

**Report to the 29th General Assembly
FIG Congress in Munich, October 2006**

Standards Network

Report of Activities 2002-2006

1. Introduction

The FIG Standards Network was set up as a result of a decision at the 2002 General Assembly. It grew out of the FIG Task Force on Standards and was designed to provide an FIG focus on this important area, which is a key part of the previous and current Council workplans.

This brief report summarises Network progress since the 2002 General Assembly, and its immediate plans.

2. FIG policy

FIG's policy on standardisation was ratified at the 2001 General Assembly. The key parts of that policy read as follows:

'Overall, FIG's aim in the field of standards is to assist in the process of developing workable and timely official and legal standards covering the activities of surveyors. FIG is also committed in its objectives to developing the skills of surveyors and encouraging the proper use of technology, activities which are becoming increasingly shaped by standards.

FIG will generally seek to ensure that *de facto* standards become official standards as technology matures, or at the very least that all relevant official, legal and *de facto* standards are produced in full knowledge of all other related material.

FIG sees the following roles for professionals in the standardisation process:

- Assisting in the production of workable and timely standards by proposing material which can be transformed into international standards (rather than relying on work developed by others) and by participating in the process of developing standards; and
- Disseminating information and creating explanatory material and guidance notes to ensure that all members of FIG are aware of the most recent standardisation activities, standards and regulations, and their implications for surveyors.'

3. Terms of reference and membership

The terms of reference of the Network are set out in the FIG Guide on Standardisation and are as follows:

- Building and maintaining relations with the secretariats of standardisation bodies;
- Proposing priorities on FIG's standardisation activities, including advising the Council on priorities for spending;

- Setting up necessary Liaison relationships with standardisation bodies;
- Ensuring that lead contacts to Technical Committees etc are in place;
- Maintaining an information flow on standardisation to FIG members, including through the FIG website and FIG Bulletin, and more directly to relevant Commission Officers;
- Maintaining the Guide on Standardisation, and related material on the FIG website;
- Working with other NGOs, within the framework of the MOUs signed by the Council; and
- Advising FIG's officers and members on standardisation activities as necessary.

The Network sees itself as at the hub of FIG standardisation activity, making the necessary linkages and providing the necessary advice to commissions and others. Strong links between Network members and 'their' commissions are a vital part of this.

Network membership over the period since 2002 has been as follows:

C1	Iain Greenway (Chair)
C2	Pedro Cavero (2002-03); Frances Plimmer (2003-06)
C3	Martin Scheu
C4	Adam Greenland (2002-03); Andrew Leyzack (2003-06)
C5	Rudolf Staiger
C6	Aloiz Kopacik
C7	Winfried Hawerk
C8	Paul Lohmann (2002-04); Diane Dumashie (2004-06)
C9	Brian Waldy
C10	Phil Shearer
ISO TC211	Larry Hothem
ISO TC172 SC6	Jean-Marie Becker (2002-04); Hansbert Heister (2004-06)

Most Commissions actively participated in the work of the Network, and the involvement in the Network of key individuals from many of the Commissions has played a key part in the successes of the Network.

4. Progress in the last 4 years

The Network held productive meetings at each FIG Working Week. Members have also maintained a grid summarising Commission work relevant to standardisation. This grid has included ISPRS activity in this area, but has been unsuccessful in including information from other sister societies. The grid has proved a useful means of capturing information concerning the links between the work of the various Commissions and standards, and a copy is available from the FIG website.

Key areas of activity were reviewed each year; over the last four years, they have included:

- **Instrument standards (ISO TC172 SC6) (Commission 5)**
Jean-Marie Becker and Hansbert Heister have been FIG's lead experts to this work. The TC has over the last four years published a number of standards in the ISO 17123 series. These

have replaced earlier standards that were not suitable for practitioners, with the new documents recognising the needs of field checks, as well as laboratory calibration. FIG has played a key role in this change, which is of profound importance. FIG's current focus is on ensuring that the TC's proposed GPS standard is workable and meaningful, and Commission 5 continues to put effort into this.

- **International Valuation Standards (Commission 9)**

A meeting was held with IVSC members in Washington during the 2002 Congress, to determine how FIG could actively participate in IVSC activities (the existing members being nations). IVSC is in principle willing to alter its rules so that bodies such as FIG can participate. The current stumbling block has been finding the right FIG representative, with sufficient funding, to participate in the IVSC meetings. This will be pursued further during the Munich Working Week. We have, however, over the last four years maintained a good relationship with IVSC.

