl**, Mr. Oscar **Frausto Martínez**, Mr. **Justo Rojas López**, Dr. **Francisco Bautista Zúñiga** and Dr. **Gerardo Bocco Verdinelli** (Mexico):

A Coastal Classification: A First Step for a Better Coastal Management Policies in Yucatan? (0354)

This paper has not been presented at the congress.

TS11.4 Mr. **Isaac Boateng** (United Kingdom):

Policy Process in Coastal and Marine Resource Management in Ghana (0402)

### **WS 2 – Workshop 2 – International Standards Seminar I**

Time: **Monday 14:00-15.30**

Venue: Room 21a

Commission: Standards Network

Chair: Prof. **Hans Knoop**, Germany

WS2.1 Prof. Dr. **Hans Knoop** (Germany):

German Standardisation Work in the International Context (0903)

WS2.2 Prof. Dr. **Hans-Peter Klein** and Prof. Dr. **Otto Heunecke** (Germany):

Engineering Surveying Standards (0904)

WS2.3 Dr. **Gerhard Joos** (Germany):

Data Quality Standards (0906)

WS2.4 Prof. Dr. **Wolfgang Kresse** (Germany):

Standardisation of Sensor and Data Models (0907)

### **TS 12 – Cadastre 2014 and Cadastral Modeling**

Time: **Monday 16:00-17:30**

Venue: Room 05

Commission: 7

Chair: Dr. **Panos Lolonis**, Greece

Rapporteur: Dr. **Jaap Zevenbergen**, The Netherlands

TS12.1 Mr. **Jürg Kaufmann**, Mr. **Urs Flückiger** and Mr. **Peter Bänninger** (Switzerland):

Cadastre 2014: The Practical Realization of a Comprehensive Documentation of the Complex Legal Situation of Land Using a Simple Data Model and Sophisticated Information Technology (0398)

TS12.2 Mr. **Christiaan Lemmen** and Prof. **Peter van Oosterom** (The Netherlands):  
Version 1 of the FIG Core Cadastral Domain Model (0605)

TS12.3 Dr. **Daniel Steudler** (Switzerland):  
Cadastre 2014 – Still a Vision? (0435)

TS12.4 Dr. **Winfried Hawerk** (Germany):  
Advances in Modern Land Administration – Cadastre 2014 in the Year 2006 (0330)

### **TS 13 – Forum for Providers and Users of Real Time Correction Services from Continuously Operating Reference Stations (CORS) – Session II**

Time: **Monday 16:00-17:30**

Venue: Room 02

Commission: 5

Chair: Mr. **Graeme Blick**, New Zealand

Rapporteur: Mr. **Rob Sarib**, Australia

TS13.1 Mr. **Joel van Cranenbroeck** (Switzerland) and Dr. **Chris Rizos** (Australia):  
Making GNSS-RTK Services Pay (0298)

TS13.2 Dr. **Stefan Willgalis** (Germany):  
Impact of Satellite Positioning Services on State Survey Control Networks (0635)

Panel Discussion with Representatives of FIG, IAG and IGS.

### **TS 14 – 3D and 4D Cadastres**

Time: **Monday 16:00-17:30**

Venue: Room 03

Commission: 7 and 3

Chair: Dr. **Hendrik Ploeger**, The Netherlands

Rapporteur: Prof. **Yerach Doytsher**, Israel

TS14.1 Mr. **Göran Eriksson** and Ms. **Cecilia Adolfsson** (Sweden):  
Experiences of the 3D Cadastre Legislation (0345)

TS14.2 Ms. **Zhang Ning** (China, P. R.) and Dr. **Arbind Tuladhar** (The Netherlands):  
Modelling Spatio-Temporal Aspects for Cadastral System in China (0462)  
This paper has not been presented at the congress.

TS14.3 Dr. **Efi Dimopoulou**, Mr. **Ilias Gavanis** and Mr. **Panagiotis Zentelis** (Greece):  
3D Registrations in the Hellenic Cadastre (0571)

TS14.4 Mr. **Moshe Benhamu** (Israel):  
A GIS-Related MultiLayer 3D Cadastre in Israel (0581)

TS14.5 Mr. **Tor Valstad** (Norway):  
Developments of the 3D Cadastre in Norway (0754)

TS14.6 Prof. **Peter van Oosterom** and Dr. **Jantien Stoter** (The Netherlands), Mr. **Rod Thompson** (Australia), Mr. **Christiaan Lemmen** and Mr. **Hendrik Ploeger** (The Netherlands):  
Aspects of a 4D Cadastre: A First Exploration (0576)

## **TS 15 – Education**

Time: **Monday 16:00-17:30**

Venue: Room 04a

Commission: 2

Chair: Prof. **Bela Markus**, Chair Elect of Commission 2, Hungary

Rapporteur: Dr. **William Patrick Prendergast**, Ireland

TS15.1 Prof. **Paul van der Molen** (The Netherlands), Dr. **Arbind Tuladhar** (Nepal), Drs. **Johan de Meijere** (The Netherlands), Dr. **Javier Morales** (Colombia) and Mr. **Christiaan Lemmen, Tom Loran** and **Pauline van Elsland** (The Netherlands):  
New: A School for Land Administration Studies (0834)

TS15.2 Ms. **Annick Jatou** and Dr. **Yvan Bédard** (Canada):  
Laval University – Reinventing Surveying and Geomatics Education in Canada since 1907 (0652)

TS15.3 Mr. **Chris Lunnay** (Australia):  
Surveying and Land Administration – Sustainable Education for Developing Countries (0362)

TS15.4 Prof. **Janis Strauhmanis** (Latvia):  
Modernisation of the Study Programme "Geodesy and Cartography" at the Riga Technical University in Accordance with Contemporary Requirements (0243)

## **TS 16 - Disaster Preparedness and Management**

Time: **Monday 16:00-17:30**

Venue: Room 04b

Commission: 8 and 3

Chair: Prof. **Theo Kötter**, Germany

Rapporteur: Dr. **Reinfried Mansberger**, Austria

TS16.1 Mr. **Antonio Hernández-Navarro** (Mexico):  
Cartography of Quick Answer after Natural Disasters – The Mexican Experience (0161)

TS16.2 Prof. **Fatai Egberongbe**, Dr. **Peter Nwilo** and Mr. **Olusegun Bajedo** (Nigeria):  
Oil Spill Disaster Monitoring Along Nigerian Coastline (0223)  
This paper has not been presented at the congress.

TS16.3 Mr. **Himmet Karaman**, Mr. **Turan Erden** and Dr. **Muhammed Sahin** (Turkey):  
Disaster and Emergency Management Activities in Turkey (0511)

TS16.4 Mr. **Carlos Rodriguez** and Mr. **Carlos Vega** (Puerto Rico):  
Disaster and Risk Management for Puerto Rico (0769)

TS16.5 Mr. **Woo Chi Pong** (Hong Kong SAR, China):  
Application of GIS Technology on Slope Registration for the Prevention of Landslide (0367)

TS16.6 Ms. **Anca-Magdalena Bordeianu** (Romania):  
Psychological Aspects of Disasters and Natural Calamities – Romanian Disasters in 2005 and 2006 (0857)

## **TS 17 – Land Value Maps and Taxation**

Time: Monday 16:00-17:30

Venue: Room 11a

Commission: 9 and 8

Chair: Prof. **Kari I. Leväinen**, Finland

Rapporteur: Mr. **Simon Adcock**, Chair Elect of Commission 8, Australia

TS17.1 Prof. **Sarah Sayce**, Dr. **Munir Morad**, Mr. **Tony Vickers** and Prof. **Owen Connellan** (United Kingdom):

Value Maps: The Next Utility? (0396)

TS17.2 Mr. **Jaroslav Gall** (Czech Republic):

Future of Land Value Maps in European Context (0767)

TS17.3 Dr. **Recep Nisançi**, Dr. **Bayram Uzun** and Ms. **Husniye Abru Colak** (Turkey):

Optimization of Land Valuation Factors by GIS&SPSS (0557)

This paper has not been presented at the congress.

TS17.4 Mr. **Arvydas Bagdonavivius** and Mr. **Steponas Deveikis** (Lithuania):

Implementation of Building Taxation and Mass Valuation in Lithuania – Outcomes and Lessons Learnt (0659)

TS17.5 Dr. **Jarosław Bydłoz**, Dr. **Piotr Cichociński** and Dr. **Piotr Parzych** (Poland):

The Proposal of Cadastral Value Determination Based on Artificial Intelligence (0337)

TS17.6 Dr. **Weidong Qu** and **Jianping Ye** (China P. R.):

Applying Fuzzy Cluster Analysis on Property Taxation (0234)

## **TS 18 – Commercial Management II**

Time: **Monday 16:00-17:30**

Venue: Room 11b

Commission: 10

Chair: Mr. **Howard M. Klein**, United Kingdom

Rapporteur: Mr. **Geoffrey Schmitt**, United Kingdom

TS18.1 Mr. **Philip Shearer** (United Kingdom):

Effective Risk Management on Construction Projects (0887)

TS18.2 Mr. **Derek Smith** (United Kingdom):

Approach to Procurement Strategy (0898)

TS18.3 Ms. **Leonie Newnham** (Australia) and Mr. **Andrew Morley** (United Kingdom):

Changing the World We See Through Land and Building Project Management (0869)

TS18.4 Mr. **Andrew Morley** (United Kingdom) and Mr. **Duncan Wainscott** (Zimbabwe):

Current Challenges Facing PPP / PFI Procurement (0874)

TS18.5 Mr. **Paul Brooks** (United Kingdom):

Sustainability and What It Means for Property Professionals (0876)

## **TS 19 – Hydrography II**

Time: **Monday 16:00-17:30**

Venue: Room 12a

Commission: 4 and 5

Chair: Mr. **Steve Shipman**, United Kingdom

Rapporteur: Mr. **Adam Greenland**, New Zealand

TS19.1 Mr. **Yousuf Al Marsooqi**, Mrs. **Amira Alzarouni** and Mr. **Satheesh Gopi** (United Arab Emirates):

Progress towards Establishment of a Unique Vertical Datum for Hydrography and Land Surveying in Emirate of Dubai – Case Study (0282)

This paper has not been presented at the congress.

TS19.2 Dr. **Volker Böder** (Germany):

Optimization of Hydrographic Positioning and Attitude Determination (0469)

TS19.3 Dr. **Faik Ahmed Sesli**, Dr. **Fevzi Karsli** and Dr. **Nihat Akyol** (Turkey):

Monitoring Coastal Land Use Changes Using Digital Photogrammetry: Case Study of Black Sea Coast of Trabzon, Turkey (0548)

This paper has not been presented at the congress.

TS19.4 Ms. **Ruth Adams** (United Kingdom):

The Development of a Vertical Reference Surface and Model for Hydrography – A Guide (0719)

TS19.5 Mr. **Edwin Danson** (United Kingdom):

Understanding LiDAR Bathymetry for Shallow Waters and Coastal Zone Mapping (0730)

## **TS 20 – Land Administration Systems**

Time: **Monday 16:00-17:30**

Venue: Room 12b

Commission: 7 and 3

Chair: Mr. **Leiv Bjarte Mjoes**, Norway

Rapporteur: Mr. **Christian Clausen**, Denmark

TS20.1 Mr. **Dimo Todorovski** (The Former Yugoslav Republic of Macedonia):

A Framework for Developing ICT Strategies in Cadastral and Land Registration Organizations (0395)

TS20.2 Mr. **Ari Tella** (Finland):

The New Land Information System in Finland (0734)

TS20.3 Dr. **Gulgun Ozkan**, Dr. **Savas Durduran** and Mr. **Seyfettin Kaya** (Turkey):

Preparation of Judicial Documents about Cadastral Studies in Turkey and an Automation Software (0412)

This paper has not been presented at the congress.

TS20.4 Mr. **Lennart Sundström** and Mr. **Bengt-Olof Käck** (Sweden):

Digital Archives and Document Management in the Cadastral Procedure in Sweden (0448)

## **TS 21 – Coastal Processes, Tools and Planning**

Time: **Monday 16:00-17:30**

Venue: Room Königsee

Commission: 4 and 8

Chair: Mr. **David Neale**, Trinidad and Tobago

Rapporteur: Mr. **Isaac Boateng**, United Kingdom

TS21.1 Mr. **Giovanni Cavaliere** (Italy):

Hydrographical Surveys – Technical Observations and Strategic Role for Sustainable Development (0451)

TS21.2 Mrs. **Angela Etuonovbe** (Nigeria):

Administering Marine Spaces: The Problem of Coastal Erosion in Nigeria, a Case Study of Forcados South Point, Delta State (0607)

TS21.3 Mr. **Manickam M. Raja**, Mr. **Chandra Sekar**, Mr. **Victor G. V. Rajamanickam** and Mr. **Shaliesh Nayak** (India):

Coastal Placer Mineral Study Using GIS Approach: A Case Study at Kallar – Vembar Coast (0752)

TS21.4 Ms. **Athanassia Georganta**, Ms. **Stella Giannopoulou**, Mr. **Tassos Labropoulos** and Dr. **Panagiotis Zentelis** (Greece):

Assessing the Development of Hellenic Small Islands (0295)

### **WS 3 – Workshop 3 - International Standards Seminar II**

Time: **Monday 16:00-17.30**

Venue: Room 21a

Commission: Standards Network

Chair: Prof. Dr. **Hans Knoop**, Germany

WS3.1 Mr. **Olaf Ostensen**, TC 211 (Norway):

The Role of ISO Standards in European Legislation (0908)

WS3.2 Mr. **Markus Seifert** (Germany):

The AAA Model as Contribution to the Standardisation of the Geoinformation Systems in Germany (0967)

WS3.3 Mr. **Günther Pichler** (USA):

Interoperability, Standards, and Metadata (0966)

WS3.4 Dr. **Udo Einspanier** (Germany):

Experiences with Federated Catalogue Services - Specification vs. Implementation (0912)

WS3.5 Prof. Dr. **Hans Knoop** (Germany):

Closing Remarks (0914)

### **Reception of the Bavarian State**

Time: **Monday 19:30-21:30**

Venue: Kaisersaal, Residenz, Munich

- By invitation only
- Dress code: business suit

## **Tuesday 10 October 2006**

### **Opening Ceremony**

Time: **Tuesday 10:00-12:30**

Venue: Room 01

Mr. **Hagen Graeff**, President of DVW

Welcome and Opening

Dr. **Edmund Stoiber**, Bavarian Minister President

Opening Speech at the 23rd International FIG Congress on 10 October 2006 in Munich (1190)

Eröffnungsansprache anlässlich des 23. Internationalen FIG Kongresses am 10. Oktober 2006 in München (1142)

Prof. Dr. **Holger Magel**, President of FIG  
FIG Presidential Address – Shaping the Change 2002 to 2006 – The German Period of FIG (English (1115) and German (1116))

### **Marks of Honour**

Distribution of the DVW Prize  
Distribution of the FIG Congress Prize

Prof. Dr. **Klaus Töpfer**, Long-time General Director of the United Nations Environment Programme  
For a More Just World – the Surveyors' Role for Achieving Sustainable Development (1190)

### **Bassiona Amorosa**

Musical entertainment

### **Plenary Session 2 – Disaster und Risk Management**

Time: **Tuesday 14:00-15:30**

Venue: Room 14b

Commission: FIG and Intergeo

Chair: Mr. **Peter Creuzer**, President of UN ECE WPLA

Rapporteur: Dr. **Andreas Drees**, Vice President of FIG, Germany

PLEN2.1 Dr. **Lutz Cleemann**, Allianz Zentrum für Technik GmbH, Ismaning:  
The Topography of the Risk Landscape (0921)

PLEN2.2 Mr. **David B. Zilkoski**, National Ocean Service, National Oceanic & Atmospheric Administration (NOAA), US Department of Commerce:  
Earth Observations: Bringing Together Critical Information for Disaster Preparedness and Response (0920)

PLEN2.3 Prof. Dr. **Jochen Zschau**, GFZ, Sektion 2.1 Naturkatastrophen (Center for Disaster Management and Risk Reduction Technology (CEDIM):  
The German-Indonesian Tsunami Early Warning System for the Indian Ocean (0927)

