Report to the 33rd General Assembly FIG Congress in Sydney, Australia 2010

FIG Commission 2 – Professional Education

Report of Activities 2009

1. General

The Commission 2 Work Plan 2007-2010 building on the experiences of the previous period tries to fulfil and implement the FIG Council Work Plan. Commission 2 in general aims:

- To perform needs analysis of Commission representatives and FIG Academic members
- To develop further the FIG Surveying Education Database and facilities using educational and internet standards
- To organize annual workshops on actual topics related to education and training
- To investigate the use of information and communication technology to support networked professional education
- To organise, jointly with other Commissions, Regional Summer Schools for solving problems, filling educational gaps and for building communities within young professionals.

Activities

- Workshop (WG 2.3) on Navigating the Future of Surveying Education, 26-28 February, Vienna, Austria
- Working Week 2009 Surveyors Key Role in Accelerated Development, 3-8 May, 2009 Eilat, Israel
- 7th Regional Conference Spatial Data Serving People: Land Governance and the Environment - Building the Capacity, 19-22 October 2009, Hanoi Vietnam
- Preparation of the FIG Congress 2010 Facing the Challenges Building the Capacity 11-16 April, Sydney, Australia
- Preparation of the FIG Publication No. 47 on Enhancing Surveying Education through e-learning to be published at the FIG Congress 2010 in Sydney
- Preparation of the Workshop on New challenges in Professional Education, 26-28 August 2010, London, UK

2. Working Groups

Working Group 2.1 – Curriculum development

Policy issues

- To support the mobility among professionals, teaching staff and students using credit transfer.
- To support the implementation of "Bologna" changes (BSc / MSc / PhD / Professional masters) and recognition.

- To facilitate the harmonization of curricula.
- To define a "core knowledge base".
- To guarantee life-long learning with educational and training services.
- To serve the needs in the new professional challenges.
- To exchange ideas on Quality Management and Accreditation.

<u>Chair</u>

Prof. Bela Markus (Szekesfehervar, Hungary), email: mb@geo.info.hu

Activities

Working Week 2009: Surveyors Key Role in Accelerated Development 3-8 May, 2009 Eilat, Israel

The Working Week targeted many of the issues facing both our profession and educators in the next years. The main topics addressed by Commission 2 include the importance of changes in land surveyors education, the future directions of education to meet the challenges and opportunities, the role of surveying within the university curricula in general, outcome-based approach to teaching, learning and assessment, development of curricula and educational materials, the need of getting young people interested in surveying and geomatics, marketing of education, challenges and opportunities in learning management.

During the Working Week three technical sessions were organized by Commission 2. After the review of the abstracts, 12 presentations were accepted and presented. The main topics were: Needs of Changing Society – New Skills, Competences in Surveying, Good Educational Practices, Life-long Learning – Educational and Training Services. More information available at http://www.fig.net/fig2009/

7th Regional Conference: Spatial Data Serving People: Land Governance and the Environment - Building the Capacity 19-22 October 2009, Hanoi Vietnam

At the 7th Regional Conference our main focus were on "Education and training needs and responses" and "Capacity building". During the Conference two technical sessions were organized by Commission 2. After the review of the abstracts, 8 presentations were accepted and presented on various topics (exchange programs, geomatics education: as a rising sector for value addition, building the capacities in the cadastral and land registration organizations at individual level in developing and transition countries, etc). ITC presented a Worldwide Network of Academic Partners; a Mechanism for Improving Capacity Building in Land Administration.

There was a "Roundtable on Professional Education", where Dr. Steven Frank, chair elect Commission 2 (USA): presented his Work Plan for the period of 2011-2014. The preliminary work plan identifies four proposed working groups, each of the working groups represents an area of focus in professional surveying education.