- **Geographic Information standards (ISO/TC 211) (many Commissions)**

This has been a key focus of the Network's activity over the last four years. TC211 has been very active, and has to date published in excess of 20 standards, covering areas including terminology, quality assessment, coordinate reference systems and services, with several more standards under development (including one on GML). FIG has sent a delegate to the majority of the ISO/TC 211 meetings over the last four years, and has been recognised by the Committee as one of the most active liaison members. With the wide range of TC211 activity, it has been necessary to prioritise FIG input, and key areas pursued have included:

- **Certification of personnel (Commissions 1 and 2)**

In 2002, the TC's work on this subject was still active. Earlier (in 1998), the TC had proposed to create a Standard in this area, with a meeting at the Brighton Congress a key component in changing the work to the creation of an advisory Technical Report. This report (ISO 19122) was published in 2004. ISO/TC 211 has resolved not to take further action at this stage, instead maintaining a watching brief on developments. The Network has therefore been supporting the work of WG 2.3 on Mutual Recognition to implement workable models of MR, whilst reminding those involved that there is continuing pressure for a certification system, and that a system of MR needs to prove itself in the near future.

- **Outreach (many Commissions)**

FIG was a prime mover in the establishment of the TC211 Outreach Group, making the case that users and potential users needed to be aware of, and understand, the standardisation activity. The Group has had many successes, including a very well-attended Seminar at the 2005 Cairo Working Week. FIG continues to be active in the Outreach Group, being represented by Iain Greenway and Gerhard Joos.

- **Standards for data producers (Commissions 3, 4, 5, 7 etc)**

Largely due to impetus provided by FIG, an ISO/TC 211 Focus Group on Data Producers was set up at the October 2004 TC meeting, with Iain Greenway as chair. Since that time, the Group has conducted a questionnaire to determine requirements, to which over 100 responses were received, and has set up and maintained a website (www.isotc211fgdp.info) to allow exchange of information.

- **Cadastral domain model (Commission 7)**

FIG proposed ISO work in this field some years ago, but it was not progressed due to concerns over its relationship with national legislation. Over the last few years, however, FIG Commission 7 has developed a core cadastral domain model (CCDM). This has been shared with TC211, and a number of constructive comments received. The next step is formally to submit this model to TC211 as a new work item. This will also involve

nominating a project leader for the work. Discussions will take place in Munich to agree the timetable for making the necessary submission. This will be another key step for FIG in standardisation activity – formally proposing an ISO work item in this vital area.

- **Standards for sensors (hydrographic, photogrammetric, laser) (Commissions 4, 5 and 6)**

Relevant commission experts have reviewed the text of the various drafts of standard 19130. FIG's comments have included significant input in the field of hydrographic sensors.

- **Location based services (Commission 3)**

A watching brief was maintained in this area

- **Influencing the development of standards in the construction area – C10**

Little substantive progress has been made in this area, although useful connections have been made with related work (and these are recorded in the grid of standardisation work).

- **Updating the FIG Guide on Standardisation**

The Network has recently completed the revision of this 2002 document (FIG publication number 28).

- **Keeping FIG members up to date on standardisation activity**

The Network has maintained a section of the FIG website on a regular basis, provided reports and papers to Working Weeks and Regional Conferences (including an FIG Article of the Month), and contributed items to the monthly E-newsletters.

5. Activity in Munich and beyond

The Network has played a leading role in organising a Standards Workshop on Monday 9 October. In addition, a number of papers on standards are included in the technical programme.

The FIG Council has agreed in principle that standards will remain a key element of FIG's work programme for 2006-10, and that the Network should continue to coordinate this work. The appropriate structural arrangements have yet to be agreed. The Network will therefore hold a meeting during the Working Week to progress its work.

6. Summary

The last four years have seen very significant consolidation and maturing of FIG's work in a number of standards-related areas as summarised in this report. The Network has played a key role in raising the profile of standards in FIG, and the profile of FIG in standardisation activity. The imminent submission of FIG work on the core cadastral domain model to ISO for progressing to an international standard marks a further development. The Network intends to continue the process of developing a clear shared understanding of FIG's priorities and required actions in the area of standardisation, and will continue to shape this as a common agenda with the Commissions.

The commitment of the Council and of the Commissions to this ongoing work is appreciated and acknowledged.

Iain Greenway

Chair, FIG Standards Network

June 2006