### **WS 4 – Workshop 4 – Hydro Workshop I – Economic Benefits of Hydrography**

Time: **Tuesday 14:00-15:30**

Venue: Room Königsee

Commission: 4

Chair: Mr. **Andrew Leyzack**, Chair Elect of Commission 4, Canada

Rapporteur: Dr. **Michael Sutherland**, Canada

### **Commission Meetings – Commission 9**

Time: **Tuesday 14:00-15:30**

Venue: Meeting Room 1

Commission: 9

Meetings of

- WG 9.4 - Organizations of Valuers and Appraisers in Emerging Eastern European Markets
- Round Table on Valuation Reports: contents, information, outlook, comparison

## **TS 22 – Governance and Land Administration**

Time: **Tuesday 16:00-17:30**

Venue: Room 05

Commission: 7

Chair: Mr. **Trung Tran Nhu**, Vietnam

Rapporteur: Mr. **Christiaan Lemmen**, The Netherlands

TS22.1 Prof. **Ian Williamson** and Ms. **Jude Wallace** (Australia) and Prof. **Stig Enemark** (Denmark):

Incorporating Sustainable Development Objectives into Land Administration (0260)

TS22.2 Mr. **Salim Abdulla** (Tanzania):

Institutional Developments in Land Administration in Zanzibar (0289)

TS22.3 Drs. **Johan C. de Meijere** (The Netherlands) and Dr. **Mabel Alvarez de Lopez** (Argentina):

Governance and Space, the Role of Civil Registers and Registers of Public and Private Land as Conditions for Development (0404)

TS22.4 Mr. **Lee Youngho** (Republic of Korea):

The Role of Cadastral System for the Good Land Administration in Korea (0497)

TS22.5 Mr. **Do Duc Doi** and Mr. **Trung Chinh Dao** (Viet Nam) and Mr. **Ian Hyde** (Australia):

Vietnam's Legal and Policy Reform Agenda: Achieving the Right Balance (0499)

## **TS 23 – NSDI**

Time: **Tuesday 16:00-17:30**

Venue: Room 02

Commission: 3

Chair: Dr. **Chryssy Potsiou**, Chair Elect of Commission 3, Greece

Rapporteur: Mr. **Jens Holländer**, Denmark

TS23.1 Prof. **Zeljko Bacic** and Ms. **Ivana Sainovic** (Croatia):

Developing Infrastructural Frame for Nationwide Management of Spatial Information in Croatia (0438)

TS23.2 Mr. **Anthony Adeoye** (Nigeria):

Approaches to Public Private Partnership in the Development of National Geospatial Data Infrastructure in Nigeria (0358)

TS23.3 Mr. **Arif Cagdas Aydinoglu** and Dr. **Tahsin Yomaralioglu** (Turkey):

Information Infrastructure Approach: Spatial Data Infrastructure Implementation Issues in Turkey (0540)

TS23.4 Mr. **Zvonko Biljecki**, Mr. **Mladen Rapaic** and Mr. **Tomislav Tonkovic** (Croatia):

Spatial Information Management of Croatian Ministry of Defence (0816)

TS23.5 Prof. **Ian Williamson** and Ms. **Jude Wallace** (Australia):

Spatially Enabling Governments: a New Direction for Land Administration Systems (0261)

## **TS 24 – Measurement**

Time: **Tuesday 16:00-17:30**

Venue: Room 03

Commission: 5 and 6

Chair: Prof. **Alojz Kopacik**, Chair Elect of Commission 6, Slovak Republic

Rapporteur: Dr. **Volker Schwieger**, Germany

TS24.1 Dr. **Karl Foppe**, Dr. **Wolf Barth** and Mr. **Sebastian Preis** (Germany):  
Autonomous Permanent Automatic Monitoring System with Robot-Tacheometers (0415)

TS24.2 Dr. **Vassilis Gikas** and Mr. **Stamatis Daskalakis** (Greece):  
Full Scale Validation of Tracking Total Stations Using a Long Stroke Electrodynamic Shaker (0477)

TS24.3 Dr. **Fadi A. Bayoud** (Switzerland):  
Leica's Pinpoint EDM Technology with System Analyser Signal Processing and Novel Optomechanical Features (0828)

TS24.4 Mr. **Tomáš Křemen**, Mr. **Bronislav Koska** and Dr. **Jiří Pospíšil** (Czech Republic):  
Verification of Laser Scanning Systems Quality (0452)

TS24.5 Mr. **David Martin** and Mr. **Gilles Gatta** (France):  
Calibration of Total Stations Instruments at the ESRF (0506)

## **TS 25 – Education and Management**

Time: **Tuesday 16:00-17:30**

Venue: Room 04a

Commission: 2

Chair: Mr. **Rob Mahoney**, United Kingdom

Rapporteur: Prof. **Bela Markus**, Chair Elect of Commission 2, Hungary

TS25.1 Dr. **Reinfried Mansberger**, Prof. **Harald Schuh** and Mr. **Gert Steinkellner** (Austria):  
Impacts of the Bologna Process and of New Public Management on the Academic Surveying Education in Austria (0735)

TS25.2 Mr. **François Mazuyer** (France):  
Continuous training for Chartered Surveyors (0870)

TS25.3 Mr. **Cüneyt Aydın**, Mr. **R. Cüneyt Erenoglu**, Mr. **Atinc Pirti**, Mr. **Bülent Bayram**, Mr. **M. Ali Yücel** and Mr. **Zerrin Demirel** (Turkey):  
What is Our Strategy to Perform a Sustainable Development in Education and Research Activities of Our Department? (0517)  
This paper has not been presented at the congress.

TS25.4 Dr. **Rahmi Nurhan Çelik** (Turkey), Dr. **Vassilis Gikas** (Greece) and **Dionysios Balodimos** (Greece):  
Geomatics Engineering Education at NTUA, Greece and ITU, Turkey: A Compare and Contrast (0630)

TS25.5 Mr. **Steve Y. W. Lam** (Hong Kong SAR, China):  
Business Management for Geomatics Education (0355)

## **TS 26 – Reference Frame**

Time: **Tuesday 16:00-17:30**

Venue: Room 04b

Commission: 5

Chair: Mr. **Mikael Lilje**, Sweden

Rapporteur: Mr. **Rob Sarib**, Australia

TS26.1 Mr. **Marinko Bosiljevac** and Mr. **Marijan Marjanovic** (Croatia):  
New Official Geodetic Datum of Croatia and CROPOS System as Its Implementation  
(0447)

TS26.2 Mrs. **Lola Bahl** (Denmark):  
Implementation of New Reference Systems in Denmark (0250)

TS26.3 Ms. **Christina Kempe**, Mr. **Anders Alfredsson**, Mr. **Lars Engberg** and Mr.  
**Mikael Lilje** (Sweden):  
Correction Models to Rectify Distorted Co-Ordinate Systems (0672)

TS26.4 Mr. **Guido Gonzalez Franco** and Mr. **Raul Gomez-Moreno** (Mexico):  
Change from ITRF92 Epoch 1988,0 to ITRF2000 Epoch 2004,0 in Mexico (0847)

## **TS 27 – Upgrading Informal Settlements: Access to Human Rights and Finance**

Time: **Tuesday 16:00-17:30**

Venue: Room 11a

Commission: 8, 9 and 10

Chair: Mr. **Bengt Kjellson**, Sweden

Rapporteur: Dr. **Diane Dumashie**, Chair of Commission 8, United Kingdom

TS27.1 Dr. **Hendrik Ploeger** and Dr. **Danielle Groetelaers** (The Netherlands):  
Informal Settlements and Fundamental Rights (0436)

TS27.2 Ms. **Ann Jennervik** (Sweden):  
Improving Slum Conditions through Innovative Financing (0726)

TS27.3 Ms. **Nsama Nsemiwe** (Zambia):  
Negotiating the Interface: Struggles Involved in the Upgrading of Informal Settlements -  
a Case Study of Nkandabwe in Kitwe, Zambia (0737)

TS27.4 Mr. **Wafula Nabutola** (Kenya):  
Financing Urban Infrastructure Development and Maintenance, with Particular Reference  
to Nairobi (0863)

TS27.5 Mr. **Wilfred K. Anim-Odame**, Prof. **Tony Key** and Dr. **Simon Stevenson**  
(United Kingdom):  
Measures of Land and Real Estate Values from Land Registration and Valuation Systems  
in Emerging Economies: The Case of Ghana (0692)

## **TS 28 – Construction Economics I**

Time: **Tuesday 16:00-17:30**

Venue: Room 11b

Commission: 10

Chair: Mr. **Andrew W. Morley**, Chair Elect of Commission 10, United Kingdom

Rapporteur: Mr. **Derek Smith**, United Kingdom

TS28.1 Mr. **Isaac Mabaya** (Zimbabwe):  
Lean Construction and Surveying (0247)  
This paper has not been presented at the congress.

TS28.2 Mr. **Joe Martin**, Ms. **Theresa Keoughan Burrows** and Mr. **Ian Pegg** (United Kingdom):  
Predicting Construction Duration of Building Projects (0831)

TS28.3 Mr. **Joe Martin** (United Kingdom):  
International Comparison of Elemental Classifications (0832)

TS28.4 Ms. **Sara Wilkinson** and Prof. **George Zillante** (Australia):  
The Future Direction of the Australian Building Surveying Profession (0888)

TS28.5 Mr. **Johannes Jan van der Heijden**, Mr. **Henk Visscher** and Mr. **Frits Meijer** (The Netherlands):  
Development of Dutch Building Control (1982-2003): Towards Certified Building Control (0523)

TS28.6 Dr. **Olukayode Oyediran** (Nigeria):  
Modeling Inflation Dynamics in the Construction Sector of a Developing Economy (0613)

### **TS 29 – Landslide Control and Monitoring Surveys**

Time: **Tuesday 16:00-17:30**

Venue: Room 12a

Commission: 6

Chair: Mr. **Henrik Vad Jensen**, Denmark

Rapporteur: Prof. **Anna Szostak-Chrzanowski**, Canada

TS29.1 Dr. **Hasanuddin Z. Abidin**, Mr. **Andreas Heri**, Mr. **Muhammad Gamal** and Mr. **Dusy Darmawan** (Indonesia):  
Land Subsidence Characteristics of Bandung Basin (Indonesia) between 2000 and 2005 as Estimated from GPS Surveys (0364)

TS29.2 Mr. **Adeniyi Iyiade** (United Kingdom):  
GPS Time Series Land Slide Monitoring Using a Weighted Extended Kalman Filtering with a DIA Procedure (0682)  
This paper has not been presented at the congress.

TS29.3 Dr. **Sergey Belov**, Prof. **Vladislav Morozov**, Dr. **Ilya Kolesnikov**, Dr. **Victor Tatarinov** and Ms. **Tatiana Tatarinova** (Russian Federation):  
Prediction of the Tectonic Processes at Selected Areas for Dispose Radioactive Waste (0265)  
This paper has not been presented at the congress.

TS29.4 Dr. **Andreas Eichhorn** (Austria):  
Geomechanical Modelling as Central Component of a Landslide Alert System Prototype: Case Study "Opencast Mine" (0277)

TS29.5 Dr. **Michaela Haberler-Weber** (Austria), Mr. **Michael Huber** (Germany), Mr. **Christoph Kandler** (Austria) and Dr. **Thomas Wunderlich** (Germany):  
Fuzzy Based Analysis and Assessment of Monitoring Data for the Eiblschrofen Rockfall Area (0413)

TS29.6 Dr. **Linlin Ge**, Mr. **Hsing-Chung Chang** and Prof. **Chris Rizos** (Australia):  
Monitoring Land Surface Subsidence Using Radar Interferometry: The Challenges (0495)

### **TS 30 – Experiences in Land Administration Projects**

Time: **Tuesday 16:00-17:30**

Venue: Room 12b

Commission: 7

Chair: Mr. **Keith Bell**, USA

Rapporteur: Dr. **Paul van der Molen**, The Netherlands

TS30.1 Ms. **Ann K. Myles** (Sweden):

If the Timing is Right... (0235)

TS30.2 Mr. **Tommy Österberg** (Sweden):

Land Administration for Economic Development – Experiences from Institutional Development Projects (0728)

TS30.3 Dr. **Alexandrina Zaharia** (Romania):

The Agreement of Romanian Legislation with EU Requirements Concerning Cadastre Juridical Function - Real Estate Registration in the Land Register (0467)

TS30.4 Dr. **Panos Lolonis** (Greece):

The Hellenic Cadastre: Use of Modern Technologies to Develop an IT and Data Infrastructure to Facilitate Large Scale Cadastral Survey Procedures (0636)

### **WS 5 – Workshop 5 – Hydro Workshop II – Pathways to Professionalism**

Time: **Tuesday 16:00-17:30**

Venue: Room Königsee

Commission: 4

Chair: Mr. **Adam Greenland**, Chair of Commission 4, New Zealand

Rapporteur: Mr. **David Neale**, Trinidad and Tobago

### **INTERGEO-Treff - Surveyors Reception and FIG Foundation Event**

Time: Tuesday 19:00 –

Venue: Löwenbräukeller, Munich

Dress code: casual

## **Wednesday 11 October 2006**

### **TS 31 – Portals and Land Administration**

Time: **Wednesday 9:00-10:30**

Venue: Room 05

Commission: 7 and 3

Chair: Dr. **Daniel Steudler**, Switzerland

Rapporteur: Mr. **Hartmut Müller**, Germany

TS31.1 Mr. **Joseph Forrai** and Mr. **Michael Klebanov** (Israel):

Experience of Cadastral Information Supply via Internet (0276)

TS31.2 Mr. **Kevin Daugherty** (USA):

Advancing Technology for Land Administration – Service-Oriented Architecture for Enterprise Systems (0393)

TS31.3 Prof. **Wojciech Wilkowski** and Ms. **Monika Jaroszewska** (Poland):

Real Estate Cadastre and Legal Registers as the Basic Sets of Information about Real Estates in Poland (0394)

TS31.4 Mr. **Damir Pahić** and Ms **Irena Magdić** (Croatia):

e-Katastar – The Browser of Cadastral Data (0434)

TS31.5 Mr. **Rik Wouters** (The Netherlands):  
Kadaster-on-line: An Award Winning Internet-portal (0835)

TS31.6 Mr. **Paul Brent**, Mr. **Greg McDermott** and Mr. **Fred Finch** (Ireland):  
State of the Art Modern Mapping Systems for Ireland (0380)

### **TS 32 – SDI - Developments**

Time: **Wednesday 9:00-10:30**

Venue: Room 02

Commission: 3

Chair: Dr. **Martin Scheu**, Germany

Rapporteur: Mr. **Gyula Iván**, Hungary

TS32.1 Mr. **Keith Murray** and Dr. **Andrew Trigg** (United Kingdom):  
Local to European SDI – “Mash up” or Professional, Industry Strength Infrastructure?  
(0484)

TS32.2 Mr. **Jens Hollaender** and Mr. **Thorben Brigsted Hansen** (Denmark):  
The Map Supply – An Element in the National Spatial Data Infrastructure (0829)

TS32.3 Ms. **Hanna Lauhkonen** (Finland):  
What Challenges You Face When Taking in Use a Wide LIS System? (0750)

TS32.4 Dr. **Martin Scheu** and Dr. **Andreas Rose** (Germany):  
Monitoring of Spatial Data Infrastructures (SDI) (0673)

TS32.5 Ms. **Teija Tarvainen** and Ms. **Tarja Myllymäki** (Finland):  
Joint Use of Geographic Information – Cadastral Data, General and Topographic Map  
Data (0747)

### **TS 33 – Cadastral Surveying and Land Administration**

Time: **Wednesday 9:00-10:30**

Venue: Room 03

Commission: 7 and 5

Chair: Prof. **Zeljko Bacic**, Croatia

Rapporteur: Mr. **Jose Antonio Pinzon Bermudez**, Colombia

TS33.1 Mr. **Jad Jarroush** and Dr. **Gilad Even-Tzur** (Israel):  
Monitoring Grid Coordinates Changes Model as a Base for Dynamic Digital Cadastre  
System (0505)

TS33.2 MSc. **Adriane B. Thum**, Dr. **Maurício R. Veronez**, Dr. **Genival C. de Souza**  
and Mr. **Alessandro O. Reinhardt** (Brazil):  
New Law of the Agricultural Property Georeferencing in Brazil: A Profile of the  
Professionals in Rio Grande do sul State (0263)  
This paper has not been presented at the congress.

TS33.3 Dr. **Craig Roberts** (Australia):  
GNSS and the Convergence of Geodesy and the Cadastre in Australia (0273)

TS33.4 Mr. **Jung Rea Jung** (Republic of Korea):  
A Study on Method of DGPS Applications for the Cadastral Surveying (0410)  
This paper has not been presented at the congress.

