

## **Report on the ISO/TC 172/SC 6 Meeting Gaithersburg, USA, 27-29 September 2004**

The meeting was held at the National Institute of Standards and Technology (NIST), where Mr. Charles F. Fronczek welcomed very friendly all participants and provided an excellent infrastructure for this event.

As used, the conference was well prepared by the acting chairman Mr. Karl Zeiske and the secretary Mr. Peter Scheibli. Both will complete their collaboration within SC6 on conclusion of the year 2004.

Therefore under agenda item 3 Mr. **René Scherrer** of Leica Geosystems Ltd., Heerbrugg, Switzerland was nominated as **new chairman** of ISO/TC 172/SC 6 for the period **2005 until 2010**. As well the **new secretary** Mr. **Nils Tonascia**, Swiss Association for Standardisation, SNV, Winterthur, Switzerland was introduced at this meeting.

Besides numerous procedural topics the following information associated with standardisation is worthwhile to report on:

**ISO/DIS 12858-3** “Optics and optical Instruments - Ancillary devices for geodetic instruments – Part 3 **Tribrachs**” was approved and comes now in the final stage (FDIS). Remarkable is that this standard contains for the first time all geometric information and mechanical properties concerning both centring **systems Wild** (Leica) and **Zeiss**.

Just as well **ISO/DIS 17123-5** “**Electronic tacheometers**” and **ISO/DIS 17123-7** “**Optical plumbing instruments**” were accepted for the approval procedure FDIS respectively for final publication.

Everybody who is interested in the DIS should contact me.

As expected, the proposal **ISO/NP 17123-8** “Field procedures for testing geodetic and surveying instruments – **GNSS field measurement systems in real-time kinematic (RTK)**” aroused an intensive discussion. Finally both proposed methods, the simplified and full test procedure were abandoned. On the basis of a **new**, by the Japanese delegation elaborated **proposal the simplified procedure** was re-determined. The principle will be, to perform GPS measurements on a short baseline (only a few meter) and to swap the antennas. The method has the advantage simply to check the RTK properties and to detect potential antenna offsets.

For the **full test procedure a modified configuration** of three rover stations (with three known distances) and an additional setup of an approximate 300 – 500 m remote reference station will give enough potential to design a reasonable accuracy test.

SC 6 appointed Dr.-Ing. Wolfgang Schauerte (Germany) as Project Leader with the task to elaborate a **revised draft (CD)**, based on the contributions of the discussion. The deadline for delivering is **January 31<sup>st</sup> 2005**.

That means that we should await within FIG C5 the new proposals before starting the evaluation. As soon as the CD will be available I will distribute it.

Already here I want to mention that the contributions coming from the FIG representation were fully accepted respectively adopted.

Second day of the meeting started with an extensive representation by **Dr. W. Tyler Estler** of NIST on “**The Expression of Uncertainty in Measurement**” (International Symposium). It

was an excellent 4 hours ride through the GUM and confirmed my personal opinion to promote furthermore this theory in surveying as well on FIG level. The way C 5.1 started the **realisation of the GUM** in the last period **should be continued!**

SC 6 discussed the application of the “Uncertainty of Measurement” for the series of the International Standards “Field procedures for testing geodetic and surveying instruments” (**ISO 17123**) and agreed upon proceeding to initiate a **revision of these Standards**.

In the first step SC6 resolved to revise **Part 1 “Theory”** and welcomed Charles Fronczek as Project Leader. It is intended to elaborate a proposal under my direct participation until **April 1<sup>st</sup> 2005** for circulation to the members and consideration at the next meeting.

On invitation of the Swiss members the next meeting of ISO/TC 172/SC 6 will be held on April 4 2006 in Winterthur, Switzerland.

Neubiberg, October 21<sup>st</sup> 2004

Hans Heister