

**Report for the 23rd General Assembly
FIG Working Week in Prague, 22-26 May 2000**

COMMISSION 6 – ENGINEERING SURVEYS

1. Activities of the year

The Commission 6 programme of specific or related meetings keeps being very active. The main events between FIG Working Weeks 1999 and 2000 have been:

- A dedicated session of WG6.5 (Facility Management Systems) was included in the Turkish-German Joint Geodetic Days, held in Istanbul 1-4 June. This Symposium was organised by Prof. O. Altan from Istanbul Technical University and Prof. L. Gruendig from Technical University Berlin and attracted 140 participants from 10 countries. It covered a wide range of scientific areas with special emphasis on photogrammetry, planning, GIS and Engineering Surveys, including one session dedicated to Facility Management. The Symposium with its motto "Towards a Digital Age" was very informative and stimulating and attracted a large number of scientists and practising engineers from Middle and especially Eastern Europe.
- The 9th International Symposium on Deformation Measurements was organised by WG 6.1 (Deformation Measurement and Analysis) and hosted by the Institute of Geodesy of the University of Warmia and Masuria in Olsztyn, Poland, 25-28 September. The symposium focused on the interdisciplinary approach to deformation, monitoring and analysis. The symposium was attended by a number of non-geodetic specialists, namely geomechanic specialists. This added the flavour of the interdisciplinary co-operation. Dr. W. Welsch of Germany presented a report of the ad hoc committee of WG 6.1 on Classification and Terminology of Modelling Dynamic Systems. The work of the ad hoc committee will continue with the input obtained at the 9th Symposium. Proceedings of the symposium will be published by Polish colleagues in March 2000. Late in the fall of 1999, WG 6.1 started preparations to the next international symposium. Metropolitan Water District of Southern California agreed to host this 10th symposium in Anaheim, California, 19-22 March 2001. Preparations are under way and the first circular has already been widely distributed.
- The 6th International Workshop on Accelerator Alignment (IWAA) was hosted and organised by the European Synchrotron Radiation Facility (ESRF), Grenoble (France), 18–22 October, with the joint support of FIG WG 6.3 (High Precision Metrology for Large Scientific Equipment) and IAG Special Commission 4 (Prof. H. Kahmen). It gathered 100 people and covered a large scope of achievements and of instrumental development. In this specialised field of high precision metrology, accuracy requirements for linear colliders are within a few micrometers, and new instruments and methods are successfully tested in some HEP (High Energy Physics) laboratories. The proceedings of the workshop will be included in the IWAA CD-ROM, and the next one will take place in Japan in 2001. A wish expressed at this meeting will lead WG6.2 (Special Equipment for Industrial & Industrial Applications) and WG6.3 (High Precision Metrology of Large Scientific Equipment) to organise a specific seminar on Hydrostatic Levelling Systems (HLS). This new FIG-C6/IAG-SC4 joint meeting will be held in CERN, Geneva, 9-11 October 2000.

- The international symposium "Modern Information and GPS Technology - Aspects and Implications of Their Application" was held in Sofia 11-12 November 1999. It was co-sponsored by the International Federation of Surveyors (FIG), the International Society for Photogrammetry and Remote Sensing (ISPRS), the International Cartographic Association (ICA), the Union of Surveyors and Land Managers in Bulgaria (USLMB) and the Geodetic Institute of the University of Hanover (GIUH). The programme covered the exceptional potentialities of GPS techniques combined with that of information technologies. Their great scope of unexpected applications, their need for a permanent information about the up-to-date state of the art, the trends of their development as well as their interdisciplinary use were reviewed and discussed in this symposium. Proceedings will be available via Prof. Georgi Milev, USLMB, 108 Rakovski street, PO Box 431, 1000 Sofia, Bulgaria.
- As for railway construction and maintenance, a user/producer interaction meeting took place in the Symposium organised in Beijing, 15-18 December 1999, by the China Ministry of Railways and the International Union of Railways (UIC). Session I "Future of fixed installations management in railway companies" included two contributions about the use of co-ordinates for track construction support and was very successful - showing the important saving potential at different levels of engineering surveys (rail construction, track calculation, navigation, etc.). It is hoped that a more extensive joint session UIC - FIG WG 6.4 (Transportation and Utility Lines) be organised in the near future on such railway-related subjects.
- After the very interesting symposium on Engineering Surveys held in Bratislava in October 1998, it is also worth to mention that the related INGEO'98 proceedings have been published and are available via the Slovak University of Technology, Vydavateľstvo STU, Bratislava.

2. Forthcoming events, in preparation

The main meetings already planned for years 2000 and 2001 are:

- **XIII International Course on Engineering Surveying**, Munich, 13–17 March 2000 , co-sponsored by FIG Commissions 5 and 6;
- **Joint Seminar of FIG Commissions 2, 4, 5, 6 and 7**, Malta, 18–21 September 2000;
- **Hydrostatic Levelling Systems seminar**, CERN, Geneva, 9-11 October 2000, co-sponsored by FIG Commission 6 (WG 6.2 & 6.3) and IAG Special Commission 4;
- **10th International Symposium on Deformation Measurements**, Anaheim, California, USA, 19-22 March 2001, sponsored by FIG Commission 6 (WG 6.1);
- **5th Conference on Optical 3-D measurement techniques**, Vienna, 1-3 October 2001, co-sponsored by FIG Commission 6 (WG 6.2), IAG Special Commission 4 and ISPRS;
- **Facility management systems, transportation and utility lines**, Berlin, 11-13 October 2001, sponsored by FIG Commission 6 (WG 6.4 & 6.5);
- **7th International Workshop on Accelerator Alignment**, JASRI Lab.(Japan), 2001.

Commission 6 is also considering a possible workshop on Special Surveying Techniques for Construction Works, in connection with CIB. The links with ISM are also being strengthened, and contacts have been taken for a closer collaboration.

Michel Mayoud,
 Chair, FIG Commission 6, Engineering Surveys
 E-mail mayoud@cern.ch
 2 March 2000