## **TS 34 – Curricula I**

Time: **Wednesday 9:00-10:30**

Venue: Room 04a

Commission: 2

Chair: Dr. **Reinfried Mansberger**, Austria

Rapporteur: Ms. **Leonie Newnham**, Australia

TS34.1 Ms. **Hanne Junnilainen**, Prof. **Henrik Haggrén**, Ms. **Katri Koistinen** and Mr. **Petri Rönnholm** (Finland):

Initiative for International Master Program in Photogrammetry and Remote Sensing at Helsinki University of Technology (0732)

TS34.2 Prof. **Kazimierz Czarnecki** (Poland) (†):

Master Courses in Surveying in the Light of the Bologna Process (0522)

(†) Prof. Czarnecki passed away 23 August 2006, this paper is published to respect his memory.

TS34.3 Dr. **William Patrick Prendergast** (Ireland):

The Development of the Educational System for Geodetic Surveyors in Ireland (0807)

TS34.4 Prof. **Miljenko Lapaine**, Prof. **Zdravko Kapovic** and Prof. **Stanislav Franges** (Croatia):

New University Curricula of Geodesy and Geoinformatics in Croatia (0599)

TS34.5 Dr. **Esben Munk Sørensen** and Prof. **Stig Enemark** (Denmark):

Problem-based Internship in Surveying and Planning Curricula (0790)

## **TS 35 – Informal Settlements: Policy, Land Use and Tenure**

Time: **Wednesday 9:00-10:30**

Venue: Room 04b

Commission: 8 and 7

Chair: Dr. **Diane Dumashie**, Chair of Commission 8, United Kingdom

Rapporteur: Mr. **Paul van Asperen**, The Netherlands

TS35.1 Mr. **Mohammed Haji Ali** and Mr. **Muhammad Salim Sulaiman** (Tanzania):

The Causes and Consequences of the Informal Settlements in Zanzibar (0320)

TS35.2 Dr. **Samson Adeyinka**, Mr. **Albert Abegunde**, Mr. **Peter Olawuni**, Dr. **Emmanuel Omisore** (Nigeria):

An Evaluation of Informal Sector Activities and Urban Land Use Management in South Western Nigeria (0641)

This paper has not been presented at the congress.

TS35.3 Mr. **Paul van Asperen** and Dr. **Jaap Zevenbergen** (The Netherlands):

Towards Effective Pro-poor Tools for Land Administration in Sub-Saharan Africa (0482)

TS35.4 Prof. **Geoffrey I. Nwaka** (Nigeria):

Land Policy and the Informal City in Nigeria (0042)

This paper has not been presented at the congress.

TS35.5 Ms. **Mweembe Muleya Mudenda** (Zambia):

An Integrated Approach to Rural Planning and Development in Zambia (0858)

### **TS 36 – Spatial Planning Practices: Urban Renewal Tools and PPP**

Time: **Wednesday 9:00-10:30**

Venue: Room 11a

Commission: 8 and 10

Chair: Mr. **Simon Adcock**, Chair Elect of Commission 8, Australia

Rapporteur: Mr. **Andrew Morley**, Chair Elect of Commission 10, United Kingdom

TS36.1 Mr. **Haji Adam Haji**, Mr. **Rashid Mohammed Azzan** and Mr. **Said Salmin Ufuzo** (Tanzania):

The Evolution of Spatial Planning in Zanzibar and Its Influence (0715)

TS36.2 Mr. **Frank Friesecke** (Germany):

The Increased Significance of Public Private Partnerships (PPP) for Urban Development in Germany (0281)

TS36.3 Dr. **August E. Røsnes** (Norway):

On Translations of Planning Terminology – Challenges in Describing National Planning Systems in a Common Transnational Language (0388)

TS36.4 Dr. **Michael Tophoej Soerensen** and Mr. **Christian Aunsborg** (Denmark):

Public-private Partnerships in Urban Regeneration Areas in Denmark (0580)

TS36.5 Mr. **Pertti Tamminen** (Finland):

Public Private Partnership in Developing a New Urban Quarter (0704)

### **TS 37 – e-Governance – Case Studies**

Time: **Wednesday 9:00-10:30**

Venue: Room 11b

Commission: 3

Chair: Ms. **Kari Strande**, Norway

Rapporteur: Ms. **Bente Neerup**, Denmark

TS37.1 Mr. **Ivan Landek**, Mr. **Igor Vilus** and Mr. **Zoran Vujic** (Croatia):

Establishment of the National Spatial Data Geoportal in Croatia (0445)

TS37.2 Mr. **Vlado Antonovic** and Mr. **Ivan Novak** (Croatia):

GISOSS – One-Stop-Shop GIS (0569)

TS37.3 Mr. **Jørgen Grum** (Denmark):

FOTdanmark – Changing the Scope from Map Datasets to a National Geographical Administrative Dataset (0826)

TS37.4 Ms. **Bente Neerup** (Denmark):

FOTdanmark – A Danish Co-operation Project Involving National and Municipal Government (0827)

TS37.5 Mr. **Paul Harcombe** (Australia):

Australian Communities Online-Using Geographic Names as Community Domain Names (0830)

### **TS 38 – Engineering Surveys for Construction Works I**

Time: **Wednesday 9:00-10:30**

Venue: Room 12a

Commission: 6

Chair: Mr. **Svend Kold Johansen**, Chair of Commission 6, Denmark

Rapporteur: Dr. **Ivo Milev**, Germany

TS38.1 Mr. **Claude Laflamme**, Ms. **Tara Kingston** and Mr. **Rob McCuaig** (Canada):  
Automated Mobile Mapping for Asset Managers (0329)

TS38.2 Dr. **Theresa Neuhierl**, Dr. **Klaus Schnädelbach** and Prof. **Thomas Wunderlich** (Germany), Prof. **Hilmar Ingensand** and Mr. **Adrian Ryf** (Switzerland):  
How to Transfer Geodetic Network Orientation through Deep Vertical Shafts – An Inertial Approach (0446)

TS38.3 Dr. **Vassilios Pagounis**, Dr. **Maria Tsakiri**, Mr. **Spiridon Palaskas**, Ms. **Barbara Biza** and Ms. **Elizabeth Zaloumi** (Greece):  
3D Laser Scanning for Road Safety and Traffic Accident Reconstruction (0475)

TS38.4 Dr. **Gethin Roberts**, Dr. **Xiaolin Meng**, Mr. **Ahmad Taha** and Mr. **Jean-Philippe Montillet** (United Kingdom):  
The Location and Positioning of Buried Pipes and Cables in Built Up Areas (0624)

TS38.5 Prof. **Dursun Zafer Seker**, Mr. **E. Özgür Avşar** and Mr. **Umut Aydar** (Turkey):  
Modeling of Historical Bridges Using Photogrammetry and Virtual Reality (0948)

### **TS 39 – Land Administration Organisations and the Future**

Time: **Wednesday 9:00-10:30**

Venue: Room 12b

Commission: 7

Chair: Mr. **András Osskó**, Chair Elect of Commission 7, Hungary

Rapporteur: Ms. **Beatriz Cecilia Quintero Rincon**, Colombia

TS39.1 Prof. **Francis Gäbele** and Mr. **Marc Vanderschueren** (Belgium):  
The Integrated Data Processing of the "Patrimonial Documentation" Administration of Belgium (0309)

TS39.2 Dr. **Joseph Forrai** and Mr. **Gili Kirschner** (Israel):  
Operating Supervising Surveyors – Two-year Experience of an Unusual Governmental Enterprise (0209)

TS39.3 Mr. **Tran Nhu Trung** and Mr. **Kiet Dao Ahn** (Viet Nam), Mr. **Ian Hyde** (Australia) and Prof. **Vo Dang Hung** (Viet Nam):  
Vietnam Land Registration – From Terminology to the Practice (0500)

TS39.4 Dr. **Hilda Herrera** (Argentina):  
Cadastral Registration of the Rights on Real Estate in Argentina (0585)  
This paper has not been presented at the congress.

TS39.5 Mr. **Asri Attallah** and Mr. Muqbel Jaber (Palestinian Authority) and Dr. **Tuomo Heinonen** (Finland):  
Piloting of Systematic Land Registration in Palestine (0683)

TS39.6 Mr. **Anthony Nuvor** (Ghana):  
Revitalisation of Land Administration Organisations: The Land Administration Project in Ghana as a Case Study (0758)

TS39.7 Mr. **Silburn Clarke** and Mr. **Llewelyn Allen** (Jamaica):  
Reforming the Land Sector in Jamaica (0822)  
This paper has not been presented at the congress.

TS39.8 Mr. **Elmar Happ** (Germany):  
Innovation in Land Management: Integrated Solutions for National Cadastre Projects (0957)

#### **TS 40 - Professionalism and Organisational Structures**

Time: Wednesday 9:00-10:30

Venue: Room Königsee

Commission: 1

Chair: Mr. **Klaus Rürup**, Chair of FIG Commission 1, Germany

Rapporteur: Mr. **Dietmar Sperling**, Germany

TS40.1 Mr. **Emmanuel Tembo** (Botswana):  
Growing the Professional – A Comparative Study of Southern Africa Surveying Professional Institutions (0706)

TS40.2 Mr. **Piero Panunzi** and Mr. **Guido Moschella** (Italy):  
Professional Practice and Organizational Structures (0450)

TS40.3 Prof. **John Hannah** (New Zealand):  
Australasia's Surveying Skills Crisis – Is It Marketing Failure? (0287)

TS40.4 Mr. **Alain Gaudet** (France):  
The Regulated Profession of Surveyors: Legal and Organizational Issues (0845)

TS40.5 Mr. **François Mazuyer** (France):  
The Legal Role of the French Licensed Surveyor (0873)

#### **Plenary Session 3 – Geoinformation on Demand**

Time: **Wednesday 11:00-12:30**

Venue: Room 14b

Commission: FIG and Intergeo

Chair: Dr. **Andreas Drees**, FIG Vice President

Rapporteur: Dr. **Chryssy Potsiou**, Chair Elect of Commission 3, Greece

PLEN3.1 Prof. Dr.-Ing. **Josef Frankenberger**, Head of the Bavarian Land Survey Administration in the Ministry of Finance, Munich:  
Geoinformation on Demand – The Bavarian example (0925)

PLEN3.2 Prof. Dr. **Joseph Salukvadze**, Department of Human Geography, Tbilisi State University, Georgia:  
Increasing Role of Geoinformation Technologies in Land Management and beyond: Case of Georgia (0708)

PLEN3.3 Mr. **Berik Davies**, Global GIS / Spatial Coordinator, Shell International Exploration & Production B.V., the Netherlands:  
GeoInformation: Enabling a global business to meet its targets (0928)

#### **Commission Meetings – Commission 9**

Time: **Wednesday 11:00-12:30**

Venue: Meeting Room 1

Commission: 9

Meetings of

- WG 9.5 - Geostatistics in Real Estate Market Analyses and Valuation
- TF 9.1 - Enhancing the Adaptation of Real Estate Valuation and Management (Real Estate Economics) to the University Education of Surveyors

## **FIG Foundation**

Time: **Wednesday 13:00-14:00**

Venue: Starnberger See

- Meeting of the Board of Directors
- By invitation only

## **TS 41 – Introduction Session: Technology – Global Players – Service Providers**

Time: **Wednesday 14:00-15:30**

Venue: Room 05

Commission: 3

Chair: Prof. **Holger Magel**, President of FIG, Germany

Rapporteur: Prof. **Milan Konecny**, President of ICA, Czech Republic

TS41.1 Mr. **Jack Dangermond**, President of ESRI (USA):

Title tbc (0899)

TS41.2 Mr. **Jarmo Ratia**, President Elect of GSDI (Finland):

Global Spatial Data Infrastructure and National and Regional SDI (0900)

TS41.3 Prof. **Željko Bačić**, President of EuroGeographics (Croatia):

New Customers, New Technologies and New Concepts – How to Meet Challenges (0901)

TS 41.4 Prof. **Milan Konecny**, President of the International Cartographic Association (Czech Republic):

Global Spatial Data Infrastructures and ICA (1012)

## **TS 42 – Geodesy in 3 Dimensions**

Time: **Wednesday 14:00-15:30**

Venue: Room 02

Commission: 1

Chair: Mr. **Klaus Rürup**, Chair of FIG Commission 1, Germany

Rapporteur: Mr. **Michael Keller**, Switzerland

TS42.1 Mr. **Jan de Graeve** (Belgium):

Geodesy in History (0892)

TS42.2 Dr. **Dietmar Sperling** (Germany):

Geodesy in Today's Practice (0893)

TS42.3 Mr. **Thomas Glatthard** (Switzerland):

Surveyor's Contribution to Sustainability: Today and Yesterday, in Literature and Graphic Arts (0894)

## **TS 43 – GNSS Processing & Applications**

Time: **Wednesday 14:00-16:30**

Venue: Room 03

Commission: 5

Chair: Dr. **Georgia Fotopoulos**, Canada

Rapporteur: Dr. **Tomás Soler**, USA

TS43.1 Prof. **Aristidis Fotiou**, Mr. **Christos Pikridas** and Mr. **Miltidas Chatzinikos** (Greece):

Long Distance GPS Baseline Solutions Using Various Software and EPN Data (0515)

TS43.2 Mr. **Siavash Hosseini**, Mr. **Yashar Balazadegan** and Dr. **Mohammad Rajabi** (Islamic Republic of Iran) and Dr. **J. A. Rod Blais** (Canada):  
Evaluation of the Effects of the Observation Weight Matrix on the Ambiguity Resolution in LAMBDA Method (0302)

This paper has not been presented at the congress.

TS43.3 Dr. **Ola Ovstedal**, Dr. **Jon Glenn Omholt Gjevestad** and Dr. **Narve Schipper Kjorsvik** (Norway):  
Surveying Using GPS Precise Point Positioning (0612)

TS43.4 Dr. **Tomás Soler**, Mr. **Neil D. Weston**, Dr. **Richard A. Snay**, Mr. **Gerald L. Mader** and Mr. **Richard Foote** (USA):  
Precise Georeferencing Using the On-line Positioning User Service (OPUS) (0343)

#### **TS 44 – Curricula II**

Time: **Wednesday 14:00-15:30**

Venue: Room 04a

Commission: 2

Chair: Dr. **William Patrick Prendergast**, Ireland

Rapporteur: Mr. **Steve Y. W. Lam**, Hong Kong SAR, China

TS44.1 Mr. **Soun Sopha**, Dr. **Jan-Peter Mund** and Mr. **Vung Setha** (Cambodia):  
Professional Education Program for Land Management and Land Tenure Education Programs in Cambodia (0427)

TS44.2 Prof. **Mohammed Essadiki** (Morocco):  
Development of a Convenient Curriculum for the Enhancement of Surveying Studies in Morocco (0685)

TS44.3 Prof. **Francis Fajemirokun** and Dr. **Timothy Idowu** (Nigeria):  
Impact of Digital Technology and the Need for Curriculum Review in Surveying Education (0707)

TS44.4 Prof. **Linda L. Velez-Rodriguez** (Puerto Rico):  
Land Surveying Bachelor Program at the University of Puerto Rico: A Vision for Success (0768)

TS44.5 Mr. **Nicky Nzioki**, Mrs. **Catherine Kariuki** and Dr. **Jennifer Murigu** (Kenya):  
Education and Training in Valuation, Land Management and Housing in Kenya (0842)  
This paper has not been presented at the congress.

#### **TS 45 – World Bank Co-operation - Disaster Management and Land Administration**

Time: **Wednesday 14:00-15:30**

Venue: Room 04b

Commission: 7 and 8 and World Bank (tbc)

Chair: Ms. **Gerda Schennach**, Austria

Rapporteur: Mr. **Wafula Nabutola**, Kenya

TS45.1 Prof. **Stig Enemark** (Denmark):  
Responding to the Millennium Development Goals (0810)

TS45.2 Mr. **Keith C. Bell**, The World Bank (USA):  
World Bank Support for Land Administration and Management: Responding to the Challenges of the Millennium Development Goals (0772)

TS45.3 Dr. **Hasanuddin Z. Abidin**, Mr. **Tony S. Haroen**, Mr. **Tri Supriyanto**, Mr. **Benny** and Mrs. **Erna Heryani** (Indonesia):  
Post-Tsunami Land Parcel Reconstruction in Aceh: Aspects, Status and Problems (0503)

TS45.4 Dr. **Isaac Karikari** (Ghana):  
Ghana's Millennium Challenge Account and the Land Component: A Holistic Approach?  
(0916)

This paper has not been presented at the congress.