Working Group 2.1 - Curriculum and Core Survey Knowledge

Working Group 2.2 – Learning and Teaching Methodology

Working Group 2.3 – Marketing and Management of Professional Survey Education

Working Group 2.4 – Accreditation and Quality Assurance

The ideas were discussed during the roundtable session. More information available at the conference website: http://www.fig.net/vietnam/

Working Group 2.2 – e-Learning

Policy issues

- To explore the movement from traditional face-to-face teaching towards an integrated learning environment, the changing role of the academic staff.
- To discuss the technical, political, legal, organisational and cultural problems of e-Learning.
- To exchange experiences on content development methods (Multimedia, CBT, Quizzes etc) and student support (Virtual Club / Library, Communication techniques, Teamwork tools).
- To identify the Educational Portal functions
- To disseminate Educational Metadata

<u>Chair</u>

Liza Groenendijk, ITC (Enschede, Netherlands), email: groenendijk@itc.nl

Activities

At the "Navigating the Future of Surveying Education" workshop in Vienna (February 2009), the board of working group chairs of Commission 2 decided to summarize the experiences on e-Learning in a technical report. As chair of Working Group 2.2 Liza Groenendijk was invited to guide this process and be responsible for the editing.

The technical report on e-learning intends to summarize the outcomes of symposia and workshops organised by FIG Commission 2, and aims to develop and present an FIG Policy Statement on e-learning. The intention of the report is to support FIG members and their affiliates, and the surveying public in general, in their efforts to further develop e-learning initiatives within their organisations.

The preparations for the technical report started early March 2009. A team of Commission 2 members drafted a first proposal and invited relevant e-learning specialists from universities and industry to join. The publication will be presented during the FIG Congress in 2010 in Sydney.

To facilitate the writing process a Wiki environment (http://figpub.pbworks.com/) was created for drafting the publication and Skype was promoted as the tool for online meetings. By the end for 2009 the draft for publication was sent to the FIG Office.

The following papers were presented during FIG events in 2009 to report on the intentions and process of developing a FIG Publication on e-learning:

 Markus, B. and L. Groenendijk (2009). E-Learning in Surveying. In: Proceedings FIG Working Week 2009. Surveyors Key Role in Accelerated Development, Eilat 3-8 May 2009. (http://www.ortra.com/fig/) Groenendijk, L. and B. Markus (2009). Towards and FIG Publication on e-Learning: Online Joint Content development. In proceedings: 7th FIG Regional Conference Spatial Data Serving People: Land Governance and the Environment - Building the Capacity, Hanoi, Vietnam, 19-22 October 2009. (http://www.fig.net/vietnam/)

Working Group 2.3 – Educational Management and Marketing

Policy issues

- To observe and register the new challenges of our profession respond to them.
- To survey the needs for academic members and provide required services.
- To analyse the market and respond by LLL services.
- To promote the need on CPD (Continuous Professional Development).
- To disseminate experiences in recruitment and marketing.
- To distribute know-how in Project and Quality Management.
- To encourage young surveyors (students) on their career.
- To serve ALUMNI and use its power.
- To build twinning and thematic networks.

<u>Chair</u>

Gert Steinkellner, BEV (Vienna, Austria), e-mail: gert.steinkellner@bev.gv.at

<u>Activities</u>

Workshop on **Navigating the Future of Surveying Education** 26-28 February, Vienna, Austria

Working Group 2.3 of FIG Commission 2 on Educational Management and Marketing and the Austrian Society for Surveying and Geoinformation (OVG) were organising jointly the Workshop. The venues were the lecture halls of the Federal Office of Metrology and Surveying (BEV) in the centre of the City of Vienna, Austria. Heads of Organizing Committee were Mr. Gert Steinkellner and Dr. Reinfried Mansberger.

The program consisted of keynote speakers, technical sessions, hands-on sessions, demonstrations and guided discussions. The Organisation Committee received 30 accepted contributions and 74 participants, from 20 different countries, participated actively in the various workshop sessions. 27 speakers shared their experiences in professional education on the following topics:

- Marketing of Professional Education
- Availability of Continuous Professional Development
- Educational Networks Globalisation of Surveying Education
- Quality Assurance in Surveying Education & Training
- New Methods for Knowledge Transfer
- Scope of Competences in Professional Education

Keynote speeches were given by the President of FIG, Prof. Stig Enemark, by the ESRI Director of Education, Michael Gould, by the chair elect of FIG Commission 2, Steve Frank, and by the Rector of the University of Technology in Graz/Austria, Prof. Hans

Sünkel and by the Austrian Representative of the Bologna Follow Up Group, Gottfried Bacher.

