Report for the 27th General Assembly FIG Working Week in Athens, Greece, May 22-27, 2004

FIG Commission 6 – Engineering Surveys Report on Activities 2003–2004

1. General

FIG Commission 6 deals with activities concerning

- Acquisition, processing and management of topometric data and of all related information throughout the life cycle of a project;
- Development and implementation of adequate survey methods in Engineering projects;
- Metrology, quality control and validation for civil construction and manufacturing of large objects;
- Deformation monitoring, analysis and interpretation;
- Prediction of deformation and movements in Engineering projects, mines and areas of geological hazard.

The goals of Commission 6 are to

- Promote the knowledge, skills and abilities of surveyors in civil and industrial works within the various professional fields of Engineering;
- Support all development and multidisciplinary expertise leading to integrated survey methods, using various instruments and sensors and combining geometry with all other data relevant to each Engineering problem;
- Provide a forum for exchange of knowledge related to Engineering analysis of survey data for the study of structures;
- In addition to the links with related Working Groups of IAG, ISM and ISPRS, look for possible connections within organizations of civil, structural and mechanical engineers and within those dealing with metrology and quality control at the national and international level.

2. Working Groups

A substantial part of the results from Commission 6 is the holding of symposiums and seminars within professional specific fields. In general, the number of participants to these seminars is high and therefore the goal of knowledge sharing has been obtained.

Each working group is during the period 2002 - 2006 responsible for one or two Symposium for representing results in the relevant field of theory and practical experience.

Working Group 6.1 – Deformation Measurement and Analysis

Chair: Adam Chrzanowski (Canada); Vice-chair Cecilia Whitaker (USA)

The main activity in the period has been the 11th International Symposium on Deformation Measurements, Santorini, Greece, 25-28 May 2003. Stathis C. Stiros has been chairing the organizing committee for this Symposium.

This symposium organized by FIG Commission 6 working group 6.1 on Deformation Measurement has the longest tradition in FIG as a Commission organized event on a certain topic with the first Sympoisum in 1975. This time this symposium attracted more than 130 participants from 29 countries – major national groups represented were Polish, Italian and, of course, Greek. Participation of more than 15 delegates, among them students and scientists from less developed countries became possible through grants from the sponsors of the symposium.

The 12th International Symposium on Deformation Measurements has been planned to take place in Qingdao, China, September 12-15, 2005, hosted by the Shandong University of Science and Technology.

Working Group 6.2 – Engineering Surveys for Industry and Research

Chair: Thomas Wunderlich (Germany); Vice-chair: Alojz Kopacik (Slovak)

The working group is co-sponsoring 14th International Conference on Engineering Surveying, 15 - 19 March 2004, Zürich, Schwitzerland, with a special tutorial on Laser scanning. The special focus in the promising field of Terrestrial Laser Scanning will be active, with preparation on a special Laser Scanning event I Germany January 2005.

As a joint event for working group 6.2 and 6.3 the planning of INGEO 2004 and FIG Regional Central and Eastern European Conference on Engineering Surveying, Bratislava, Slovakia, November 11-13, 2004 has been a major activity in this period, with the 1. Announcement being published ultimo 2003.

WG6.3 was responsible for a Technical Session on the Working Week in Paris.

Working Group 6.3 – Engineering Survey Data Bases and Facility Management

Chair: Lothar Gründig (Germany); Vice-chair Hande Demirel (Turkey)

As a joint event for working group 6.2 and 6.3 the planning of INGEO 2004 and FIG Regional Central and Eastern European Conference on Engineering Surveying, Bratislava, Slovakia, November 11-13, 2004 has been a major activity in this period, with the 1. Announcement being published ultimo 2003.

WG6.3 was responsible for a Technical Session on the Working Week in Paris.

Working Group 6.4 – Engineering Surveys for Construction Works and Structural Engineering

Chair: Gethin Wyn Roberts (UK); Vice-chair: Jin Fengxiang (China)

Beside the presenting of results on the WG6.1 Symposium in Santorini, WG6.4 has as a major activity been planning The 1st International Symposium on Engineering Surveys for Construction Works and Structural Engineering organised by FIG Commission 6 to be held in Nottingham, United Kingdom, 28 June – 1 July 2004. The Symposium will be hosted by the Institute of Engineering Surveying and Space Geodesy, University of Nottingham. In addition, there will be a workshop held as part of the Special Task Force 6.1.1 established under Working Group 6.1, "Measurements and Analysis of Cyclic Deformations and Structural Vibrations".

3. Events 2003 – 2004

- FIG Working Week, 13-17 April 2003, Paris (Commission 6 responsible of 2 Technical sessions)
- 11th International Symposium on Deformation Measurements, Santorini, Greece, 25-28 May 2003;
- 14th International Conference on Engineering Surveying, Zürich, Switzerland, 15-19 March, 2004, co-sponsored by WG 6.2

4. Calendar of forthcoming Events

2004

- FIG Working Week, Athens Greece 22-27 May 2004 (Commission 6 responsible of 3 Technical Sessions)
- 1st International Symposium on Engineering Surveys for Construction Works and Structural Engineering, Nottingham, United Kingdom, 28 June 1 July 2004.
- 3rd FIG Regional Conference in Jakarta, Indonesia, October 3-7 2004;
- INGEO 2004 and FIG Regional Central and Eastern European Conference on Engineering Surveying, Bratislava, Slovakia, November 11-13, 2004

2005

- FIG Working, Week, Cairo, Egypt, 16-21 April 2005;
- 12th International Symposium on Deformation Measurements, Qingdao, China, September 12-15, 2005;
- 7th conference on Optical 3-D Measurement Techniques, Vienna, Austria, October 3-6, 2005, co-sponsored by WG 6.2 and WG 6.4;

Svend Kold Johansen

Chair, FIG Commission 6 February 2004

Commission web site: http://www.fig.net/figtree/commission6/index.htm