#### **TS 46 – Valuation and Real Estate Management**

Time: **Wednesday 14:00-15:30**

Venue: Room 11a

Commission: 9

Chair: Mr. **Dieter Kertscher**, Germany

Rapporteur: Mr. **Stephen Yip**, Chair of Commission 9, Hong Kong SAR, China

TS46.1 Mr. **Henning Elmstroem** (Denmark):  
Valuation Data in a Fully Open and Digital World (0788)

TS46.2 Mr. **Holger Wanzke** (Germany):  
BORIS.NRW – The Information System on Standard Land Values in North Rhine-  
Westphalia, Germany (0559)

TS46.3 Mr. **Mutale Katyoka** and Dr. **Peter Wyatt** (United Kingdom):  
Estimating the Nature and Extent of Vacant Commercial and Industrial Property (0658)

TS46.4 Ms. **Monica Högberg** (Sweden):  
Selling Property and Mortgaging in Sweden – A Simple Matter (0513)

TS46.5 Ms. **Anna-Liisa Lindholm** and Prof. **Kari I. Leväinen** (Finland):  
A Framework for Identifying and Measuring Value Added by Corporate Real Estate (0868)

TS46.6 Dr. **Klas Ernard Borges** (Sweden):  
Joint Facilities in Legal Private Management (0611)

#### **TS 47 – GIS Applications – Special Issues**

Time: **Wednesday 14:00-15:30**

Venue: Room 11b

Commission: 3

Chair: Mr. **Serge Bédard**, Germany

Rapporteur: Dr. **Thomas Hatzichristos**, Greece

TS47.1 Mr. **Peter Tarsoly** (Hungary):  
Cave Information System (0340)

TS47.2 Dr. **Cristina Oana**, Dr. **Cristian Vasile**, Dr. **Mircea Angelescu**, Dr. **Dana Mihai** and Mr. **Laurentiu Ichim** (Romania):  
A Centrally Managed GIS System of the Romanian Archaeological Sites (0524)

TS47.3 Prof. **Francis Fajemirokun**, Dr. **Timothy Idowu**, Mr. **O. S. Adewale**, Mr. **Abimbola Oyiewosu** and Mr. **Babajide Mayiegung** (Nigeria):  
A GIS Approach to Crime Mapping and Management in Nigeria: A Case Study of Victoria  
Island Lagos (0717)

TS47.4 Mr. **Stephen Yao Fiatornu** (Ghana):  
Using GIS Environment as a Remedy to Solve Rail Network in West Africa as a Global Village (0796)

TS47.5 Ms. **Ece Aksoy** (Turkey):  
Clustering with GIS: An Attempt to Classify Turkish District Data (0327)

TS47.6 Mr. **Farhad Hoseinali**, Mr. **Reza Farajloo** and Dr. **Mohammed Rajabi** (Islamic Republic of Iran):  
Weighting Information Layers Using Logistic Regression for Mine Exploration Applications (0418)  
This paper has not been presented at the congress.

## **TS 48 – Engineering Surveys for Construction Works II**

Time: **Wednesday 14:00-15:30**

Venue: Room 12a

Commission: 6

Chair: Dr. **Gethin Roberts**, United Kingdom

Rapporteur: Dr. **Vassilis Gikas**, Greece

TS48.1 Mr. **Christian Clemen** and Prof. **Lothar Gründig** (Germany):  
The Industry Foundation Classes (IFC) – Ready for Indoor Cadastre? (0414)

TS48.2 Prof. **Wolfgang Möhlenbrink** and Dr. **Volker Schwieger** (Germany):  
Navigation and Quality of Construction Processes (0654)

TS48.3 Mr. **Francis Mensah** and Mr. **Edward E. Duncan** (Ghana):  
The Use of RTK GPS in Open Pit Survey – A Case Study at Gold Fields Ghana Limited, Tarkwa (0655)

TS48.4 Mr. **Jan Sirotek** and Mr. **Josef Weigel** (Czech Republic):  
Speleological Mapping in the Northern Part of Moravian Karst (0744)

TS48.5 Dr. **Hakan Akcin** (Turkey), Mr. **Tomonori Degucci** (Japan) and Dr. **Hakan Kutoglu** (Turkey):  
Monitoring Mining Induced Subsidence Using GPS and INSAR (0695)

TS48.6 Mr. **Mladen Zrinjski**, Dr. **Marko Džapo** and Mr. **Loris Redovniković** (Croatia):  
Underground Geodetic Basis of the Tunnel "Mala Kapela" (0422)

## **TS 49 – (Social) Land Tenure and Land Administration**

Time: **Wednesday 14:00-15:30**

Venue: Room 12b

Commission: 7

Chair: Mr. **Soeren Faurholm Christensen**, Denmark

Rapporteur: Mr. **Gyula Iván**, Hungary

TS49.1 Mr. **Rohan Bennett** (Australia):  
Reshaping the Management of Property Rights, Restrictions and Responsibilities (0256)

TS49.2 Mr. **Jean-Paul Miserez** (Switzerland):  
Registration of Public Land Rights and Restrictions in a Land Administration System (0321)

TS49.3 Dr. **Jaap Zevenbergen** (The Netherlands):  
Slowly Towards Trustworthy Land Records of Pre-existing Land Rights (0356)

TS49.4 Dr. **Jan-Peter Mund** (Cambodia):  
Land Dynamics in Rural Cambodia – From Accessibility via Suitability to Social Land Concessions (0423)

TS49.5 Mr. **Peter Dütschler** (Switzerland):  
Integration of Public-right Restrictions into Cadastre – Case Study from the Practice (0610)

### **TS 50 – Conflicts and Land Administration**

Time: **Wednesday 14:00-15:30**

Venue: Room Königsee

Commission: 7

Chair: Mr. **Chris Lunnay**, Australia

Rapporteur: Mr. **Mehmet Cete**, Turkey

TS50.1 Prof. **Meha Murat** (Kosovo UNMIK):  
Effects of e-Cadastre in Land Administration in Kosovo and in Other Post Conflict Countries (0392)

This paper has not been presented at the congress.

TS50.2 Prof. **Paul van der Molen** and Dr. **Arbind Tuladhar** (The Netherlands):  
Corruption and Land Administration (0690)

TS50.3 Ms. **Mweembe Muleya Mudenda** (Zambia):  
The Challenges of Customary Land Tenure in Zambia (0740)

TS50.4 Dr. **Per Kåre Sky** and Mr. **Øyvind Ravna** (Norway):  
The Land Consolidation Court of Norway – A Court for Landed Property and Land Rights (0279)

### **FIG Corporate Members Meeting**

Time: **Wednesday 14:00-15:00**

Venue: Meeting Room 4

- By invitation only

### **TS 51 – Land Administration and e-Government**

Time: **Wednesday 16:00-17:30**

Venue: Room 05

Commission: 7 and 3

Chair: Prof. **Ian Williamson**, Australia

Rapporteur: Dr. **Reinfried Mansberger**, Austria

TS51.1 Dr. **Martin Salzmann** (The Netherlands):  
The Impact of e-Government on Cadastral Systems and the Role and Positions of NMCA's (0317)

TS51.2 Mr. **Emil Ciepielewski** and Mr. **Peter Ringberg** (Sweden):  
Development of e-land Administration in Sweden and the Next Phase (0377)

TS51.3 Mr. **Gyula Iván**, Mr. **Gábor Szabo** and Mr. **Zoltán Weninger** (Hungary):  
Expansion of Land Information Services in Hungarian Land Administration (0428)

TS51.4 Mr. **Soeren Reeberg Nielsen** and Mr. **Soeren Faurholm Christensen** (Denmark):  
The Role of the Cadastre in Spatial Data Infrastructure in Denmark (0895)

TS51.5 Mr. **Bruno Razza** (Italy):  
The Telematic Updating of Cadastral Data Communication in Italy (0454)

TS51.6 Dr. **Esben Munk Sørensen** and Dr. **Bent Hulegaard-Jensen** (Denmark):  
e-Governance in Cadastral and Land Management Need a New Theoretical Paradigm (0789)

### **TS 52 – GSDI – FIG Spatial Information Contributing to e-Governance**

Time: **Wednesday 16:00-17:30**

Venue: Room 02

Commission: 3, 7 and GSDI

Chair: Mr. **Jarmo Ratia**, President Elect of GSDI

Rapporteur: Mr. **Rob Mahoney**, United Kingdom

TS52.1 Prof. **Jaap W. J. Besemer**, Mr. **Peter M. Laarakker**, Mr. **Leen M. Murre**, Mr. **N. W. Zuiderveen Borgesius** and Mr. **R. B. M. ten Kroode** (The Netherlands):  
Basic Registers for Geo-Information (0259)

TS52.2 Mr. **Gerhard Muggenhuber** (Austria):  
Impacts of Change – The Public Spatial Information Sector in Europe (0766)

TS52.3 Mr. **Robin McLaren** (United Kingdom):  
How to Avoid National Spatial Data Infrastructure (NSDI) Cul-de-sacs (0764)

TS52.4 Mr. **Daniel Roberge** (Canada):  
The Register of the Domain of the State – A Revolution in the Registration of Land Rights (0486)

TS52.5 Mr. **Daniel Holweg** (Germany), Mr. **João Geirinhas** (Portugal) and Mr. **Bruce McCormack** (Ireland):  
Applications as an Engine for Effective Building of SDI (0978)  
This paper has not been presented at the congress.

TS52.6 Dr. **Gabor Remetey-Fülöpp** (Hungary):  
Interdisciplinary Partnership Based Implementation of SDI – The Case of Hungary (0977)  
This paper has not been presented at the congress.

### **TS 53 – Reference Frame Vertical**

Time: **Wednesday 16:00-17:30**

Venue: Room 03

Commission: 5

Chair: Prof. **Dalal S. Alnaggar**, Egypt

Rapporteur: Prof. **Rudolf Staiger**, Chair Elect of Commission 5, Germany

TS53.1 Dr. **Yakov Tuchin** (Israel):  
Development of the Geoid-Ellipsoid Separations Model in Israel (0240)

TS53.2 Mr. **Runar Svensson**, Dr. **Jonas Ågren**, Mr. **Per-Anders Olsson**, Mr. **Per-Ola Eriksson** and Mr. **Mikael Lilje** (Sweden):  
The New Swedish Height System RH 2000 and Geoid Model SWEN 05LR (0665)

TS53.3 Dr. **Mikko Takalo** and Mr. **Paavo Rouhiainen** (Finland):  
On Digital Levelling Technique Applied in Water Crossing (0507)

TS53.4 Mr. **Fuat Basciftci**, Mr. **Hasan Cagla**, Mr. **Turgut Ayten**, Mr. **Sabahattin Akkus** and Mr. **Ismail Sanlioglu** (Turkey):  
Determination of Geoid and Transformation Parameters by Using GPS on the Region of Kadinhani in Konya (0568)

### **TS 54 – Curricula III**

Time: **Wednesday 16:00-17:30**

Venue: Room 04a

Commission: 2

Chair: Prof. **Pedro Caverio**, Chair of Commission 2, Spain

Rapporteur: Prof. **Linda L. Velez-Rodriguez**, Puerto Rico

TS54.1 Dr. **Klas Ernard Borges** (Sweden) and Dr. **Esben Munk Sørensen** (Denmark):  
Land Surveyors without Borders – Double Degrees for Neighbours at a Common Market (0785)

TS54.2 Mr. **Josef Weigel** and Mr. **Otakar Svabensky** (Czech Republic):  
Structure and Significance of Fieldwork Courses in Transformed Surveying Education (0738)

TS54.3 Mr. **Hasan Cagla**, Mr. **Sabahattin Akkus**, Mr. **Fuat Basciftci**, Mr. **Turgut Ayten** and Mr. **Beytullah Yalcin** (Turkey):  
Property and Property Management Technician Program (0570)

### **TS 55 – Next Generation GNSS**

Time: **Wednesday 16:00-17:30**

Venue: Room 04b

Commission: 5

Chair: Dr. **Georgia Fotopoulos**, Canada

Rapporteur: Mr. **Andrew Hunter**, Canada

TS55.1 Mr. **Larry D. Hothem** (USA):  
The GPS Modernization Program and Policy Update (0913)

TS55.2 Mr. **Sergey Revniviykh**, Central Research Institute of the Federal Space Agency (Russian Federation):  
Current Operations and Future Developments in GLONASS (0995)

TS55.3 Mr. **Eero Ailio**, Galileo International Relations, European Commission:  
Galileo - Status and Future Plans (0996)

Panel Discussion on Next Generation GNSS and Their Impact on Surveyors

### **TS 56 – Special Valuation Situations**

Time: **Wednesday 16:00-17:30**

Venue: Room 11a

Commission: 9

Chair: Mr. **Stephen Yip**, Chair of FIG Commission 9, Hong Kong SAR, China

Rapporteur: Mr. **Holger Wanzke**, Germany

TS56.1 Mr. **Simon Adcock** and Mr. **Ed Young** (Australia):  
Valuations Involving Brownfield Sites – An Economic, Environmental and Social Issue (0780)

TS56.2 Mr. **Albert Abegunde**, Mrs. **Funmi Oluodo**, Dr. **Samson Adeyinka** and Mr. **Peter Olawuni** (Nigeria):  
An Assessment of the Socio Economic Impacts of Soil Erosion in South-eastern Nigeria (0787)  
This paper has not been presented at the congress.

TS56.3 Mr. **Dennis A. Webb** (United States):  
Why, How and Who of Direct Fractional Interest Valuation (0727)

TS56.4 Dr. **Arvo Vitikainen** (Finland):  
Assessment Method for Highway Project Impacts on Real Estates (0411)  
This paper has not been presented at the congress.

TS56.5 Dr. **Sopon Pornchokchai** (Thailand):  
The Changes of Land Prices after Natural Disasters: A Case of Tsunami in Phuket, 2004-2006 (0897)

### **TS 57 – Project Management**

Time: **Wednesday 16:00-17:30**

Venue: Room 11b

Commission: 1

Chair: Mr. **Dietmar Sperling**, Germany

Rapporteur: Mr. **Michael Keller**, Switzerland

TS57.1 Prof. **Ralf Schroth** (Germany):  
Project Management and Organization of International Engineering Projects (0242)

TS57.2 Dr. **Tom Kennie** (United Kingdom):  
Strategic Practice Management: How Strategic Is Your Plan? (0254)

TS57.3 Mr. **Robert Mahoney** and Mr. **James Kavanagh** (United Kingdom):  
Current Trends in the European Surveying Market (0350)

TS57.4 Ms. **Leonie Newnham** (Australia):  
Guiding Change in Land Management – How to Know if We Are There Yet (0871)

### **TS 58 – Deformation Measurements of Bridges**

Time: **Wednesday 16:00-17:30**

Venue: Room 12a

Commission: 6

Chair: Prof. **Adam Chrzanowski**, Canada

Rapporteur: Mr. **Alan Wright**, United Kingdom

TS58.1 Mr. **Thomas Schäfer**, Dr. **Erwin Penka**, Prof. **Konrad Zilch** and Prof. **Thomas A. Wunderlich** (Germany):  
Efficient Local Deformation Recognition on Highway Bridges (0305)

TS58.2 Mr. **Štefan Lukáč** and Mr. **Milan Žák** (Slovak Republic):  
Base Deformation Measurement of New Highway Bridge Structures in Slovakia (0579)  
This paper has not been presented at the congress.

TS58.3 Mr. **Jan Dirk Wegner**, Ms. **Xiao Ying Cong**, Mr. **Jens-André Paffenholz**, Ms. **Ilka Rehr** and Mr. **Thorsten Strübing** (Germany):  
Geodetic Monitoring and Deformation Analysis of a Vertical Lift Bridge (0608)

TS58.4 Dr. **Gethin Roberts**, Mr. **Chris Brown** and Dr. **Xiaolin Meng** (United Kingdom):  
Using GPS to Monitor the Forth Road Bridge (0625)

TS58.5 Ms. **Hediye Erdogan**, Mr. **Burak Akpinar**, Mr. **Ercenk Ata** and Mr. **Engin Gulal**  
(Turkey):

Investigating the Movements of Bosphorus Bridge by Different Types of Loads (0667)  
This paper has not been presented at the congress.

TS58.6 Mr. **Mohammad Hooshmandzadeh** (Islamic Republic of Iran):

Principles of Using Integrating GPS and Triaxial Accelerometers in Surveying  
Displacement of Large Span Bridges (0793)

This paper has not been presented at the congress.

