

International Federation of Surveyors Fédération Internationale des Géomètres Internationale Vereinigung der Vermessungsingenieure

Commission 5

Positioning and Measurement (2007-2010) www.fig.net/figtree/commission5

Newsletter - December 2007 Edition

MESSAGE FROM Rudolf Staiger COMMISSION 5 CHAIR

Commission 5 Delegates.....

I would like to take this opportunity to wish you all a very Merry Christmas and a prosperous New Year.

I also hope you enjoy this newsletter which outlines our activities at the Regional Conference held in San José - Costa Rica.

I look forward to your active participation in 2008!

Cheers,

6th FIG Regional Conference Coastal Areas and Land Administration -Building the Capacity 12-15 November, San José, Costa Rica

The FIG Regional Conference held in San Jose, Costa Rica attracted close to 250 participants. 100 of these were international guests and the remaining delegates were local or regional surveyors.

There were 3 plenary sessions on the conference theme "Coastal Areas and Land Administration - Building the Capacity",

and 21 technical sessions comprising of approximately 90 papers / presentations. Commission 5 facilitated 3 technical sessions and these focused primarily on positioning and measurement infrastructure to support the triangular concept between "land administration, coastal areas and building capacity". The sessions were -



TS 2 - GNSS CORS Fundamentals, Chaired by Prof. Rudolf Staiger

- Dr-Ing. Volker Schwieger (Germany):
 GNSS CORS Infrastructure and
 General Principles
- Mr Mikael Lilje (Sweden): Linking GNSS, CORS and Reference Frames
- Mr David Martin (France): Standards and Best Practice for GNSS and CORS
- Mr Matt Higgins (Australia): GNSS, CORS and Positioning Infrastructure -Business and the Future



TS 5 - Operational GNSS and CORS Infrastructure, Chaired by Dr Volker Schwieger

- Ms Sonia Maria Alves Costa, (Brazil): SIRGAS Operations and the Regional LOCAL CORS Network Scene
- Prof. Cárdenas Contreras Andrés, Ing. Raul Ernesto Martinez Cano and Ing. Jorge Ivan Ramirez Sanabria (Colombia): Control Geodesico y Sig de un Tramo del Sistema Ferroviario de Colombia
- Mr Dave Doyle (USA): Improved Access to an Accurate Geodetic Reference Frame in the Caribbean/Center America Region
- Dr Neil Weston (USA): NGS and OPUS Activities
- Mr Neal Toso (Leica Geosystems):
 Overview of Various GNSS CORS
 Networks



TS 08 - Positioning and Measurement, Chaired by Mr Rob Sarib

- Dr Volker Schwieger (Germany) : Positioning within the GSM Network
- Mr Carlos Rodriguez (Puerto Rico) : Virtual Machines for GPS Real Time Networks
- Mr Joe Sass (United States): Low Cost, High Accuracy, GNSS Survey & Mapping
- Dr Ivo Milev (Germany): DGNSS Based Multisensor Navigator for Railway State Monitoring

All three sessions attracted 80 plus delegates and on occasions there was 'standing room' only. The presentations were performed in either English or Spanish and the simultaneous translation was done professionally and did not hinder the flow of the sessions. Copies of the papers and presentations will be available on the FIG website - http://www.fig.net/



The topics pertaining to GNSS CORS infrastructure were once again the most popular. Issues raised at these forums appeared to be no different to those which are being experienced or have been dealt with in various countries around the world. For example, issues discussed were - the role of FIG to support such GNSS CORS activities in the region, communications for GNSS infrastructure, resourcing of such infrastructure, convincing industry to

acknowledge and accept the need for GNSS CORS networks, GNSS calibration and testing, linking GNSS CORS networks to a reference frame, and various business management and data models.

As result of these sessions Commission 5 have produced a series of fundamental fact sheets about GNSS CORS networks and these will be available on the FIG Commission 5 website, (web location http://www.fig.net/commission5/wg52/ma nuals.htm) for all delegates to download, read and comment on. Also for the FIG Stockholm Working week in June 2008, Commission 5 will now devise a technical program to not only cater for the standard technical positioning and measurement topics but also plan to have more focussed sessions **GNSS** relating communications navigation industry, testing, facilitate calibration / and network providers and manufacturers issues.



