



COMMISSION 1

Newsletter 12/2004



Dear Delegates Commission 1,

after publishing a newsletter in July you can now see our second edition for this year. The big thrillers are the information of our chairs Iain Greenway and Gabriele Dasse. Both of them were a little ignored in our last presentation. We hope you enjoy this briefing and we would be grateful for any idea to improve this kind of information.

Working Group 1.1

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The FIG Standards Network (WG 1.1) held a successful meeting in Athens in May 2004 which reviewed work to date and agreed the need for a limited number of key focuses in 2004/05:

- Continuing FIG's leading work in the field of official standards for survey instruments, particularly in ISO Technical Committee 172 Subcommittee 6. The key focus in this area for 2004/05 will be to ensure that workable, timely standards are created for GPS work;
- Continuing to build FIG's relationship with the International Valuation Standards Committee, ensuring that an FIG representative attends the biannual meetings of the IVSC Standards Board (www.ivsc.org) ;
- Reviewing current standards in hydrographic surveying and highlighting areas which need attention and action. At these stage, they appear to include the lack of standards as to the orientation of sensors

- Continuing to influence the development of good practice in the area of construction economics, working with the International Cost Engineering Council and others, and in spatial planning and developments. These are areas to date not covered to any extent by official standards;
- Remaining an active contributor to ISO TC211 (Geographic Information). The work of ISO Technical Committee (TC) 211 (www.isotc211.org) will have a profound impact on large numbers of surveyors. More than 20 standards covering aspects from terminology to translation protocols are in the process of being published. Many of the first generation of standards are conceptual models, not providing the detail. TC211, however, is now moving into the more detailed area, including the development of registries. Particular aspects we are focusing on at present include:
 - Location based services;
 - The possible standardisation of the cadastral domain, an area in which FIG's Commission 7 is taking a leading role;
 - Any relevant TC211 work on sensor standards (for hydrographic, photogrammetric and laser-based survey work);
 - Involvement in outreach activity. TC211 has set up an Outreach Group, tasked with ensuring that the market is aware of the standards and their implications, and that standards developers are fully aware of market views. The Network will coordinate with the Outreach Group to ensure that FIG plays a full part in this important work, including arranging appropriate joint events at the FIG Working Week 2005 in Cairo;
 - The qualification and certification of personnel;
 - Considering whether any FIG material can expedite the development of standards in this area.

Report on the ISO TC211/ CEN TC 287 meetings, Verbania/Ispra October 2004

1. Overview and key issues

The ISO and CEN meetings in Italy took the work of the two committees further forward.

The ISO work is now reducing in terms of number of work items as many are pushed through to final editorial stages (driven in part by the new, tighter ISO timelines on acceptable time to complete work). This is now allowing consideration of a future work programme that is more planned and less ad hoc (new work items tend to come forward sporadically at the moment and there is no overarching plan to guide this).

In terms of outreach, it was agreed that a greater focussing is now required, after 2 successful years in generally raising the profile of the TC211 work. A key group needing support on implementation is data producers, and a focus group to support them was set up.

A further piece of work is to ensure harmonisation of the standards already published, and fresh impetus was given to this work during the meetings.

Key issues for FIG are, in summary:

- Outreach/ implementation: arranging a workshop in Cairo in conjunction with WW2005.
- The need for us to continue to input to a number of specific work items including:
 - 6709 – standard ways of expressing position – Tomas Soler (Commission 5)
 - 19130 on sensors, including (now) hydrographic sensors (Naser El-Sheimy/ Commission 4)
 - Continuing to maintain a watching brief on work on location based services, including now the start of work on features which move (Commission 3/ Martin Scheu)

FIG remains respected as a key contributor to TC211's programme of work. We should continue to support TC211's work. The work of the CEN committee is of less direct relevance to FIG. It is largely focused on implementing the ISO standards in Europe, and adding any additional elements required for SDI activity, particularly INSPIRE.

2. My activity

I divided my time as follows:

Monday 4th – at project team meeting of 19138 (data quality measures)

Tuesday 5th – at project team meeting for 6709 (standard representation of location); strategy meeting

Wednesday 6th – project team meeting on harmonising the standard set

Thursday 7th, Friday 8th – Plenary meeting of TC211

Monday 11th, Tuesday 12th – Plenary meeting of TC287

Between these formal activities, I held a range of meetings with individuals and small groups.

3. ISO Technical item progress

The number of active work items in TC211 is declining, as many reach the stage of final editorial work. There is a clear focus at the moment on clearing the decks, but also discussion of what comes next, including consulting the market on priorities.