### **TS 59 – AdV**

Time: **Wednesday 16:00-17:30**

Venue: Room 12b

Commission: 7 and AdV

Chair: Mr. **Wilhelm Zeddies**, Germany

Rapporteur: Mr. **Ralph Merten**, Germany

TS59.1 Dr. **Winfried Hawerk** (Germany):

Cadastre for the 21st Century – The German Way (0324)

TS59.2 Prof. **Klaus Kummer** (Germany):

The Official Surveying and Mapping in Germany and Its Contribution to the National SDI  
(GDI-DE) (0383)

TS59.3 Mr. **Markus Seifert** (Germany):

AAA the Contribution of the AdV in an Increasing European Spatial Data Infrastructure –  
The German Way (0449)

TS59.4 Mr. **Uwe Faulhaber** (Germany):

Radical Change to a Modern General Control Network (339)

### **TS 60 – In Search for Best Practices in Land Administration**

Time: **Wednesday 16:00-17:30**

Venue: Room Königsee

Commission: 7

Chair: Mr. **Richard Grover**, United Kingdom

Rapporteur: Mr. **James Dadson**, Ghana

TS60.1 Mr. **Johann Martin Lun** (Italy):

The Cadastre in South Tyrol/Alto Adige - History and Practical Examples (0208)

TS60.2 Mr. **Mehmet Gur** and Dr. **Hukya Demir** (Turkey):

Analyzing of Turkish Cadastre System According to Land Administration Concept (0680)

TS60.3 Mr. **Mehmet Cete** and Prof. **Holger Magel** (Germany) and Prof. **Tahsin  
Yomralioglu** (Turkey):

The Needs for Improvement in Turkish Land Administration System: Lessons Learnt from  
German Case (0722)

TS60.4 Mr. **Dorman Chimhamhiwa** (South Africa):

Benchmarking for Regional Best Practice: A Comparative Evaluation of Land  
Administration Systems in Namibia, South Africa and Zimbabwe. (0836)

This paper has not been presented at the congress.

TS60.5 Mr. **Michael Elfick** (Australia) and Mr. **Tim Hodson** (South Africa):  
Managing Cadastral Data in a GIS (0739)

TS60.6 Dr. **Tcha Dek Kie** (Republic of Korea):  
A Study on the U-cadastral Space Data Modeling in Korea (0430)  
This paper has not been presented at the congress.

## **Thursday 12 October 2006**

### **TS 61 – Pro Poor Land Management Tools**

Time: **Thursday 9:00-10:30**

Venue: Room 05

Commission: 7 and 8

Chair: Prof. **Theo Kötter**, Germany

Rapporteur: Mr. **Frank Friesecke** Germany

TS61.1 Mr. **Lennart Bäckström** (Sweden):  
Look at Ethiopia! – A Simplified and Result Oriented Development and Implementation of  
a Low Cost Land Administration System (0312)  
This paper has been presented by **Lars Palm**.

TS61.2 Mr. **Pertti Onkalo** (Finland):  
Cadastral Survey Methodologies and Techniques in Developing Countries: Case Cambodia  
and Kosovo (0318)

TS61.3 Ms. **Jill Urban-Karr** (USA) and Mr. **Paul-Dan Ursu** (Romania):  
Land Management Tool for Local Administrations (0419)

TS61.4 Dr. **Bayram Uzun** (Turkey):  
Gaining School Land Free of Charge: A Proposal for Developing Countries (0553)  
This paper has not been presented at the congress.

TS61.5 Mr. **Jouni Anttonen** (Finland):  
Can a Successful Modern Cadastre Be Developed in South-East Asian Developing  
Countries? - South-East Asian Experience with the Focus on Cambodia (0791)

### **TS 62 – SIM – Policy and Strategy**

Time: **Thursday 9:00-10:30**

Venue: Room 02

Commission: 3

Chair: Mr. **Robin McLaren**, United Kingdom

Rapporteur: Mr. **Daniel Roberge**, Canada

TS62.1 Mr. **Christian Clausen** (Denmark) and Dr. **Abbas Rajabifard** (Australia) and  
Prof. **Stig Enemark** (Denmark) and Prof. **Ian Williamson** (Australia):  
Awareness as a Foundation for Developing Efficient Spatial Data Infrastructures (0334)

TS62.2 Dr. **Bastiaan van Loenen**, Dr. **Jaap Zevenbergen** and Prof. **Jitske de Jong**  
(The Netherlands):  
Access to Government Information Unnecessary Remains a Case of Professional Elite  
(0426)

TS62.3 Mr. **Serge Bédard** (Germany):  
GIS in 20 Years: Where Is the Future Taking Us? (0733)

TS62.4 Mr. **William Kalande** and Mr. **Joe-Duncan Ondulo** (Kenya):  
Geoinformation Policy in East Africa (0270)  
This paper has not been presented at the congress.

### **TS 63 – Geodetic Infrastructure & Theory**

Time: **Thursday 9:00-10:30**

Venue: Room 03

Commission: 5

Chair: Prof. **Rudolf Staiger**, Chair Elect of Commission 5, Germany

Rapporteur: Mr. **Rob Sarib**, Australia

TS63.1 Mr. **Haim Srebro** and Prof. **Maxim Shoshani** (Israel):  
Towards a Comprehensive International Boundary Making Model (0293)

TS63.2 Mr. **Bachir Gourine** and Dr. **Salem Kahlouche** (Algeria) and Dr. **Pierre Exertier**, Dr. **Philippe Berio**, Dr. **David Coulot** (France) and Mr. **Pascal Bonnefond** (France):

Positioning of the French Transportable Laser Ranging System (FTLRS) in Corsica over the 2002 and 2005 campaigns (0676)

TS63.3 Mrs. **Jemma Picco**, Mr. **Matthew Higgins**, Mr. **Robert Sarib** and Mr. **Gary Johnston** (Australia) and Mr. **Graeme Blick** (New Zealand):  
Streamlining the Exchange of Geodetic Data in Australia and New Zealand (0502)

TS63.4 Mr. **Anders Alfredsson** and Mr. **Mikael Lilje** (Sweden):  
Digital Geodetic Archive (0671)

TS63.5 Prof. **Beat Fischer** and Mr. **Philipp Brühlmann** (Switzerland):  
On the Application of Nonparametric Regression Methods to Geodetic Data (0460)

### **TS 64 – Mobile Mapping and Location Based Services**

Time: **Thursday 9:00-10:30**

Venue: Room 04a

Commission: 5

Chair: Mr. **Andrew Hunter**, Canada

Rapporteur: Dr. **Georgia Fotopoulos**, Canada

TS64.1 Ms. **Sandy Kennedy**, Mr. **Jason Hamilton** and Mr. **Hugh Martell** (Canada):  
GPS/INS Integration with the iMAR-FSAS IMU (0472)

TS64.2 Dr. **Naser El-Sheimy**, Mr. **Andrew Hunter**, Dr. **Sameh Nassar**, Mr. **Abdallah Osman** and Ms. **Zainab Syed** (Canada):  
Progress in Integrated Positioning, Navigation and Mapping Systems (0653)

TS64.3 Mr. **Johannes Hotz** (Switzerland):  
Mobile GIS for Surveyors and GIS Professionals Working for Cadastral and Mapping Agencies (0802)

TS64.4 Ms. **Katrin Ramm**, Dr. **Renate Czommer** and Dr. **Volker Schwieger** (Germany):  
Map-based Positioning Using Mobile Phones (0470)

TS64.5 Prof. **Esmond Mok** (Hong Kong SAR, China), Prof. **Xia Linyuan** (China, P. R.) and Dr. **Guenther Retscher** (Austria):  
Investigation of Seamless Indoor and Outdoor Positioning Integrating WiFi and GNSS (0801)

### **TS 65 – Environment, Culture and Spatial Information**

Time: **Thursday 9:00-10:30**

Venue: Room 04b

Commission: 3 and 8

Chair: Mr. **Rainer Müller-Jökel**, Germany

Rapporteur: Drs. **Oscar Custers**, The Netherlands

TS65.1 Dr. **Chryssy Potsiou** and Mr. **Gerassimos Apostolatos** (Greece):  
Legal Reforms in Land Management Aspects to Support the Construction and the Continuing Use of the Olympic Infrastructure  
An example of Good Practice in Greece (0755)

TS65.2 Drs. **Oscar Custers** (The Netherlands):  
The Geospatial Managed Environment (0821)

TS65.3 Mr. **Pavel Propastin** and Mr. **Martin Kappas** (Germany) and Ms. **Nadiya R. Muratova** (Kazakhstan):  
Temporal Responses of Vegetation to Climatic Factors in Kazakhstan and Middle Asia (0493)  
This paper has not been presented at the congress.

### **TS 66 – Commercial Property Valuation**

Time: **Thursday 9:00-10:30**

Venue: Room 11a

Commission: 9

Chair: Prof. **Kauko Viitanen**, Chair Elect of FIG Commission 9, Finland

Rapporteur: Mr. **Steven Nystrom**, USA

TS66.1 Mr. **Thomas Ferguson** (Bahamas):  
GIS Data (Profit or Loss) – A Case Study for Its Marketability in the Bahamas (0721)  
This paper has not been presented at the congress.

TS66.2 Mr. **Patrik Skogster** (Finland):  
Location Planning Theories in Valuation of Retail Premises (0634)

TS66.3 Mr. **Steven Nystrom** and Mr. **Craig Nowicke** (USA):  
Industrial Efficiency and Value in a Changing Market (0742)

TS66.4 Mr. **Arhi Kivilahti** and Prof. **Kauko Viitanen** (Finland):  
Dynamics of the Commercial Property Markets in Finland (0376)

TS66.5 Prof. **Krystyna Czarnecka** and Ms. **Dominika Adamska** (Poland):  
New Horizons in CEE Real Estate Markets – Polish Case (0527)

TS66.6 Dr. **Zhang Xiuzhi** and Mr. **Wu Xiaoguang** (China P. R.):  
The Analysis: the Influence of RMB Exchange Rate Fluctuation on Real Estate Price in China (0440)

## **TS 67 – Technical Cooperation based on German Experiences**

Time: **Thursday 9:00-10:30**

Venue: Room 11b

Commission: Advisory Group for Surveying and Geoinformation BEV for Germany, ADV, private industry and DGK and FIG Commission 1

Chair: Mr. **Volkmar Teetzmann**, Germany

Rapporteur: Dr. **Andreas Drees**, Vice President of FIG, Germany

TS67.1 Dr. **Otmar Schuster**, Past Chairman of Geometers of Europe (Germany):  
Geodetic Professions – Their Formation in State and Economy (0969)

TS67.2 Dr. **Gernod Schindler**, Mr. **Jasper Lauert** and Mr. **Ronald Schmieder** (Germany):

Project Experiences with Land Management in Countries in Transition (0970)

TS67.3 Prof. **Gottfried Konecny** (Germany):

Geoinformation Issues for the Developing Countries (0971)

## **TS 68 – Deformation Measurements of Dams**

Time: **Thursday 9:00-10:30**

Venue: Room 12a

Commission: 6

Chair: Dr. **Maria Tsakiri**, Greece

Rapporteur: Mr. **Joel van Cranenbroeck**, Switzerland

TS68.1 Dr. **Nicola Pacileo Neto**, Mr. **Fernando Cesar Ribeiro**, Mr. **Ademar Sergio Fiorini** and Mr. **Herbert Erwes** (Brazil):

Verification of the Stability of Observation Pillars for the Monitoring of Structures by GPS-Technologies – The Case of the ITAIPU–Dam (0325)

TS68.2 Prof. **Anna Szostak-Chrzanowski**, Prof. **Michel Massiera** and Prof. **Adam Chrzanowski** (Canada):

Kinematic Analysis of Behaviour of Large Earth Dams (0474)

TS68.3 Mr. **Mario Alba**, Prof. **Alberto Giussani**, Mr. **Fabio Roncoroni**, Dr. **Marco Scaioni** and Mr. **Paolo Valgoi** (Italy):

Geometric Modelling of a Large Dam by Terrestrial Laser Scanning (0521)

TS68.4 Dr. **Temel Bayrak** (Turkey):

Monitoring Temporal Behaviors of the Yamula Dam (0555)

This paper has not been presented at the congress.

TS68.5 Mr. **Ingo Neumann**, Prof. **Hansjörg Kutterer** (Germany):

Geodetic Deformation Analysis with Respect to Observation Imprecision (0573)

## **TS 69 – Land Administration Concepts**

Time: **Thursday 9:00-10:30**

Venue: Room 12b

Commission: 7

Chair: Mr. **Tommy Österberg**, Sweden

Rapporteur: Mr. **Tran Nhu Trung**, Viet Nam

TS69.1 Prof. **Wojciech Wilkowski** and Dr. **Marcin Karabin** (Poland):

Cadastré 2020 – A Vision for a Future Cadastral System in Poland (0390)

TS69.2 Mrs. **Kristin Andreasson** (Sweden):  
Legal Coordinated Cadastres – Theoretical Concepts and the Case of Singapore (0590)

TS69.3 Ms. **Gerda Schennach** (Austria):  
New Structures for New Land Administration Technologies (0711)

TS69.4 Mrs. **Line Træholt Hvingel** and Mr. **Lars Emil Vindfeld Møller** (Denmark):  
The Cadastral System of Tomorrow (0805)

TS69.5 Mr. **Mohsen Kalantari**, Mr. **Abbas Rajabifard**, Ms. **Jude Wallace** and Mr. **Ian P. Williamson** (Australia):  
A New Vision on Cadastral Data Model (0498)

### **TS 70 – Land Consolidation and Land Administration**

Time: **Thursday 9:00-10:30**

Venue: Room Königsee

Commission: 7

Chair: Mr. **Christiaan Lemmen**, The Netherlands

TS70.1 Ms. **Seija Kotilainen** (Finland):  
Final Engineering and Land Consolidation Planning – Action Research Method as  
Increasing Activity and Contentment of Landowners (0323)  
This paper has not been presented at the congress.