The Commission 5 Steering Committee also convened a meeting in Costa Rica to progress its work plan for the Stockholm FIG Working Week and to perform their normal administrative duties to facilitate the management of the Commission. Minutes from this meeting detailing the activities will be available for delegates to download and view on the FIG Commission 5 website-

http://www.fig.net/commission5/steering_committee/steeringcommittee.htm

Commission 5 Chair - Rudolf Staiger and Vice Chair for Administration Rob Sarib also attended the Advisory Committee of Commission Officers (ACCO) meeting. The meeting agenda and items discussed concerned the Stockholm FIG Working Week, future conferences, the up coming elections relating to Commission Chairs and Vice Presidents, FIG website upgrade and FIG Council matters. One of the other topics discussed, which is highly relevant to Commission 5, was the Peer Review System (PRS) which will be implemented for the Stockholm FIG Working Week in June 2008. Briefly, authors who desire their papers to be reviewed for the Stockholm Working Week will need to submit their 'full' paper by 31st January 2008; the paper review will be a 'double blind' process; authors need to be registered for the conference; and authors will be notified of the review outcome before the official publishing date of the all papers / proceedings.



Commission 5 was 'deeply impressed' with the hospitality shown by the Costa Ricans. There were several fantastic social events which the Commission 5 delegates participated in with their usual vigour and joyous spirit, and these were -

- the Welcome Cocktail party at the main hall of the head quarters of the Colegio Federado de Ingenieros y de Arquitectos de Costa Rica (CFIA)
- the Cultural Evening room at the Pueblo Antiquo (Old Town)



- the Farewell Dinner at the conference hotel, Ramada Herradura, main ball room, and
- the visit to the Poás Volcano / Crater and the coffee plantation, Café Britt.



In summary, despite travel / visa issues experienced by some delegates, the FIG Regional conference was a 'regional' success. Holding this conference has galvanised and brought together a spirit of collaboration in the region. This was evident in FIG President Stig Enemark's

closing speech as he announced that a working group will be now be established by several countries in the region to look at holding a surveyors conference in Costa Rica in September 2008 to address regional surveying issues. FIG has in principle agreed to support this conference.



In addition, President Enemark announced the Costa Rica Declaration and that this will be launched at the Stockholm FIG Working Week. This declaration will investigate -

- developing the concept of Integrated and Pro Poor Coastal Zone Management (CZM)
- identifying the problems and issues related to Costa Rica and the Central America region
- analysing these problems in the context of Pro Poor CZM
- looking at recommendations and ways forward.

From a Commission 5 perspective this regional conference re-emphasised and re-enforced the important role that the 'technical' component has with respect to land administration. That is, for land administrators to make comprehensive decisions they need reliable and accurate

information which infers that quality geodetic, hydrographic reference frames and / or land information infrastructure are essential requirements to underpin land registration systems, data collection, data analysis, spatial and land use planning models. The conference also highlighted that to build such infrastructure in this region it was necessary that partnerships need to be developed between public, private and local authority entities.

The quote which summarises Commissions 5 thoughts on this regional conference comes from Dave Doyle (USA - National Geodetic Survey) and he stated -

"Good co-ordination begins with good co-ordinates".



OTHER Commission 5 News

2008 FIG WORKING WEEK and XXXI General Assembly 14 -19 June Stockholm - Sweden

The next FIG Working Week will be held the 14 - 19th of June in Stockholm, the capital of Sweden. FIG Commission 5 will have a strong program so it is now time to start thinking about relevant papers to be presented at the Working Week. The final date for abstracts and full papers (ONLY

for those who would like to have peerreviewed papers) is the 31st of January. More information about the FIG Working Week can be found at -

www.fig.net/fig2008

13th FIG Symposium on Deformation Measurements and Analysis 12-15 May, Lisbon, Portugal

FIG WG 6.1 with the 4th IAG Symposium on Geodesy for Geotechnical and Structural Engineering (SC 4.2) Measuring the Changes. Web site:

http://measuringchanges.lnec.pt

21st International Geodetic Students
Meeting - ISGM 2008.
May-June, Valencia, Spain

1st International Conference on Machine
Control & Guidance
24-26 June, Zurich, Switzerland

For more details please see Programme at web site:

http://www.mcg.ethz.ch

If you would like to circulate Commission 5
NEWS to all our members please email
your item for consideration to the Vice
Chair Administration -

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