

Quo Vadis European Surveying,

Interview with Prof. Holger Magel, President of FIG

The International Federation of Surveyors (FIG) is an international, non-governmental organisation whose purpose is to support international collaboration for the progress of surveying in all fields and applications. FIG is the only international association representing all surveying disciplines. The organisation has members in more than 110 countries and in the member associations there are more than 230,000 individual members. In addition to 94 member associations from 81 countries FIG has 83 academic members from 53 countries, 15 affiliates and 14 correspondents. The number of corporate members is 27. FIG is recognized by the United Nations and has close co-operations with organisations like FAO, UN-Habitat, UNEP and UN OOSA. FIG is also a founding member of the Joint Board of Geospatial Information Societies and Habitat Professionals Forum. More information:

<http://www.fig.net>.



'Times they are a'changing.' This certainly is the case for the surveying and geomatics profession. How does an organisation like FIG respond to this? An interview with Prof. Holger Magel, President of FIG, on broad views, solidarity and knowledge.

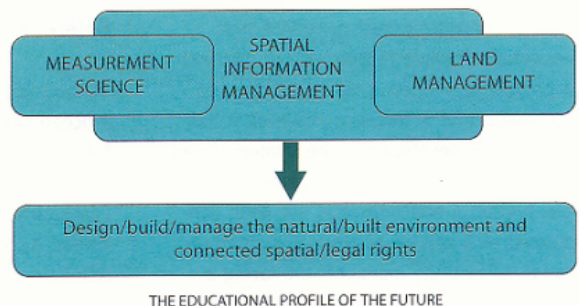
By Markku Villaka and Sonja de Bruijn

The demand on the market seems to be growing towards "well-grounded specialised generalists" with excellent management skills and good knowledge on the technical aspects of the profession, like geodesy and modern measurement technology.

What is the role of FIG in a changing world?

FIG has developed into the leading association in the surveying and geomatics profession during the last almost 130 years of its existence. Its strengths are that it covers all disciplines of surveying, geoinformatics, geosciences and all kinds of land management. This broad view on the profession has been successful especially during the recent years. As I have expressed many times the demand on the market seems to be growing towards "well-grounded specialised generalists" with excellent management skills and good knowledge on the technical aspects of the profession, like geodesy and modern measurement technology. At the same time there is a demand for expertise on land administration and management – and in many cases also with spatial planning and valuation. In the FIG concept the technical disciplines of the profession and the land issues are linked by spatial information management components. This concept applies to the future education models as well as to the professional profile. If you look at the diagram enclosed in this interview you will also find this philosophy in Germany, the country I come from. The FIG member association DVW is called Association of Geodesy, GIS and Land Management and the German Commission of all university professors of geodesy (DGK). The DGK has published a journal on "Geodesy 2000 +" with the three pillars Geodesy (in the sense of measurement science), GIS and Land Management. In my opinion it is more a question of the right philosophy and contents than a question of new names.

The other important change in the role of FIG during the last 10-15 years has been the change from internal issues to a more outward oriented organisation. This means that we have brought in more policy level issues for example on land tenure, spatial information or disaster and risk management and measurement sciences. We are implementing these in close co-operation with the United Nations and its agencies and for example on standards issues with several partners. We want to reach out to our members by not only producing policy statements but also practical guidelines and sets of best practices. Against the danger of a more and more specialized and therefore growing risk of splitted discipline and profession (see my column "Academics and Professionals Bridging the Gap" in this issue) FIG wants to bring together professionals from the private and public sector, both from the government and local authorities, and academia. This is why we introduced the category of academic membership in 1998 to facilitate liaison between practitioners and those who provide them with their academic training and, increasingly, contribute to their continuing professional development.



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Geodesy or Geomatics?

Is there any difference in the situation of surveyors, geodesists and spatial experts in Europe when you compare this to their situation in the rest of the world?

The role of the surveying profession – I use this term here to cover all land and partly earth (shape and gravity) related professions – varies in different countries. There is no European general model neither a global model. In many countries the technical surveying, astronomical and physical geodesy and land management have been different disciplines and also studies, but in my opinion the “generalist model” has gained space in Europe. Especially those Western and Central European countries that have been most successful in geosciences have implemented this broader view on the profession and education.

Against this background it is striking to me that especially the development in the United States has been different. Even though there are good attempts to bridge the gap between surveying and geomatics, it seems that surveying is still a practical measurement profession and geoinformation issues are taken care of by other professionals, who are often geographers, planners etc. I am therefore very grateful to ESRI for having started the so-called survey summit two years ago to bridge the gap between survey and GIS. In Central Europe geodesy or surveying and GIS are seen as an entity.

How did this European situation arise?

I think that first of all development in Europe has been a result of history. Geodesy as a comprehensive study consists of so-called lower

and higher geodesy, planning, land readjustment, valuation and such. Nowadays development is forced by the increasing competition between universities for students, by market forces and by young professionals who will succeed. There was and is a need to modernise the profession at any time and to link it to topics that are of interest to society. Unfortunately surveyors have lost too much time in shaping the GIS landscape.

The question is more and more about co-operation between different professionals. That is why I strongly support better communication and cooperation within the 10 FIG commissions and with a lot of sister organisations. However, in our field it is obvious that a broader view is needed with regard to competition and in serving the clients of tomorrow.

What role does FIG play in improving the situation?

As mentioned FIG is trying to influence policy-makers through its own events, like conferences and working weeks with ministers as keynote speakers et cetera, and through its members by assisting them with material, research and such. We have assisted in developing curricula for the surveying education and developing models for professional qualifications. These activities include our activities on professional standards. In this area we are supporting the model of mutual recognition instead of global standards or certification. One of the biggest benefits of

FIG as “mother of all surveying and surveyors” is that all surveyors around the world feel solidarity and strength of unity. That is the best basis for coping with the changes into a unknown future.



Round table meeting on education in Africa and Middle East at the FIG/GSDI conference in Cairo in 2005.

How to disseminate knowledge to individuals and institutions - to a whole region?

There are improvements in the way we accumulate, manage and transfer knowledge. Both life long learning and practical experiences essentially contribute to knowledge. In the nineties FIG Commission 2 on professional education accommodated a working group on computer-based training (CBT). We started to use computers to help the teaching process. Later with the help of computer networking a virtual academy was founded for collecting and disseminating experiences of teachers in surveying at universities from all the world. These are the roots of e-Learning at FIG.

Nowadays e-Learning changes our mind and activities with the focus on the learning process. Active, innovative, Internet-based learning involving both information communication technologies (ICT) and knowledge management systems (KMS). We are on the way to improve dissemination of information on educational theory and practice to the members across the world. Besides this we also strengthen knowledge transfer between FIG Commissions and inspire activities on knowledge networks.

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President Magel signs a co-operation agreement with Sergio Camacho-Lara, Director of United Nations Office for Outer Space Affairs, in Vienna, December 2004.