

# REPORT ON THE ISO/TC 211 MEETINGS, ORLANDO, MAY 2006

## 1. Overview and key issues

The meetings in Florida continued to consolidate the work of the Technical Committee. A key focus was on considering structural arrangements to ensure that the standards set is developed and maintained effectively, as well as on finalising a number of longer-standing projects.

In terms of outreach, it was agreed that a greater focussing is now required, after successful work in generally raising the profile of the TC211 work, to put more effort into implementation support as this is now a key need of users.

Key issues for FIG are, in summary:

- Outreach/ implementation: arranging a workshop in Munich in conjunction with the Congress.
- Preparing the Core Cadastral Domain Model for submission as a work item of TC211, determining also who we will nominate as a project leader, as soon as possible after the Munich Congress (Commission 7).
- 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) is the FIG Expert – this will come forward as DIS (the last chance to alter the text substantively) in the next couple of months, and is a document of much relevance to many FIG members
  - 19130 on sensors – waiting for the work item to be re-initiated, and then continuing to input (Commissions 4/ Andrew Leyzack, 5/ Rudolf Staiger)
- Maintaining a watching brief on work on location based services and related areas (ubiquitous geographic information etc), determining how/ whether they are relevant to us (Commission 3/ Martin Scheu)

FIG remains respected as an important contributor to TC211's programme of work. We should continue to support TC211's work, working within the arrangements for FIG standards work in 2006-10 which are currently being considered by the FIG Council/ ACCO.

## 2. My activity

I divided my time as follows:

Monday 4<sup>th</sup> – at Working Group 9 meeting, at ISO 19145 meeting, and contributing to revision of ISO 19111

Tuesday 5<sup>th</sup> – contributing to editing of ISO 670; strategy meeting

Wednesday 6<sup>th</sup> – chairing Focus Group on Data Producers; Outreach meeting

Thursday 7<sup>th</sup>, Friday 8<sup>th</sup> – Plenary meeting

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

## 3. ISO Technical item progress

A good volume of work continues to move through TC211, although there are a few items that have become 'stuck' in the process and have required remedial action. The development of many standards in parallel inevitably created some inconsistency, with some of this having been addressed, other the subject of current work items, and some yet to be surfaced. In addition, there are significant new areas where people would like TC211 to work, and balancing this with the need to maintain the current standards set, whilst recognising the limitations on available resource, is a subject of ongoing debate.

Active work is as follows:

- Geospatial services (Working Group 4)
  - 19142/ 19143 – Web Feature Service/ Filter Encoding – this has slipped and there are still a number of issues to be resolved – plan a Committee Draft by end 2006
  - Encoding rules – there is some incompatibility between different standards, and an informal meeting was held to develop a new work item proposal
  - ISO 19136 – GML – a key standard – the editing committee completed its work and the document will now pass to the Secretariat for publication (hopefully directly as an IS, although ISO procedures may require an additional FDIS stage)
  - Possible new work identified included OGC Catalogue Service, Web Coverage Service (WCS), Web Coordinate Transformation Services, Updating 19117 (Portrayal – it’s agreed that this is needed but a project leader has to be identified)
- Imagery and gridded data – this working group (WG6) is extending the TC211 standards to cover all elements of imagery and gridded data. This working group has struggled with resource availability, with project leaders often changing in the middle of work, leading to additional efforts being required
  - ISO 19101-2 – extending the reference model (and possibly merging it into 19101 in due course) – TS vote planned for January 2007
  - ISO 19115-2 – the metadata elements – DIS vote planned for October 2006
  - ISO 19129 – framework – has had to be reintroduced after timing out – project leader has resigned – aiming for Editing Committee in May 2007
  - ISO 19130 – Sensor and data model – this is very relevant for many user communities, for instance standardising the axes used in LIDAR, photogrammetry, hydrography etc. The item was timed out by ISO but will be reintroduced, aiming at moving to a Technical Specification for the time being
  - Possible new work includes Radiometric Calibration and Validation (where ISPRS has been active); Encoding Rules for Imagery; and Portrayal of Imagery and Gridded Data
- Information Communities (WG7)
  - 19126 (Feature Concept Dictionaries and Registers) – to replace a timed out work item – this work item proposal will be submitted soon
  - 19137 – core profile of the spatial schema – to go to the Secretariat this week for publication (this had stalled due to time constraints)
  - 19139 – Metadata implementation specifications – a crucial document – again had stalled but has just been submitted for publication
  - 19144 – Land Cover Classification Schemas – this work was submitted by UN-FAO and is now progressing through editing. It marks an expansion of the TC211 work into application areas
- Location Based Services (WG8)
  - This has no active work items but has spent time looking at key areas to work in. Ubiquitous GI has become a catch phrase – recognising that GI will get everywhere and needs to be integrated more and more into IT activity. Examples include intelligent transportation systems, emergency management, and very localised tracking (which shelf is an item on, for instance)
  - Other possible areas include cross-domain vocabularies, linear referencing systems, and transfer nodes