Active work is as follows:

- The process for establishing registers of items of geographic information. The purpose of this work is to ensure that all registers contain information in a standard format and described in a consistent way, so that accessing that information provides unambiguous answers. Much of the central document – ISO 19135 – is procedural (roles and responsibilities for a register, for instance), with different types of registers then specified in particular standards. 19135 is now in final editorial stages. Related work includes:
 - 19126 – data dictionary formats – key for IHO, DGIWG etc but needn't concern us greatly
 - 19127 – registers for geodetic codes and parameters. Of interest to C5, and possibly to the History PI (as they have a lot of records of historic coordinate reference systems). The document defines how a register of codes and

parameters will be set up and maintained. It is moving into final publication stages now

- 19131 – data product specifications – how to define such things in a consistent way. Now in final editorial stages.
- 19137 – generally used spatial schemas – another document putting flesh on the conceptual schemas. Heading for publication
- 19138 – data quality measures – this is attempting to define what measures should be used to define quality (eg. how do you measure completeness, positional accuracy etc). A draft that is sufficiently stable for vote will emerge in the next few weeks
- A review (19140) of what technical amendments are needed to bring harmony to all of the standards that were developed in parallel. This is vital if the standards are to be used, not least in the European context through the CEN standardisation efforts in this area. The focus at the meeting was to get necessary amendments in progress sooner rather than later, and then wind down the group (probably to be replaced by some form of harmonisation overseeing body). The team was also tasked with getting an open log of comments made, available on the TC211 website. Work due soon is:
 - A revised version of 19111 (positioning by coordinates) to deal with shortcomings in the original document. The draft has been provided by OGC and Roger Lott will be the project leader
 - Work to make the necessary amendments to the quality standards (19113 and 19114) that are inconsistent with other standards
 - Work to update 19118 (encoding) in light of the work on GML
 - Work to update 19119 (services) in light of experiences in using it
 - Possibly some corrigenda (to correct minor editorial errors)
- 19130 on sensors (photogrammetric, hydrographic etc). This will come out for further review and vote at the end of November. It now includes material on hydrographic sensors (provided by IHB), but leaves terrestrial scanners as being insufficiently developed for standardisation.
- Revision of ISO 6709 – how to describe locations – this 1983 standard needs updating for the digital age. Tomas Soler of USGS is the FIG expert and Larry Hothem is also involved. A draft for comment and vote is expected soon. The document interfaces the ‘positioning’ community with the user community, and there are therefore issues in terminology, what level of precision is needed, etc.
- Location Based Services. The original batch of documents (19132-134) are into editorial phases now. A new item (19141) on moving features (things like trains) has been started and is likely to be the first of a number of items in this area of things whose position changes over time.
- 19136 – GML – a key document, and one which is a joint piece of work with OGC. Larry Hothem is the FIG expert. The editing committee took 720 man hours and is coming to the end of its work. A draft for final vote is expected by the end of the year
- the extension of 19115 (metadata) and 19101 (reference model) to cope with imagery and gridded data. The whole area of imagery and gridded data were not dealt with in the original work and needs including. Several other pieces of work

are likely to be needed fully to include gridded data in the standards, including quality and portrayal.

The only new work items currently proposed are those to amend/ harmonise the existing standards set. Some proposals from OGC are expected shortly, covering web feature server and feature encoder. A proposal from FAO (UN) to create a standard covering their land cover classification scheme (LCCS) is expected soon. These potential items raise for debate how much TC211 should move into application areas, of which cadastre is raised as another example (and one of great interest to FIG, with the Commission 7 work to create a standard cadastral domain model). More than 75 possible service areas have, for instance, already been identified – should ISO create standards for all of them? If not, who will ensure sufficient standardisation to ensure interoperability?

Other issues:

- qualification and certification – publication of 19122 is expected any day now, bringing that chapter to a conclusion. There was no further discussion of the topic during the meetings.

I spoke briefly to the FIG Liaison report, highlighting the day workshop in Cairo, the work on a cadastral domain model, the need to deal with hydrographic sensors, and the work on GPS testing in ISO/TC172 SC6. I have also provided an updated list of FIG experts to the active work items, to the secretariat.

4. ISO Outreach etc

There was agreement during the week that the Outreach Group had made good progress in raising the general awareness of the TC211 work, but that some greater focus was now needed in the next phase, with a greater concentration on implementation. It was agreed to continue to work with OGC on educating GIS and application developers on the standards, and the day in Cairo will include some of this. An additional group on the implementation of the standards by data providers was set up, recognising that a range of implementation standards are now in place. I am chair of this group, and the membership is being agreed at present. It will work independently of the Outreach Group and is expected to have a life of 18 months.

Three seminars were run during the meeting on Outreach, which reflected the strong efforts of key people in this work. Some consolidation of material such as the fact sheets is planned for the coming months, within a generally more low-key phase.

5. Next ISO meetings and activity

TC211 continues to gain momentum. With standards being published, and the renewed focus on implementation, there is much good that is happening, and that FIG can gain from being associated with.

A planning group has been set up for the TC, to consider what its future plan of work should be. New work tends to be added at the moment in a piecemeal way and it was agreed that some form of overarching programme should be created, taking into

account the requirements of the different user communities (determined through consultation/ questionnaires), the 5-yearly revision of standards, the work to harmonise standards, etc. This will allow the TC to ensure that the workload is manageable and managed as effectively as possible. Such a plan will be created in draft form before the next meeting in June 2005.

