

## FIG and Standards – Progress to Date

It is now about three years since the FIG Task Force on Standards started its work in earnest. With a year to go to the next Congress, when the Task Force is likely to be stood down in favour of other structural arrangements to manage FIG's involvement in standards, this seemed a good time to summarise the Task Force's work to date.

There are, for me, two numbers that stand out from the mass of data collected by the Task Force. They are US\$ 15 billion, and 356,427. Taking these in turn:

- A 1999 study by the Technical University of Dresden and the Fraunhofer Institute for Systems and Innovations found that the benefit to the German economy of standardisation amounts to more than US\$ 15 billion per annum (more than patents and licences)
- There were 356,427 pages of ISO standards in print at the end of 1999.

These two numbers, therefore, capture the importance of standards to the world. As described in papers to the 2000 and 2001 FIG Working Weeks, the process of creating standards is a lengthy one, and practising professionals tend to be bit players (with the main parts being taken by government employees and academics). Taking all this into account, FIG has agreed that it needs to play a continuing role in the development of standards. This is enshrined in the FIG policy on standards, which was presented to the General Assembly in Seoul. The policy is 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 one of the few bodies through which surveyors can formally be represented in international official standardisation activities. In so doing, FIG is supporting its objective to collaborate with relevant agencies in the formulation and implementation of policies. 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:

1. 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
2. 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.

In supporting this policy, FIG will dovetail the work of its Commissions and other bodies with that of official standardisation bodies, to ensure that the greatest possible benefit for practising surveyors and their clients is achieved. This dovetailing will be reflected in Commission, Task Force and Permanent Institution (PI) workplans – these will include the creation of necessary information and explanatory material, and any planned output from any of FIG's bodies will be discussed with the relevant standardisation bodies before it is created. FIG will also seek to work closely with other international bodies representing surveyors, to ensure the most effective use of resources.'

The creation of a generally agreed policy is one of the particular achievements of the Task Force to date. Others are the general raising of FIG's profile in standardisation activities, and of standardisation activities' profile within FIG; the completion of a questionnaire of FIG member associations on their priorities in the standardisation field; and the creation of an FIG Guide on Standardisation, which contains a variety of useful information to assist FIG's Officers and Member Associations in influencing and supporting standardisation.

During the next year, key elements of the Task Force's work are as follows:

- Ensuring that standards are linked into 2002-06 workplans. The Task Force began work in earnest after the 1998-2002 Commission and Permanent Institution work plans were prepared. This has meant, understandably, that the addition of standardisation items to them has only been possible to a limited degree. It is vital that the new workplans take standardisation fully into account. Some planned examples are that Commission 7 will be considering minimum standards necessary for delivering national cadastres, feeding information back to ISO as necessary on the completeness (or not) of existing standards. Links with ICEC's work on construction economic best practice will be included in the Ad Hoc Commission's work plan; and Commission 3 will be linking elements of ISO's work on Geographic Information standards into its work plan.
- Building links with other NGOs. We are planning a Round Table on standards at the Washington Congress, reviewing how FIG and our sister organisations can work together and influence to best effect in this area.
- Building further FIG's relationship with IVSC. The International Valuation Standards Committee has developed IVS2000 and is now working towards a 2002 edition. We are planning joint activity with them at the Washington Congress, and a formal relationship with them, recognising the important role FIG (particularly Commission 9) can play in developing valuation standards.
- Inputting to ISO's work on standards for survey instruments. Commission 5, particularly through the work of Jean-Marie Becker, has been involved in the ISO work of refining standards for survey instruments for some years. The goal is a single, usable set of standards that are appropriate for field surveyors (and not just for calibration laboratories). Some of these standards are now approaching their final editions and Jean-Marie will be at the next ISO meeting in September to continue FIG's work in this field.
- Inputting to ISO work on Geographic Information Standards. The work of ISO Technical Committee (TC) 211 will have a profound impact on large numbers of surveyors. More than 20 standards covering aspects from terminology to translation protocols will be published over the next year. Indeed, ISO 19105 on Conformance and Testing has already been published. At present, many of this first generation of standards will be conceptual models, not providing the detail. TC211, however, is now moving into the more detailed area. Location Based Services is, understandably, a particular focus. Another is geodetic codes and parameters, where FIG has been asked for assistance in compiling a library of the definitive transformations required to move between different coordinate reference systems. TC211 is becoming the place where the GI community meets – the liaison members of the Committee include the Open GIS Consortium, GSDI and FIG. FIG has played an active role, but has recognised that it can't be involved in everything. Particular aspects we are focusing on at present are:
  - The work item on the Qualification and Certification of Personnel. This has been a focus since before the Brighton Congress in 1998. The current status is that a final report is being prepared, including case studies on education and training in a number of countries. FIG has commented on the drafts, and has submitted material from our Task Force on Mutual Recognition as an 'FIG Case Study'. The ISO report is due to be completed later this year. The current draft recommends that ISO considers whether it wishes to continue to work in this area, which has caused friction with professional bodies and others and, if it does, whether it wishes to be a certifying body or to take a coordinating role. FIG has proposed a Round Table discussion in Washington, including all of the main parties, to see what the most appropriate way forward might be. FIG recognises the need to facilitate movement of professionals across borders, but is firmly of the view that an international standard is *not* the way in a rapidly changing environment.