During the conference in two short-term workshops hosted discussions on the topics

- "Students Where Are You?", and
- "Student Today Status & Vision"

In the first mentioned workshop the reasons for the decreasing number of students were be analysed and proper strategies for the recruitment of students and the marketing of professional surveying education were elaborated. The second one – performed by students – examined the situation of students in our professional fields and tried to outline visions for an optimised professional education. Both topics of the workshops have a high relevance in most of our countries.

The discussion topics of the "Students Where Are You?" workshop were as follows:

- 1. Is the surveying profession itself to unattractive for today's young people?
- 2. Is the low number of surveying students the result of an insufficient and inadequate education?
- 3. Is the low number of surveying students the result of only a missing or none active marketing of the surveying study and/or the surveying profession?
- 4. How to enhance technical interest and interest especially for academic surveying education? Mustn't technical education and training begin at kindergarten/ elementary school?
- 5. How to encourage life long learning, project management and quality management? The conclusions were presented during the Closing Session by Mr. Rob Mahoney.

The results of the second workshop were presented during the Closing Session, and were used during the Working Week in Eilat in the discussions generated by "Young Surveyors".

All presentations can be found on the workshop website: http://fig09.ovg.at/

Working Group 2.4 – Real Estate Valuation and Management Education (Joint WG with Commission 9)

Policy Issues

Surveyors are traditionally well educated to basics of real estate legislation and markets. In the present world requirements for knowledge in real estate are expanding fast. It is not anymore possible to educate surveyors to all traditional tasks in unified programs but the programs have to have real options where students can really specialise in real estate economics. This is needed in the market (thousands of new jobs) and examples of some countries show that this kind of education is possible and also very attractive for students and markets.

Chair

Prof. Arvo Vitikainen (Helsinki, Finland), e-mail : arvo.vitikainen@tkk.fi Co-Chair Prof. Kauko Viitanen (Helsinki, Finland), e-mail : kauko.viitanen@tkk.fi

Activities

It was our intention (at Helsinki University of Technology) at the autumn candidate seminar of the study program of the real estate economics to collect basic material for the final report of WG 2.4 Real Estate Valuation and Management Education. We meant to prepare a preliminary report for the Eilat Working Week based on these papers. Unfortunately the autumn seminar had very few participants and the topic was experienced rather difficult, so the plan did not realise.

The final report postponed to the Sydney Congress. The study will concentrate on comparing the education (real estate valuation, facilities management and land management), contents of the study programme, study entities and focuses, extent of the education (credits), number of students, teaching methods, and which different educational institutions the education is given in (which study programmes), etc.

3. Communication

Newsletters: A special edition of Commission's Newsletter supported FIG WW in Eilat and Hanoi.

Commission 2 website: In June 2007 the new website (www.geo.info.hu/fig2) was introduced.

4. Calendar of Commission 2 Events

- Workshop on Curriculum Development Scientia Est Potentia Knowledge is power. FIG Commission 2 Symposium, 7-9 June 2007, Czech Technical University, Prague, Czech Republic Web site: http://geoinformatics.fsv.cvut.cz/
- Workshop on e-Learning, 11-13 June 2008, Enschede, Netherlands Web site: http://www.itc.nl/fig_elearning2008/
- Workshop on Educational management and marketing, 26-28 February 2009, Vienna, Austria Web site: http://fig09.ovg.at/
- Workshop on New term of FIG Commission 2 New challenges in Professional Education, 26-28 August 2010, London, UK Contact: Sharon G. Brown, University of East-London (S.G.Brown@uel.ac.uk)

The aims of this workshop are the presentation of the results of Working Groups for 2007 -2010; discussions on the present problems of surveying education and planning actions for next term (2011-2014), which will be chaired by Steve Frank (USA).

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Web site: www.fig.net/commission2