TS70.2 Dr. **Teresa Dzikowska**, Dr. **Malgorzata Akincza**, Dr. **Jakub Szczepanski** and  
Ms. **Agnieszka Stacherzak** (Poland):  
Possibilities of Afforestation of Farming Land and Social Acceptance (0526)

TS70.3 Mr. **Halil Ibrahim Inan** (Turkey) and Mr. **Mehmet Cete** (Germany):  
The Role of Cadastre in Agricultural Reform Applications of Turkey: Case Study of  
Trabzon Province (0532)

TS70.4 Mr. **Willibald Perzl** (Germany):  
Integrated Rural Development (IRD) Waldnaabaue – From a Project for Protection of  
Nature to Economic and Social Land Development (0596)

TS70.5 Miss **Marie Kovandova** (Czech Republic):  
Could the Land Consolidation Process Be an Effective Tool for Nature and Environmental  
Protection in the Czech Republic? (0825)

### **Federation des Géomètres Francophones (FGF)**

Time : **Thursday 9 :00-11 :00**

Venue : Meeting Room 4

- Meeting of FGF

### **Plenary Session 4 – Global Change**

Time: **Thursday 11:00-12:30**

Venue: Room 14b

Commission: FIG and Intergeo and IAG

Chair: Univ.Prof. DDr. **Gerhard Beutler**, President of the International Association of  
Geodesy

Rapporteur: Prof. **Rudolf Staiger**, Chair Elect of Commission 5, Germany

PLEN4.1 Univ.Prof. Dr.-Ing. DDr. E.h. **Reiner Rummel**, Permanent Secretary of the German Geodetic Commission:  
Assessment of Global Change by Geodetic Techniques (0929)

PLEN4.2 Hon.-Prof. Dr.-Ing. **Hermann Drewes**, President of IAG Commission 1 (Reference Frames), München, Germany:  
A Unique Reference Frame: Basis of the geodetic observing system for geodynamics and global change (0923)

PLEN4.3 Prof. **Hans Haubold**, United Nations Office for Outer Space Affairs (UN-OOSA) , Vienna, Austria:  
The United Nations and GNSS: Global in Space and Time (0922)

### **Commission Meetings – Commission 9**

Time: **Thursday 11:00-12:30**

Venue: Meeting Room 1

Commission: 9

Meetings of

- WG 9.2 - Improving Slum Conditions through Innovative Financing
- TF 9.2 - Organising Seminar in Valuation at WW in Hong Kong May 2007

### **TS 71 – Global Land Tenure – Challenges and Innovations**

Time: **Thursday 14:00-15:30**

Venue: Room 05

Commission: 7 and FAO

Chair: Dr. **Paul Munro-Faure**, FAO

Rapporteur: Prof. **Paul van der Molen**, Chair of Commission 7, The Netherlands

TS71.1 Mr. **Lorenzo Cotula**, Ms. **Camilla Toulmin** and Mr. **Julian Quan** (United Kingdom):  
Policies and Practices for Securing and Improving Access to Land (Issue Paper no. 1 from ICARRD) (0879)

TS71.2 Mr. **Willi Zimmermann** (Germany):  
Good Governance in Land Tenure and Administration (0881)

TS71.3 Mr. **Paul De Wit** (Belgium):  
Access to Rural Land and Land Administration after Violent Conflicts (0883)

TS71.4 Mr. **Morten Hartvigsen** (Denmark):  
Land Consolidation in Central and Eastern European Countries (0882)

TS71.5 Prof. **Stig Enemark** (Denmark) and Prof. **Paul van der Molen** (The Netherlands):  
A Framework for Self-Assessment of Capacity Needs in Land Administration (0811)

### **TS 72 – GIS Applications – Planning Issues**

Time: **Thursday 14:00-15:30**

Venue: Room 02

Commission: 3 and 8

Chair: Mr. **Gerhard Muggenhuber**, Austria

Rapporteur: Mr. **Simon Adcock**, Chair Elect of Commission 8, Australia

TS72.1 Dr. **S. Savas Durduran** and Dr. **Ali Erdi** (Turkey):  
Activities and Problems of Urban Information System in Turkey (0283)

TS72.2 Ms. **Adriane B. Thum**, Dr. **Maurício Roberto Veronez** and Mr. **Carlos Eduardo Aveiro** (Brazil):  
Urban Planning Utilizing Geographic Information Systems: Case Vila Caí, Porto Alegre, RS - Brazil (0262)

TS72.3 Ms. **Husniye Ebru Colak** and Mr. **Arif Cagdas Aydiunoglu** (Turkey):  
Determining Regional Tourism Development Strategies of Eastern Black Sea Region of Turkey by GIS (0545)

TS72.4 Mr. **Saheed Salawudeen Olaniyi** and Mrs. **Usman Rashidat** (Nigeria):  
Electricity Distribution Engineering and GIS (DeGIS) (0591)

TS72.5 Mr. **Mohamed A. Al-Shalabi**, Mr. **Shattri Bin Mansor**, Mr. **Nordin Bin Ahmed** and Mr. **Rashid Shiriff** (Malaysia):  
GIS Based Multicriteria Approaches to Housing Site Suitability Assessment (0702)

TS72.6 Mr. **Joseph Owusu**, Mr. **Francis Afukaar K.** and Dr. **B. E. K. Prah** (Ghana):  
Urban Traffic Speed Management – The Use of GPS/GIS (0710)

TS72.7 Prof. **Olubodun Ayeni** (Nigeria):  
Development of a Multimedia GIS Database for the Management and Promotion of Tourism Industry in Nigeria (0771)

### **TS 73 – Low Cost Technology**

Time: **Thursday 14:00-15:30**

Venue: Room 03

Commission: 5

Chair: Mr. **Dan Schnurr**, United Kingdom

Rapporteur: Dr. **Arbind Toladhur**, The Netherlands

TS73.1 Mr. **Dan Schnurr** (United Kingdom):  
Cost Effective Survey Measurement and Mapping of Informal Settlements - The FIG Focus (0934)

TS73.2 Dr. **Jan-Peter Mund** and Mr. **Seang Teang Peng** (Cambodia):  
Geo-referenced Balloon Digital Aerial Photo Technique a Low Cost High-Resolution Option for Developing Countries (0425)  
This paper has not been presented at the congress.

TS73.3 Mr. **Catur Aries Rokhmana** (Indonesia):  
Some Experiences on Using Handheld GPS and Camcorder as a Truly Low-cost Mapping Systems (0820)  
This paper has not been presented at the congress.

TS73.4 Mr. **Eugene Onyeka** (Nigeria):  
Contributions of Surveying in the Development of Regional Infrastructures – An African Perspective (0687)  
This paper has not been presented at the congress.

### **TS 74 – Capacity Building**

Time: **Thursday 14:00-15:30**

Venue: Room 04a

Commission: 2

Chair: Dr. **Frances Plimmer**, United Kingdom

Rapporteur: Mr. **Gert Steinkellner**, Austria

TS74.1 Dr. **Jaeik Liou** (Republic of Korea):  
New Designs for Modeling Sustainable Capacity Development: Concepts, Methods and Contexts (0516)

TS74.2 Ms. **Silke T. Franke** and Prof. **Holger Magel** (Germany):  
Changing Peoples Attitudes – Capacity Building for Sustainable Land Management. Best Practice Municipalities and Their Concrete Example of Good Governance (0729)

TS74.3 Mr. **Jan Dirk Wegner** and Mr. **Jens-André Paffenholz** (Germany):  
ARGEOS: the Student's Contribution to Shaping the Change (0391)

### **TS 75 – Issues Arising in Land and Property Development**

Time: **Thursday 14:00-15:30**

Venue: Room 04b

Commission: 8, 7 and 9

Chair: Mr. **Isaac Boateng**, United Kingdom

Rapporteur: Mr. **Emmanuel Tembo**, Botswana

TS75.1 Dr. **Danielle Groetelaers** (The Netherlands):  
Building Land and the Urban Land Development Process: Characteristics, Rights and Markets (0437)

TS75.2 Prof. **Andrzej Hopfer** (Poland):  
Property Development and Land Management in Poland (0817)

TS75.3 Ms. **Heidi Falkenbach**, Mrs. **Malgorzata Mierzejewska** and Ms. **Katri Nuuja** (Finland):  
Does a Higher Real Estate Tax Rate for Unbuilt Building Sites Lead to an Increase in the Supply of Building Land – The Case of the City of Espoo (0753)

### **TS 76 – Valuation Standards and Practices**

Time: **Thursday 14:00-15:30**

Venue: Room 11a

Commission: 9

Chair: Mr. **Henning Elmstroem**, Denmark

TS76.1 Prof. **Kauko Viitanen**, Mr. **Simo Hannelius** and Mr. **Markku Airaksinen** (Finland):  
Valuation Guidance of Forest Properties within Valuation Standards Needed? (0746)

TS76.2 Mr. **Alfred Bollinger** (Switzerland):  
New Method to Value Forests in Land Consolidations (0399)

TS76.3 Mr. **Hrvoje Tomić**, Mr. **Hrvoje Matijević** and Dr. **Siniša Mastelić Ivić** (Croatia):  
Development of Land Valuation System (0542)

TS76.4 Mr. **Malvern Tipping** (United Kingdom):  
The Impact of the Time Value of Money on Valuation Practice (0373)

TS76.5 Mr. **Said Omar Fakh** and Mr. **Tahir Omar Mussa** (Tanzania):  
Valuation as Guided by the Legislation in Zanzibar (0736)

## **TS 77 – Internationalism and FIG**

Time: **Thursday 14:00-15:30**

Venue: Room 11b

Commission: 1 and 2

Chair: Mr. **Volkmaar Teetzman**, Germany

Rapporteur: Mr. **Yaacoub Saade**, Lebanon

TS77.1 Prof. **Stig Enemark** (Denmark) and Mr. **Iain Greenway** (Ireland):  
Promoting Institutional and Organisational Development in Surveying and Land Administration (0813)

TS77.2 Dr. **Joseph Forrai** and Mr. **Joseph Kraus** (Israel):  
The Necessity for Interdisciplinary Cooperation as a Part of FIG Activity (0241)

TS77.3 Prof. **John Parker** (Australia):  
Go the Next Step (0714)

TS77.4 Dr. **Ivan Katzarsky** (Bulgaria):  
Participation of Bulgarian Surveyors in the Life of FIG (0196)

TS77.5 Mr. **Nusret Demir**, Mr. **Tansu Tosun** and Ms. **Petek Tatli** (Turkey):  
Establishment of Learning Organisation Structure for GIS Companies (0444)

## **TS 78 – Survey Control and Monitoring of Buildings**

Time: **Thursday 14:00-15:30**

Venue: Room 12a

Commission: 6

Chair: Prof. **Lothar Gründig**, Germany

Rapporteur: Dr. **Xiaoli Ding**, Hong Kong SAR, China

TS78.1 Mr. **Doug Hayes** (United Arab Emirates), Mr. **Ian Sparks** (Australia) and Mr. **Joel van Cranenbroeck** (Switzerland):  
Core Wall Survey Control System for High-Rise Buildings (0297)

TS78.2 Mr. **Thomas Schäfer**, Mr. **Peter Wasmeier**, Mrs. **Katharina Ratke**, Mr. **Thomas Weber**, Dr. **Karl Foppe** and Mr. **Glennfried Preuß** (Germany):  
Motion Detection of Munich's Olympic Tower with a Multi-sensor System Operating at Different Sampling Rates (0304)

TS78.3 Dr. **Andréa De Seixas**, Mr. **José Roberto De Seixas** and Prof. **José Jorge De Seixas** (Brazil):  
Control and Monitoring of Buildings Foundation – Application in Very High Buildings Structures (0363)  
This paper has not been presented at the congress.

TS78.4 Dr. **George Vozikis** (Greece):  
The Hybrid Use of Surveying Techniques for Documenting the Largest Ancient Theatre in Greece (0478)

TS78.5 Dr. **Frank Gielsdorf** and Prof. **Wolfgang Huhnt** (Germany):  
Topology as Central Information in Building Models (0582)

TS78.6 Mr. **Daniel Palazzo**, Prof. **Raul Friedmann**, Dr. **Carlos Nadal**, Dr. **Mauno Santos Filho** and Dr. **Luis Veiga** (Brazil):  
Dynamic Monitoring of Structures Using a Robotic Total Station (0643)

### **TS 79 – Cadastral Maps**

Time: **Thursday 14:00-15:30**

Venue: Room 12b

Commission: 7 and 5

Chair: Prof. **Andrzej Hopfer**, Poland

Rapporteur: Mr. **Lee Youngho**, Republic of Korea

TS79.1 Mr. **Joe-Duncan Ondulo** and Mr. **William Kalande** (Kenya):  
High Spatial Resolution Satellite Imagery for PID Improvement in Kenya (0272)  
This paper has not been presented at the congress.

TS79.2 Mr. **Gershon Steinberg** (Israel):  
New Survey Regulations for Israel (0306)

TS79.3 Mr. **Olof Olsson** and Mr. **Christos Papadopoulos** (Sweden):  
The New Cadastral Index Map of Sweden – A Matter of Co-operation. (0541)  
This paper has not been presented at the congress.

### **TS 80 – Land Consolidation in Germany**

Time: **Thursday 14:00-15.30**

Venue: Room Königsee

Commission: 7

Chair: Mr. **Tor Valstad**, Norway

Rapporteur: Prof. **Wojciech Wilkowski**, Poland

TS80.1 Dr. **Andreas Drees** and Mr. **Rainer Sünderhauf** (Germany):  
Land Consolidation as a Tool for Flood Prevention (0853)

TS80.2 Mr. **Ralf Helle** (Germany):  
Land Consolidation – An Instrument to Provide Areas for Water Retention by Mutual Consent (0310)

TS80.3 Prof. **Joachim Thomas** (Germany):  
What's on Regarding Land Consolidation in Europe (0311)

TS80.4 Mr. **Ralf Wilden** (Germany):  
Land Consolidation in Forest Areas – The German Approach in Terms of Sustainability (0313)

TS80.5 Mr. **Ralph Merten** (Germany):  
Land Consolidation as a Tool to Balance Private and Public Requests on Land Use – A German Example in the Rhenish Lignite Mining District (0314)

### **TS 81 – Land Tenure Data in Policy Making**

Time: **Thursday 16:00-17:30**

Venue: Room 05

Commission: 7 and FAO

Chair: Dr. **Mika Törhönen**, FAO

Rapporteur: Ms. **Pauline van Elsland**, The Netherlands

TS81.1 Mr. **Richard Grover** (United Kingdom):  
European Union Accession and Land Tenure Data in Central and Eastern Europe (0884)

TS81.2 Ms. **Orapan Napangchang-Srisawalak** (Thailand):  
Thailand Land Tenure Data or Land Tenure Data in South East Asia (0885)

TS81.3 Mr. **Pierre-Yves Le Meur** (France):

Reflections on Land Information and Policy-making in Sub-Saharan Africa (0886)

Launching of two FAO publications:

- European Union accession and land tenure data in Central and Eastern Europe
- Land Reform, Land Settlement and Cooperatives

### **TS 82 – e-Governance – Developments**

Time: **Thursday 16:00-17:30**

Venue: Room 02

Commission: 3

Chair: Ms. **Kari Strande**, Norway

Rapporteur: Mr. **Peter Laarakker**, The Netherlands

TS82.1 Dr. **Jan Pytel**, Dr. **Jiri Pospisil** and Prof. **Ales Cepek** (Czech Republic):  
Implementation of a General Web Application Program Interface for Geoinformatics (0357)

TS82.2 Mr. **Vlado Cetl**, Dr. **Miodrag Roic** and Mr. **Mario Madjer** (Croatia):  
Development of Cadastral Metadata Service (Cadastral Metadata Database) (0368)

TS82.3 Mr. **Paul van Asperen** and Drs. **Wim Blanken** (The Netherlands):  
Geoinformation Dissemination for the General Public through Multiple Clients (0487)

TS82.4 Dr. **Andreas Donaubaue**r, Ms. **Astrid Fichtinger**, Prof. **Matthäus Schilcher**  
and Mr. **Florian Straub** (Germany):  
Model Driven Approach for Accessing Distributed Spatial Data Using Web Services -  
Demonstrated for Cross-border GIS Applications (0603)

TS82.5 Mr. **Benjamin Armah Quaye** (Ghana):  
Towards an Appropriate Framework for the Effective Utilization/Management of  
Geoinformation: A Case Study of Ghana (0397)

### **TS 83 – Photogrammetry and Remote Sensing**

Time: **Thursday 16:00-17:30**

Venue: Room 03

Commission: 5

Chair: Mr. **Andrew Hunter**, Canada

Rapporteur: Mr. **Dan Schnurr**, United Kingdom

TS83.1 Dr. **Analia Isabel Argerich** (Argentina):  
Issues about Satellite Images Georeferencing in Argentina (0496)

TS83.2 Prof. **Charalabos Ioannidis**, Ms. **Sofia Soile** and Dr. **Chryssy Potsiou**  
(Greece):  
Low Cost Digital Photogrammetric Techniques for the Documentation of Cultural Heritage  
(0760)

TS83.3 Dr. **Ashraf Sharawi** (Egypt):  
Mapping from Fused High Resolution Satellites Stereo Imageries (0264)

TS83.4 Mr. **Pavel Propastin** and Mr. **Martin Kappas** (Germany) and **Nadiya R. Muratova** (Kazakhstan):  
Application of Geographically Weighted Regression Analysis to Assess Human-Induced  
Land Degradation in a Dry Region of Kazakhstan (0492)  
This paper has not been presented at the congress.

## **TS 84 – e-Learning**

Time: **Thursday 16:00-17:30**

Venue: Room 04a

Commission: 2

Chair: Prof. **Stig Enemark**, Denmark

Rapporteur: Dr. **Jaeik Liou**, Republic of Korea

TS84.1 Dr. **Stefan Willgalis** (Germany):

Economic Solutions to Changing Professional Training Requirements in Geodesy and Surveying (0562)

TS84.2 Prof. **Bela Markus** (Hungary):

Experiences in and around eLearning (0606)

This paper has not been presented at the congress.

TS84.3 Mr. **Saheed Salawudeen Olaniyi** (Nigeria):

e-Learning Technology: Nigeria Experience (0593)

TS84.4 Mr. **Pierre-Yves Gillieron**, Mr. **Hervé Gontran** and Prof. **Bertrand Merminod** (Switzerland):

Assessment of Topography e-Learning with Exomatic (0535)

TS84.5 Dr. M. **Flor Alvarez**, Dr. **José Ramón Rodríguez-Pérez**, Mr. **Enoc Sanz Ablanedo** and Ms. **Marta Fernández Martínez** (Spain):

Problem Based Learning (PBL) and e-Learning in Geodetic Engineering, Cartography and Surveying Education in the European Higher Education Area (EHEA) Frame – A Case Study in the University of León (Spain): Experiences and Results (0463)

## **TS 85 – Standards**

Time: **Thursday 16:00-17:30**

Venue: Room 04b

Commission: Standards Network

Chair: Mr. **Andrew Leyzack**, Chair Elect of FIG Commission 4, Canada

Rapporteur: Dr. **Hans Knoop**, Germany

TS85.1 Mr. **Iain Greenway** (Ireland):

Standards – Their Vital Role (0485)

This paper has not been presented at the congress.