- The Working Group was formally suspended pending the bringing forward of new work items
- Information Management (WG9)
  - Revision of ISO 6709 – this has struggled in taking 1983 text and turning it into material which is relevant to 2006 and fits with the rest of the TC211 standards set. The amount of revision has added to the lack of flow in the text. A DIS is planned for June 2006
  - Revision of ISO 19111 (Spatial referencing by coordinates) – this is making good headway, and marks a significant revision of the old standard – the aim is to submit for publication this year
  - 19131 – data product specifications – a stalled item of significant relevance to data producers – in danger of being timed out – final draft planned for June
  - 19138 – data quality measures – editing completed this week and will now be published
  - Revision of quality standards – there are inconsistencies in the standards in this area; this review project is designed to determine what needs to be done to resolve them. A draft is expected in the next 2-3 months
  - Registry of representation of geographic point locations – a new work item (19145) which had its first meeting this week – a review stage item to determine what (if anything) needs to be done
- Terminology – this is an area where inconsistencies crept in as a large number of standards were developed in parallel; a Terminology Maintenance Group is tasked with removing the inconsistencies, and maintains a spreadsheet to support this. A glossary of terms from published standards has just been added to the TC211 website ([www.isotc211.org](http://www.isotc211.org)), and project 19104 (terminology) is to be revised to include the terms in an Annex (followed by the creation of an online register of terms)
- Registers – many of the standards currently being completed point to a register of items (geodetic codes and parameters, terminology, data quality measures). TC211 has not yet set up such a register, as there are issues in finding an organisation willing to act as a Registration Authority (which requires effort and cost) – this is becoming a pressing issue
- Conceptual Schema Language – this has been published but needs revision work, and is a base to much of the standards set (so needs care in making changes to it). Norway is to submit a work item proposal to revise it, at the same time upgrading it to an International Standard (this last element is particularly required for CEN, which does not take ISO/TS documents into the CEN catalogue)
- Cadastral domain model – this is currently at an advanced stage of development by FIG and is likely to be proposed to TC211 within the next year, moving the TC into another key application area
- Ontologies – a review project was set up to look at what work TC211 should be doing in this area

#### **4. The way forward**

A useful set of discussions took place on how best to move forward. Key decisions were:

- Creation of a Programme Maintenance Group (PMG) to oversee the process of revising and improving the standards set – determining where revision work is required (either because of shortcomings, or because of the 5-yearly review of any standard); proposing priorities on work; etc. The Group will link with the group maintaining the harmonised model and the terminology, and will subsume the current harmonisation work item (19140). It will manage the overall architecture of the standards set, then passing specific work to designers and implementers. The Secretariat was tasked with drafting terms of reference for the PMG
- To push on and get some registers set up as soon as possible – a group to oversee this was set up, to report back to the next plenary
- To prioritise some of the new work being proposed, so that TC211 doesn't try to take on too much
- To increase activity in implementation support (see the following section for more information)

At least some of this thinking is driven by the European INSPIRE initiative, where there has been a danger that the initiative would proceed without referencing ISO/ CEN standards. This possibility seems to have been headed off, following an exchange of letters with the European Commission. The work has, however, provided an example for where significant initiatives will not wait for standards development, and therefore the need for TC211 to prioritise its work and find sufficient resource to complete it in a timely manner.

Another aspect raised by the INSPIRE work is the extent to which GI standards should be global, and where they should be regional.

The complexity of ISO is another challenge – there is related work to that of TC211 going on in many other TCs and resource has to be found to make the necessary links.

#### **5. 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. The Outreach Group is therefore determining how to do this (a key issue being able to tap into resources – including cash – for some of the necessary work), including providing user guides, fact sheets etc.

The Focus Group on Data Producers created a workplan building on the results of the survey completed in 2005 (which elicited over 100 responses). The main focus of the group will be in the Quality and Metadata areas, using a website as the main information repository and interchange mechanism, supplemented by an E-newsletter.

The TC211 chair plans to bring forward proposals next year on how further to develop implementation support mechanisms, recognising this as a key element of the continuing work of TC211.

As at previous plenary meetings, the Outreach Group arranged a Standards in Action workshop, where presentations ranged from ubiquitous GI, to the role of GI standards in polar activity. In addition, there were metadata seminars prior to the start of the meetings.

## **6. Next 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. The overall management of the standards programme is another positive step.

The next meetings for TC211 are as follows:

- 11-15 November 2006 – Riyadh
- 28 May – 1 June 2007 – Rome

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26 May 2006