- Involvement in the terminology work. In particular, the Task Force is working with the FIG Multi Lingual Dictionary Team and ISO to review how the MLD can input to the standardisation of terminology. A meeting has been arranged during the InterGeo conference in Cologne in September to develop this link further. The MLD could be particularly useful, as it is primarily in German whereas TC211's work so far has been in English. This link might also facilitate the keeping up to date of the MLD after the completion of the current revision.
- Involvement in the testing of the standards, to ensure that they meet user needs. Much of this is under the banner 'Standards in Action'. FIG has offered its support to this work, recognising its key role in explaining to surveyors what the standards mean (this also comes through very clearly in the FIG policy on standards). To date, we have not taken a specific role, being generally supportive from the sidelines. We await a clear steer from TC211, although the inclusion of relevant items in 2002-06 workplans will be a particular development. In addition, we are soliciting papers on TC211 activity for the Washington Congress.
- Considering whether any FIG material can expedite the development of standards in this area. We have previously submitted the FIG Statement on the Cadastre. With the key role of national laws in this area, ISO decided not to take this forward explicitly, but there is a wealth of other material that FIG could offer to the process, again supporting FIG's policy of creating workable, timely standards.
- Investigating how Member Associations handle standardisation activities, to see whether further support from FIG is needed in this area. This work has been very limited to date, and any thoughts on it would be most welcome.
- Maintaining and building links with the ISO Central Secretariat. FIG has established a good profile with the Secretariat in Geneva. It may be that further substantive contact waits until after the Washington Round Table with sister organisations, as a joint approach is likely to be more beneficial than individual approaches.
- Ongoing input to the Task Force on Commission Structure. Standards is an important area for FIG and is likely to remain so. It is therefore important that any new structure provides a clear focus for standardisation work, with sufficient profile inside and outside of FIG. In due course, such a profile might be embedded within the Commissions, but that might be for the future rather than for 2002.

As you can see, there is much for the Task Force to do. Its successes to date have been due to the continuing hard work of a number of individuals, for which FIG is most grateful. The last three years have provided a stronger focus for FIG on standards, and a greater awareness within standardisation bodies of FIG and what it can contribute. Outputs such as the draft FIG Guide on Standardisation are concrete examples of this. The area continues to be a vital one – after all, standardisation is more important economically than licences and patents, and there are 356,427 pages of ISO standards in print, meaning that standards influence almost every aspect of our lives, professional and personal.

The next formal progress report from the Task Force will be at the General Assembly in Washington. In the meantime, the Task Force area of FIG's web site is maintained on a more frequent basis, with links to other material. All input and suggestions on the work of the Task Force are always very gratefully received.

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