TS85.2 Dr. **Hans Knoop** (Germany):

Economic Benefits of Standardization – Result of a German Scientific Study (0890)

TS85.3 Mr. **Paul Harcombe**, Mr. **Ian O'Donnell**, Mr. **Garry West** and Dr. **Russell Priebbenow** (Australia):

Geospatial Standards Working Down Under (0783)

TS85.4 Prof. **Peter Baumann** (Germany):

Towards a Standard for Interoperable Earth System Raster Services (0650)

TS85.5 Mr. **Mario Blazevic** (Croatia):

Harmonization of Land Register and Cadastre in Croatia (0565)

TS85.6 Mr. **Jesper Paasch** (Sweden):

Standardisation of Real Property Rights and Restrictions – A Fool's Task? (0274)

## **TS 86 – Valuation Methods**

Time: **Thursday 16:00-17:30**

Venue: Room 11a

Commission: 9

Chair: Mr. **Stephen Yip**, Chair of FIG Commission 9, Hong Kong SAR, China

Rapporteur: Prof. **Kari I. Leväinen**, Finland

TS86.1 Prof. **Sarah Sayce** and Dr. **Frances Plimmer** (United Kingdom):  
Depreciated Replacement Cost – Consistent Methodology? (0268)

TS86.2 Mr. **Antonio Benvenuti** (Italy):  
The Appraisal System of Property Qualities (0453)

TS86.3 Dr. **Anna Baranska** (Poland):  
Estimation of Parameters of Multiplicative Exponential Function Model for Real Estate Market Value Prediction (0572)

TS86.4 Dr. **Pekka Rahkila** and Mr. **Eero Carlson** (Finland):  
The Effect of Visual Damage of Landscape on Recreational Parcel Sales (0351)

TS86.5 Dr. **Tomasz Budzyński** and Prof. **Wojciech Wilkowski** (Poland):  
Application of Artificial Neural Networks for Real Estate Valuation (0341)

TS86.6 Mr. **Mirosław Zak** (Poland):  
Evaluation of Properties in Poland (0975)

## **TS 87 – Under-represented Groups and Ethics**

Time: **Thursday 16:00-17:30**

Venue: Room 11b

Commission: 1 and 2

Chair: Mr. **Ken Allred**, Vice President of FIG, Canada

Rapporteur: Ms. **Gabriele Dasse**, Germany

TS87.1 Dr. **Ron Adler**, Dr. **Joseph Forrai** and Mr. **Haim Srebro** (Israel):  
Professional Practice Based on Education, Ethics and Standards (0290)

TS87.2 Ms. **Gabriele Dasse** (Germany):  
Guidelines to Enhance the Representation of Under-Represented Groups in FIG (0409)

TS87.3 Ms. **Jennifer Maldar** (Germany):  
Let's Talk about Us! (0458)

TS87.4 Mrs. **Angela Etuonovbe** (Nigeria):  
Improving Participation of Under-represented Groups – Projecting the Image of the Nigerian Female Surveyor (0598)

TS87.5 Ms. **Gerda Schennach** (Austria):  
Gender Issues for Land Registration and Professional Qualification (0712)

## **TS 88 – Engineering Surveys for Industry and Research**

Time: **Thursday 16:00-17:30**

Venue: Room 12a

Commission: 6

Chair: Prof. **Thomas Wunderlich**, Germany

Rapporteur: Prof. **Alojz Kopacik**, Chair Elect of Commission 6, Slovak Republic

TS88.1 Dr. **Mihaly Agfalvi**, Mr. **Zsolt Bokor**, Mr. **Róbert Farkas**, Mr. **Robert Gyenes** and Mr. **Peter Tarsoly** (Hungary):  
Geodetic Control and Setting Measurements in Mechanical Metrology (0338)

TS88.2 Prof. **Thomas Wunderlich**, Mr. **Stefan Auer** and Mr. **Thomas Schäfer** (Germany):  
Geodetic Concepts for Collision Avoidance along Industrial Transport and Assembly Lines (0424)

TS88.3 Mr. **Thomas Weber** and Ms. **Katharina Ratke** (Germany):  
Modern Art Scanning (0508)

TS88.4 Mr. **Edi Meier**, Prof. **Hilmar Ingensand**, Mr. **Fuqiang Wei**, Prof. **Leonid Rivkin** and Dr. **Alexander Somieski** (Switzerland):  
Precise Long Term Deformations: Results of the Hydrostatic Levelling System at the "Swiss Light Source" Synchrotron (0549)

TS88.5 Dr. **Zdravko Kapović**, Mr. **Ante Marendić** and Mr. **Rinaldo Paar** (Croatia):  
Deformation Analysis of the Holcim Ltd. Cement Factory Objects (0595)

TS88.6 Prof. **Alojz Kopacik**, Ms. **Miriam Zamecnikova** and Mr. **Peter Kyrinovic** (Slovak Republic):  
3D Model Creation of Hydro Technical Structures (0674)

### **TS 89 – Community Involvement and Land Administration**

Time: **Thursday 16:00-17:30**

Venue: Room 12b

Commission: 7

Chair: Prof. **Francis Gäbele**, Belgium

Rapporteur: Mr. **Marc Vanderschueren**, Belgium

TS89.1 Mr. **Jan Hallebro** (Sweden):  
Stakeholder Co-operation in Swedish Land Management and Land Information (0294)

TS89.2 Dr. **Tayfun Cay**, Mr. **Turgut Ayten** and Mr. **Fatih Iscan** (Turkey):  
An Investigation of Reallocation Model Based on Interview in Land Consolidation (0429)

TS89.3 Mr. **Eric Nyadimo** (Kenya):  
The Role of Private Sector in Land Adjudication in Kenya (0640)

TS89.4 Mr. **Dev Raj Paudyal** and Mr. **Rabin K. Sharma** (Nepal):  
Public Participation Approach for Land Adjudication - An Innovative Approach for Digital Cadastre in Nepal (0464)  
This paper has not been presented at the congress.

### **TS 90 – GIS and Land Administration**

Time: **Thursday 16:00-17:30**

Venue: Room Königsee

Commission: 7 and 3

Chair: Dr. **Joseph Forrai**, Israel

TS90.1 Mr. **Kim Joon-sik**, Dr. **Kang Sang-gu** and Mr. **Yun-Soo Choi** (Republic of Korea):  
Development of Mobile Cadastral Surveying System for Korean Cadastral Resurvey Project (0407)

TS90.2 Dr. **Rami Al-Ruzouq** and Ms. **Petya Dimitrova** (Jordan):  
Photogrammetric Techniques for Cadastral Map Renewal (0456)

TS90.3 Mr. **Oguz Kansu** and Mr. **Sezgin Gazioglu** (Turkey):  
The Availability of the Satellite Image Data in Digital Cadastral Map Production (0551)  
This paper has not been presented at the congress.

TS90.4 Mr. **Thomas Ferguson** (Bahamas):  
GIS Case Study for a Fiscal Cadastre and Improved Land Tenure in the Bahamas (0720)

### **Farewell Banquet**

Time: **Thursday 19:30 –**  
Venue: Hofbräuhaus, Munich

- Dress code: business suit

### **Posters (To be displayed from Monday to Thursday - Oral presentation at the stand as shown in the programme)**

#### **PS 1 – Commission 1 Posters**

n/a

#### **PS 2 – Commission 2 Posters**

Time: Poster presentations during the coffee break on Wednesday morning

PS2.1 Ms. **Kinga Wezka**, Mr. **Artur Adamek**, Mr. **Zbigniew Malinowski** and Mr. **Marcin Rajner** (Poland):  
Polish Geodetic Students Expeditions to the Horsund Fjord in Spitsbergen (0600)

PS2.2 Mr. **Carlos Alfredo Rodriguez Rojas** (Colombia):  
TOPOLAC – Latin American Topographical Network and the Caribbean (0225)

PS2.3 Mr. **Tahsin Yomralioglu** (Turkey):  
A Research Coding System for Land-Related Scientists: A Conceptual View (0519)

#### **PS 3 – Commission 3 Posters**

Time: Poster presentations during the coffee break on Wednesday afternoon

PS3.1 Dr. **Ali Yalcin**, Dr. **Fevzi Karsli**, Dr. **Mustafa Atasoy**, Dr. **Osman Demir** and Dr. **Selcuk Reis** (Turkey):  
Assessment of Landslide Environmental Impact Using Aerial Images (0292)

PS3.2 Dr. **Selcuk Reis**, Mr. **Volkan Yildirim** and Mr. **Halil Ibrahim Inan** (Turkey):  
Natural Hazard Management in Regional Base Using Geographical Information System (0550)

PS3.3 Mr. **Jair Silveira Silva Junior** and Dr. **Francisco José Ferreira** (Brazil):  
Gravimetry Applied to Water Resources and Risk Management in Karst Areas: A Case Study in Parana State, Brazil (0546)

PS3.4 Mr. **Taouss Abdelali** (Morocco):  
Development of a Topological Structure of 3D Data for the Analysis of Geological Models and Its Integration into Geographical Information System for the Geotechnical Natural Risk Management (0645)

PS3.5 Dr. **Rahmi Nurhan Çelik**, Mr. **Umut Utkan**, Mr. **Kerem Halıcioğlu** and Mr. **Örgür Avcı** (Turkey):  
Personal Navigation with the Combination of GPS, Mobile Phones and Printed Tourist Maps (0633)

PS3.6 Mr. **Kim Do Jun** and Mr. **Jang Byung-Tae** (Republic of Korea):  
The Interoperability of Location-Tracking Service Based on Geographic Information (0724)

PS3.7 Dr. **Lilian Pun-Cheng** and Prof. **Zhilin Li** (Hong Kong SAR, China):  
Optimal Path Finding Independent of Centerline Topology (0784)

PS3.8 Dr. **Murat H. Yilmaz**, Dr. **Selçuk Reis** and Dr. **Mustafa Atasoy** (Turkey):  
Detection of Spatial-Temporal Changes of Development Potential of Aksaray City Using Remote Sensing and GIS (0267)

PS3.9 Dr. **Ahmet Murat Turk**, Prof. **Turgut Uzel** and Mr. **Ahmet Anil Dindar** (Turkey):  
GIS and Introduction of Seismic Assessment Procedures (0632)

PS3.10 Mr. **Edward Eric Duncan** and Mr. **Ambrose Amoako** (Ghana):  
A GIS Application to Mineral Exploration in Ghana – A Case Study of the Ayanfuri Area (0759)

PS3.11 Mr. **Volkan Yildirim**, Dr. **Recep Nisanci** and Dr. **Selcut Reis** (Turkey):  
A GIS Based Route Determination in Linear Engineering Structures Information Management (LESIM) (0544)

PS3.12 Mr. **Shanan Mohamed Kheir** and Mr. **M. A. Gorani** (Sudan)  
UML Conceptual Framework for the Investment Potential in the Sudan (0955)

#### **PS 4 – Commission 4 Posters**

Time: Poster presentations during the coffee break on Tuesday afternoon

PS4.1 Dr. **Reha Metin Alkan**, Dr. **Yunus Kalkan** and Mr. **N. Onur Aykut** (Turkey):  
Sound Velocity Determination with Empirical Formulas & Bar Check (0566)

PS4.2 Mr. **Hussein Abdulmuttalib** (United Arab Emirates):  
Total Quality Measures for Environmental Coastal Monitoring Using Remote Sensing, Lidar Bathymetry, Radar Altimetry and GIS Techniques (0366)

PS4.3 Mr. **Isaac Boateng** (Ghana):  
Marine Cadastre: A Possible Tool for Effective Marine and Shoreline Management in Ghana (0401)

PS4.4 Dr. **Osman Demir**, Dr. **Cemal Biyik** and Mr. **Kamil Karatas** (Turkey):  
Determining the River Basin Changing Effects to the Property: Case Study in Trabzon Degirmendere River Basin of Turkey (0537)

#### **PS 5 – Commission 5 Posters**

##### PS 5.1 - RTK / CORS

Time: Poster presentations during the coffee break on Monday afternoon

PS5.1.1 Mr. **Tariq Al Barwani** (Canada):

BCACS-Providing Geo-Spatial Reference through GPS Network (0316)

PS5.1.2 Dr. **Mualla Yalcinkaya** and Mr. **Kamil Teke** (Turkey):  
Optimization of GPS Networks with Respect to the Accuracy and Reliability Criteria (0386)

PS5.1.3 Dr. **Kang Sang-Gu** and Dr. **Lee In-Su** (Republic of Korea):  
Accuracy Analysis of Geodetic Control Points Using GPS in Korean Island Zone (0403)

PS5.1.4 Mr. **Pasi Häkli** (Finland):  
Quality of Virtual Data Generated from the GNSS Reference Station Network (0520)

PS5.1.5 Dr. **Ayhan Ceylan**, Dr. **Ömer Mutluoglu** and Mr. **C. Özer Yigit** (Turkey):  
Cost and Accuracy Analysis of Detail Measurements by Real Time Kinematic GPS (RTK-GPS) (0693)

#### PS 5.2 - Measurement

Time: Poster presentations during the coffee break on Tuesday afternoon

PS5.2.1 Mr. **Tim Lemmon** (Australia) and Mr. **Chris van der Loo** (New Zealand):  
GPS Search for Advanced Total Station Operation (0296)

PS5.2.2 Mr. **Jorma Jokela** and Mr. **Pasi Häkli** (Finland):  
Current Research and Development at the Nummela Standard Baseline (0371)

PS5.2.3 Mr. **Peter Wasmeier** and Dr. **Karl Foppe** (Germany):  
A New CCD-based Technique for the Calibration of Levelling Rods (0375)

PS5.2.4 Ms. **Edinéia Aparecida dos Santos Galvanin**, Mr. **Aluir Porfino Dal Poz** and Ms. **Aparecida Doniseti Pires Souza** (Brazil):  
Laser Scanning Data Segmentation in Urban Areas by a Bayesian Framework (0481)

PS5.2.5 Mr. **Bronislav Koska**, Dr. **Jiri Pospisil** and Dr. **Martin Stroner** (Czech Republic):  
Innovations in the Development of Laser and Optic Rotating Scanner LORS (0560)

PS5.2.6 Prof. **Shattri Mansor**, Mr. **Biswajeet Pradhan**, Dr. **Abdul Rahman Ramli** and Dr. **Abdul Rashid Mohd Shariff** (Malaysia) and Dr. **K. Sandeep** (India):  
LIDAR Data Compression Using Second Generation Wavelets (0818)

#### PS 5.3 - Reference Frame

Time: Poster presentations during the coffee break on Tuesday afternoon

PS5.3.1 Mr. **Noureddine Kheloufi** (Algeria):  
Coordinates Transformation by "Zoning Method" for Parameters Computing between WGS84 and North Sahara (0252)

PS5.3.2 Mr. **Lawrence Layi Arinola** (Nigeria):  
Error Propagation in the Nigerian Geodetic Network: Imperatives of GPS Observations to Strengthen Network (0286)

PS5.3.3 Prof. **Erik Grafarend** (Germany) and Dr. **Francis Okeke** (Nigeria):  
Transformation of Conformal Coordinates of Type Lambert Conic from a Global Datum, (ITRS) to a Local Datum (Regional, National) (0584)

PS5.3.4 Mr. **Lars E. Engberg** and Mr. **Mikael Lilje** (Sweden):

Direct Projection – An Efficient Approach for Transformation between Three Dimensional Systems to Plane Systems (0670)

PS 5.4 - GNSS Processing and Applications

Time: Poster presentations during the coffee break on Wednesday afternoon

PS5.4.1 Prof. **Alireza Ardalan** and Mr. **Mostafa Delghandi** (Islamic Republic of Iran):  
Local Ionospheric Modeling Based on GPS Observations at the Permanent GPS Stations (0465)

PS5.4.2 Dr. **György Busics** and Mr. **Robert Farkas** (Hungary):  
GNSS Technology Developments in Point Position Fixing in Hungary (0303)

PS5.4.3 Mr. **Yuksel Boz** and Dr. **Ertan Gokalp** (Turkey):  
Robust Estimation of the Outliers in GPS Baseline Components (0361)