The next meetings for TC211 are as follows:

- June 2005 – Sweden
- September 2005 – Montréal
- May 2006 – Orlando
- November 2006 - Riyadh

6. CEN/TC287

This technical committee was revitalised in late 2003 and held its second meetings in conjunction with the ISO meetings. The focus of the committee is on bringing the ISO work across into the European arena, with additional factor that CEN standards are compulsory in many European countries whereas ISO standards aren't. The plenary meeting lasted for two half days. The key topics were:

- Procedural issues on how to make the ISO work and outputs joint with CEN. There are administrative complexities here, with the ISO work moving on and the CEN procedures struggling to catch up from a standing start. Many of the published ISO standards are likely to be EN standards by the end of this year, and ISO work in its earlier stages will become joint with CEN
- The work of WG1 on standards for spatial data infrastructures. This group is looking at what standards are required in this area (with, inevitably, a key focus on INSPIRE). It is considering whether full standards are required, or profiles of ISO standards. Where the former is the case, CEN will request that ISO picks up the necessary work. Where the latter, CEN will publish and mandate the profiles. A variety of guidance material is also being considered. A key meeting of the working group will take place in Brussels on 5 November to decide on priorities for the coming months. Most of the resolutions from the TC meeting were about the WG1 activity
- Whether a European conceptual schema language is needed (or desirable). This was left for further reflection – it is an issue of whether GML provides a sufficiently specific language or not

A separate meeting on CEN outreach took place during the two days and agreed to focus at this stage on implementing a public area of the TC287 website to provide information on the TC's work. Opportunity to raise the profile of the work through presentations at conferences etc would be taken as it arose, but it was felt that it was important to have some work under the TC's belt before being too much more active.

The TC's next meeting will take place in Sweden in conjunction with the ISO meetings in June 2005; the following meeting will be in late 2005, possibly in Dublin.

Working Group 1.5
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**Joint Commission Working Group
On Under-Represented Groups In Surveying**

Issue 3/04 (http://www.fig.net/pub/underrep_news/200403/newsletter200403.htm) of the Working Group Newsletter was published in July with the following content:

- Report: Workshop - Network on Under-represented Groups in Surveying by Gabriele Dasse
- How to get more students involved in FIG by Linnéa Lindqvist and Jennie Nilsson, Sweden
- The Women in Greece – Working and Developing the Surveying Profession by Eleni Tziortzioti and Anna Karagiannaki, Greece
- Collaboration with Gender and Cartography Commission by Gabriele Dasse
- American Accreditation Board Strives for Diversity by Wendy J. W. Straight, United States
- Elizabeth Ann Johnson was a Leader in Diversity contributed by Dr. Herbert Stoughton, United States

Issue 4/04 (http://www.fig.net/pub/underrep_news/200404/newsletter200404.htm) of the Working Group Newsletter was published in November with the following content:

- Extract of “Women's Rights to Land and Property”, by Marjolein Benschop, UN-HABITAT
- Personalities: Eleni Tziortzioti, Greece
- More women engineering graduates, but they still face poor employment prospects

Working Week in Athens

The Joint Commission Working Group on Under-represented Groups in Surveying organized a workshop during the Working Week in Athens. The Session started with three presentations from Eleni Tziortzioti and Anna Karagiannaki (Greece) “The Women in Greece - Working and Developing the Surveying Profession“, Gabriele Dasse (Germany) “Gender Mainstreaming – A Topic for the Surveying Profession“, Ali Buxton, Pat Turrell and Sara Wilkinson (United Kingdom) “Why Do Women Like

Working in Building Conservation?“. These presentations initiated an interesting debate and discussion.

Meetings with FIG President Holger Magel and Vice-President Bettina Petzold resulted in deliberations to draw up FIG guidelines to improve the situation of women, young surveyors, like students, and cultural and language minorities. A draft should be presented and discussed during the Working Week 2005 in Cairo.

Virtual Conference - The Past, The Present and the Future of Women in Surveying

Gabriele Dasse, Chair of the Working Group, participated in the Virtual Conference which took place from 5th to 9th July 2004. The conference gave the opportunity to share experiences. Gabriele presented her paper “Women in DVW, the German Association for Surveying“. 11 members of the FIG network participated at the Virtual Conference and 5 of them presented a paper.

Minutes ACCO Meeting at the 3. Regional Conference in Jakarta

Under the leadership of Stig Enemark we reached the results as follows:

Decided that Matt Higgins will be the ACCO representative in the Council for term of office 1.1.2005 – 31.12.2006.

Decided to establish a working group (Surveyors Reference Library) to prepare guidelines for the recommended papers, draft by the end of the year and a discussion paper for the ACCO meeting in Cairo.

FIG Week in Cairo, April 16-21, 2005

FIG Regional Conference in Havana, Cuba, September 26-29, 2005

FIG Regional Conference in Accra, Ghana, February, 2006

FIG Congress in Munich, October 8-13, 2006

Attention + Attention + Attention + Attention + Attention + Attention

You may have noticed the picture at the top of this newsletter. With this photo commission 1 started a riddle. Who is it? Every newsletter will have a different picture at the top. At the congress in Munich commission 1 will award the winner. Please send your answers to the chair or secretary:

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