PS5.4.4 Dr. **Atinc Pirti** and Mr. **R. Cüneyt Erenoğlu** (Turkey):  
The Advantage and Disadvantage of Enhanced Strobe Correlator Multipath Rejection for Code and Carrier Phase (0529)

PS5.4.5 Dr. **José Ramón Rodríguez-Pérez**, Dr. **M. Flor Alvarez**, Mr. **Enoc Sanz Ablanado** and Mr. **Antonio Gavela** (Spain):  
Comparison of GPS Receiver Accuracies in Forest Environments – Practical Recommendations Regarding Methods and Receiver Selection (0556)

PS5.4.6 Mr. **Maxwell Ansah** (Ghana):  
Understanding GPS Processing and Results (0681)

PS5.4.7 Mr. **Metin Soycan**, Mr. **Taylan Ocalan**, Mr. **Burak Akpinar** and Mr. **Kutalmis Gumus** (Turkey):  
Investigation of Kinematic Relative Positioning Accuracy Using SP3 and Broadcast Ephemerides (0699)

PS5.4.8 Prof. **Francis Fajemirokun**, Prof. **Christian Ezeigbo** and Ms. **Abimbola Oyewusi** (Nigeria):  
Differential Positioning Using Promark X-CM GPS Receivers (0716)

PS5.4.9 Mr. **Simeon Katsougiannopoulos**, Dr. **Christos Pikridas**, Prof. **Dimitrios Rossikopoulos**, Prof. **Ioannis Ifadis** and Prof. **Aristidis Fotiou** (Greece):  
Tropospheric Refraction Estimation Using Various Models, Radiosonde Measurements and Permanent GPS Data (0725)

PS5.4.10 Mr. **Guido Gonzalez-Franco** and Mr. **Moreno Gomez** (Mexico):  
Center of Processing INEGI (0846)

PS5.4.11 Mr. **Antonio Hernández-Navarro** (Mexico) and Dr. **Tomás Soler** (USA):  
Rigorous Geodetic Point Positioning in Mexico (0705)

PS5.4.12 Mr. **Hichem Dekkiche**, Dr. **Salem Kahlouche**, Mr. **Hocine Abbas** and Mr. **Med Idir Kariche** (Algeria):  
Ionospheric Effect Modelling for Long-baseline Kinematic GPS Applications (0563)

PS 5.5 - Reference Frame Vertical

Time: Poster presentations during the coffee break on Wednesday afternoon

PS5.5.1 Mr. **Kemal Yurt** and Dr. **Ertan Gokalp** (Turkey):  
Spherical and Planar Approach in Determination of Local Geoid: Case Study in  
Trabzon/Turkey (0457)

PS5.5.2 Dr. **Francis Okeke** (Nigeria):  
Comparisons of SRTM Derived DEM vs. 1:50,000 Topographic Map Derived DEM of Part  
of South Eastern Nigeria (0587)

PS5.5.3 Dr. **Hakan Kutoglu** (Turkey):  
Use of Artificial Neural Network Method for Transformation of GPS Defined Elipsoidal  
Heights to Geoid Referenced Heights (0662)

PS5.5.4 Ms. **Sibel Uzun** and Ms. **Leyla Çakır** (Turkey):  
The Reliability of Orthometric Height Determination from GPS Observations by Surface  
Fitting (0686)

#### PS 5.6 - Geodetic Infrastructure and Theory

Time: Poster presentations during the coffee break on Thursday morning

PS5.6.1 Dr. **Ron Adler** and Mr. **Yosef Melzer** (Israel):  
Present and Future Geodetic Applicational Challenges in Israel (0322)

PS5.6.2 Prof. **Alireza Ardalan** and Mr. **Majid Nazari** (Islamic Republic of Iran):  
The Effect of Plumb Line Curvature on the Vertical Deflection Components (0627)

PS5.6.3 Ms. **Sonja Bogatin** and Mr. **Dušan Kogoj** (Slovenia):  
Application of Kalman Filtering in Terrestrial Geodesy (0275)

PS5.6.4 Mr. **Cuneyt R. Erenoglu**, Dr. **Serif Hekimoglu** and Dr. **Atinc Pirti** (Turkey):  
Usage of Robust Statistics in Geodetic Networks (0547)

PS5.6.5 Mr. **Nazan Yilmaz** and Prof. **Celalettin Karaali** (Turkey):  
Positioning with Astronomic and Geodetic Method (0554)

PS5.6.6 Mr. **Artur Oruba** and Dr. **Janusz Bogusz** (Poland):  
Automatic Earth Tides Observation System in Astrogeodetic Observatory in Jozefoslaw  
(Poland) (0631)

#### PS 5.7 - Mobile Mapping

Time: Poster presentations during the coffee break on Thursday morning

PS5.7.1 Mr. **Yashar Balazadegan**, Mr. **Siavash Hosseini** and Mr. **Mohammad Rajabi**  
(Islamic Republic of Iran):  
GPS/INS Integration Using Kalman Filtering for Navigation (0301)

PS5.7.2 Ms. **Priyanka Aggarwal**, Mr. **Yong Yang**, Dr. **Xiaoji Niu** and Dr. **Naser El-Sheimy**  
(Canada):  
Cost-effective Testing and Calibration of Low Cost MEMS Sensors for Integrated  
Positioning, Navigation and Mapping Systems (0617)

PS5.7.3 Dr. **Xiaoji Niu**, Mr. **Taher Hassan**, Mr. **Ellum Cameron** and Dr. **Naser El-Sheimy**  
(Canada):  
Directly Georeferencing Terrestrial Imagery Using MEMS-based INS/GNSS Integrated  
Systems (0619)

PS5.7.4 Dr. **Luis Augusto Koenig Veiga** and Dr. **Pedro Faggion** (Brazil):  
Automatic Field Mapping Systems: A Different Concept of Surveying (0647)

PS 5.8 - Photogrammetry and Remote Sensing

Time: Poster presentations during the coffee break on Thursday afternoon

PS5.8.1 Dr. **Daniel Carneiro Silva** (Brazil):  
Non-Metric Digital Cameras Images Versus High Resolution Satellites Images in Regions with High Cloudiness (0285)

PS5.8.2 Mrs. **Eminnur Ayhan**, Ms. **Özlem Erden**, Ms. **Cülcin Atay** and Ms. **Esra Tunc** (Turkey):  
Digital Orthophoto Generation with Aerial Photos and Satellite Images and Analyzing of Factors which Affect Accuracy (0552)

PS5.8.3 Mr. **Omar Hadj Sahraoui**, Mr. **Benali Hassaine** and Ms **Chahira Serief** (Algeria):  
Radar Interferometry with SARSCAPE Software (804)

PS5.8.4 Dr **Roberto Torra** (Argentina):  
Land Use Employing Satellite Image of Low Spatial Resolution: A Case in the Northeastern Argentina Using Landsat TM 5 (Thematic Mapper) and Landsat ETM 7 (Enhanced Thematic Mapper) Multispectral Optical Sensors (0823)

**PS 6 – Commission 6 Posters**

Time: Poster presentations during the coffee break on Wednesday afternoon

PS6.1 Mr. **Cemal Ozer Yigit** and Prof. **Cevat Inal** (Turkey):  
An Improved Programme for Deformation Analysis of Vertical Networks (0331)

PS6.2 Prof. **Cevat Inal** and Mr. **Cemal Ozer Yigit** (Turkey):  
S Transformation and  $\theta_2$  Criterium Approach at Determination of Horizontal Deformations (0332)

PS6.3 Ms. **Stephanie Boehm** and Prof. **Hansjörg Kutterer** (Germany):  
Modeling the Deformations of a Lock by Means of Neuro-Fuzzy Techniques (0597)

PS6.4 Mr. **Serdar Erol**, Mrs. **Bihter Erol** and Dr. **Rahmi Nurhan Çelik** (Turkey):  
Monitoring and Analyzing Movements of Geodetic Monuments (0601)

PS6.5 Prof. **Kazimierz Czarnecki** (+), Dr. **Janusz Walo**, Mr. **Ryszard Szpunar**, Mr. **Tomasz Olszak** and Dr. **Andrzej Pachuta** (Poland):  
Local Geodynamic Network for Safety of Engineering Objects (0602)

PS6.6 Ms. **Christiana Mitsakaki**, Mr. **Michalis Sakellariou**, Ms. **Eugenia Lytrivi** and Mr. **Theodoros Xenakis** (Greece):  
Static Stress Changes and Fault Interactions in Western Greece (Ionian Islands and Gulf of Corinth) (0476)

PS6.7 Mr. **Hakan Yavasoglu**, Dr. **Ergin Tari**, Mr. **Mehmet Ugur Altin**, Dr. **Semih Ergintav** and Dr. **Okan Tuysuz** (Turkey):  
GPS Measurements on the Western Marmara Segment of the North Anatolian Fault System (0577)

PS6.8 Mr. **Ryszard Szpunar** and Dr. **Janusz Walo** (Poland):  
Sub-centimeter Displacements Monitoring of Engineering Objects Applying GPS-RTK  
Technique (0604)

### **PS 7 – Commission 7 Posters**

Time: Poster presentations during the coffee break on Thursday morning

PS7.1 Dr. **Tayfun Cay**, Dr. **S. Savas Durduran**, Dr. **Ali Erdi**, Dr. **Gülgün Ozkan** and  
Dr. **Saban Inam** (Turkey):  
GIS Update Problems of Cadastral 2014 Studies in Turkey (0509)

PS7.2 Mr. **Nicky Nzioki** (Kenya):  
Implementing Land Policy Reforms in Eastern African Countries: The Case-study of the  
Kenya Land Reform Policy (0844)

PS7.3 Ms. **Li Juan** and Dr. **Zhu Qing** (China, P. R.) and Dr. **Tor Yam Khoon**  
(Singapore):  
The 3D Data Integration Methods of 3D GIS and 3DCAD (0745)

PS7.4 Ms. **Nsemiwe Nsama** (Zambia):  
Gender Dimensions of Land Customary Inheritance under Customary Tenure in Zambia  
(0731)

PS7.5 Mr. **Jad Jarroush**, Mr. **Ron Adler** and Mr. **Marwan Zeibak** (Israel):  
Cadastre Surveys with Real Time Kinematic GPS (RTK) as a Basis for Future Survey  
Regulations (0258)

PS7.6 Mr. **Park Sung-Seok**, Dr. **Kang Sang-Gu** and Mr. **Ko Jeong-Seok** (Republic of  
Korea):  
A Study on Practical Use of RTK-GPS and Mobile GIS for Cadastral Surveying (0489)

PS7.7 Mr. **Dev Raj Paudyal** (Nepal):  
Pro-Poor Land Management System: A Study Considering Dynamic Aspect of Land  
Tenure in Nepal (0461)

PS7.8 Mr. **Kamil Karatas**, Dr. **Cemal Biyik** and Dr. **Osman Demir** (Turkey):  
The Underground Cadastre and Its Implementations in Turkey (0536)

PS7.9 Mr. **Epifanio Lopez** (The Philippines):  
Political Boundary Surveying in the Philippines: A Case Study in a Mount Pinatubo Lahar-  
Covered Municipality (0291)

PS7.10 Prof. **Maricel Palamariu**, Prof. **Ionita Padure** and Mr. **Mircea Puscas**  
(Romania):  
Possibilities of Avoiding Natural Calamities and Reducing Their Outcomes (0433)

PS7.11 Mr. **Ganesh Prasad Bhatta** (Nepal):  
Technical Deficiencies and Human Factors in Land Disputes in the Context of Nepalese  
Cadastral Surveying (0352)

PS7.12 Ms. **Orit Shwarts** and Mr. **Moshe Felus** (Israel):  
The Surveyor's Role in the Development of an Urban Construction Plan in Israel (0359)

PS7.13 Dr. **Tayfun Cay** and Mr. **Fatih Iscan** (Turkey):  
Optimization in Land Consolidation (0372)

PS7.14 Mr. **Nam Kwanmo** and Mr. **Kim Kwagsu** (Republic of Korea):  
A Research on Supporting System of Cadastral Surveying Data under Wireless Internet  
(0406)

PS7.15 Mrs. **Rebecca Sittie** (Ghana):  
Land Title Registration – The Ghanaian Experience (0848)

PS7.16 Dr. **Matilda Esi Fiadzigbey** (Ghana):  
Customary Land Administration in Ghana – Challenges and Prospects (0849)

PS7.17 Mr. **Chinzorig Batbileg** (Mongolia):  
Land Administration Institutional Development in Mongolia (0850)

PS7.18 Mr. **Roland Klaus** and Mr. **Ibrahim Usman Jibril** (Nigeria):  
Land Administration as Tool for Good Governance: The AGIS Way (0851)

PS7.19 Mr. **James Dadson** (Ghana):  
Optimizing Land Asset Management in Ghana – A Shared Responsibility and Recipe for  
Good Governance (0861)

PS7.20 Mr. **Tony M. Haroen** (Indonesia):  
Land Management and Land Consolidation in Bali (0973)

#### **PS 8 – Commission 8 Posters**

Time: Poster presentations during the coffee break on Thursday afternoon

PS8.1 Mr. **Peter Olawuni**, Mr. **Albert Abegunde** and Mr. **Samson Adeyinka** (Nigeria):  
An Analysis of Spatial Variation of Housing Quality in Nigeria Urban Centres: The GIS  
Approach (0642)

PS8.2 Dr. **Sevkiye Sence Turk** (Turkey):  
Basic Conditions for Efficient Application of Land Readjustment Method (LR) (0614)

PS8.3 Mr. **Lars Emil Vindfeld Moeller** and Ms. **Line Traeholt Hvingel** (Denmark):  
The Natura 2000 Network and Compensatory Measures (0814)

PS8.4 Dr. **Sevkiye Sence Turk** (Turkey):  
The Critical Overview to the Legal Structure Related with Urban Transformation in Turkey  
(0616)

PS8.5 Mrs. **Frances Plimmer**, Mrs. **Gaye Pottinger** and Prof. **Brian Goodall** (United  
Kingdom):  
Accessibility Issues for Heritage Properties: a Frame of Mind? (0269)

#### **PS 9 – Commission 9 Posters**

Time: Poster presentations during the coffee break on Thursday afternoon

PS9.1 Ms. **Sabina Zrobek** and Mr. **Ryszard Zrobek** (Poland):  
Transformation of Land Perpetual Usufruct in Ownership Right in Poland (0803)

PS9.2 Dr. **Zoltán Gaál**, Dr. **Gergely Tóth**, Dr. **József Vass**, Mr. **István Nikl** and Mr.  
**Ferenc Speiser** (Hungary):  
Information Technology of the D-e-Meter the Intelligent Land Evaluating System (0239)

PS9.3 Dr. Mrs. **Gaye Kizilsu** (Turkey):  
Mortgage System and the Increasing Importance of Real Estate Evaluation in Turkey  
(0494)

PS9.4 Dr. **Vida Maliene** and Ms. **Jolanta Ruzinskaite**, (United Kingdom):  
Development of Sustainable Dwelling in Lithuania (0968)

### **PS 10 – Commission 10 Posters**

Time: Poster presentations during the coffee break on Thursday afternoon

PS10.1 Ms. **Sara Wilkinson** (Australia) and Dr. **Mike Hoxley** (United Kingdom):  
Building Surveying in the UK and RICS Education Reform: Where Are We Now? (0889)

## **Friday 13 October 2006**

### **FIG President's Meeting**

Time: **Friday, 13 October 9:00-11:00**

Venue: Forum 8, Holiday Inn City-Center, Hochstrasse 3, Munich

- For Presidents of FIG member associations, by invitation only

### **FIG General Assembly – Second Session**

Time: **Friday, 13 October 11:30-13:00**

Venue: Main Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

- For FIG members
- Open for observers

### **Closing Ceremony**

Time: **Friday, 13 October 13:30-14:30**

Venue: Main Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

Mr. **Thomas Gollwitzer**, FIG Congress Director:  
Opening and Information about FIG 2006

Prof. **Holger Magel**, FIG President:  
Shaping the Change - Congress Summary (1117)

Introduction of new Commission Chairs

Appreciation to the Organising Committee

Flag Ceremony (DVW and ISA)

FIG Fanfare

Closing of the Congress

### **FIG 2010 Party**

Time: **Friday, 13 October 14:30-16:30**

Venue: Ballroom, Holiday Inn City-Center, Hochstrasse 3, Munich

- For all participants – registration required