

FIG Work Plan

2000 – 2003

INTERNATIONAL FEDERATION OF SURVEYORS FIG

The FIG Work Plan 2000 - 2003

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Introduction

This document lists the tasks which FIG will undertake during 2000-2003. It comprises the vision statement and goals of the Federation, a plan of work for the Bureau for 2000-2003 , in relation to the administration and forward planning of the Federation; and plans of work 1998-2002 for each of the nine technical commissions and ad hoc commission on Construction Economics and Management which pursue FIG's professional and technical objectives. It is, however the Bureau which has overall responsibility for fulfilling this plan, in its role either as an executor or, in the case of commission-led activities, as a facilitator and co-ordinator.

The Bureau's Work Plan is governed by FIG's aim and objectives, the Statutes and Internal Rules of the Federation and decisions of the General Assembly of FIG.

The FIG Work Plan 2000 – 2003 has been adopted by the 23rd FIG General Assembly in Prague, May 2000.

Robert W. Foster
President of FIG

Aim

The aim of FIG is to be the premier international non-governmental organization that represents the interests of surveyors and users of surveying services in all countries in the world. It is a Federation of member associations all of whom seek excellence in the services that they deliver.

Objectives

The objectives of the Federation as defined in its Statutes are:

1. to provide an international forum for the exchange of information about surveying and for the development of fellowship between surveyors
2. to collaborate with the United Nations and other international and regional agencies in the formulation and implementation of policies affecting the use, development and management of land and marine resources
3. to promote the disciplines of surveying, particularly in developing countries and countries in economic transition
4. to promote the role of the surveyor in the management of natural and man-made environments
5. to promote the development of national associations of surveyors and to promote professional standards and codes of ethics and the exchange of surveying personnel
6. to promote high standards of education and training for surveyors and to facilitate continuing professional development (CPD)
7. to encourage the development and proper use of appropriate technology
8. to encourage research in all disciplines of surveying and to disseminate the results.

Mission Statement

The Mission of the International Federation of Surveyors is to ensure that the disciplines of surveying and all who practice them meet the needs of the markets and communities that they serve.

The Bureau Work Plan 2000 - 2003

"Advancing the Global Role of Surveying"

1 General

This Work Plan provides the FIG Bureau direction in its management of the Federation. The Bureau, as the managing board of the Federation, has the authority and responsibility for fulfilling this plan.

The member organizations are FIG; thus, the Bureau will focus on providing member organizations the tools to advance the global role of surveying by

- Recognizing surveying's significant role in the betterment of humanity and its environs;
- Recognizing its responsibilities to all surveyors including those not represented by member organizations and will ensure that its activities will benefit the profession as a whole;
- Implementing mechanisms for increasing participation by member organizations in FIG activities and informing member organizations of FIG and other international surveying activities;
- Emphasizing the strengthening of professional institutions, the promoting of professional development, the participating in the development of international standards, and the working with international organizations;
- Developing contacts with UN agencies and other international organizations in the context of the commission work plans;
- Promoting international standards of professional competence;
- Encouraging the development and proper use of appropriate technology; and
- Encouraging research in all disciplines of surveying and to disseminate research results.

FIG's financial security is directly related to its member organizations' (and potential new member organizations) members perceptions of FIG's responsiveness to their individual goals. Thus, the Bureau has as its primary objective

- The improving of FIG's responsiveness to the needs of member organizations' members.

The Bureau recognizes that the commissions are the implementers of FIG policies and programs. Thus, the Bureau plans to achieve this objective by

- Increasing the effectiveness and responsiveness of the commission work plans through Bureau oversight (ensuring that commission work plans reflect the FIG approved overall plan, ensuring coordination between commissions, tracking of work plan schedules, etc.);
- Providing financial grants to commissions for high priority projects;
- Developing, through the commissions, products, training and services which have practical application to member organizations and their individual members; and
- Communicating the commissions' accomplishments to the member organizations and others.

2. Specific Tasks

The specific tasks which the Bureau will under take during its administration are

2.1 Planning and Developing the Federation

- a. To present, to the General Assembly in Prague 2000, the findings and recommendations of the task force on the Future Governance and Management of FIG and to implement the General Assembly's approved changes and prepare the new Statutes for the approval of the General Assembly in Seoul 2001;
- b. To review and update the strategic plan for approval to the General Assembly in Washington 2002;
- c. To develop a long-term financial strategy for FIG and present the strategy to the General Assembly in Washington 2002;
- d. To initiate and fund a reserve account;
- e. To develop and implement work planning and budgeting processes which incorporate and coordinate all FIG organizational units;
- f. To continue the work of the task force on the Future Governance of FIG with ACCO to evaluate the need for any longer term changes to the Commission structure in more detail so that the decisions can be made at the General Assembly in Washington, 2002;
- g. To make recommendations, to the 2002 General Assembly, on the process for selecting future congress sites;
- h. To develop, for presentation to the 2002 General Assembly, protocols for the financing and the content of congresses and working weeks, including a policy for the distribution of congress and working week profits and losses;
- i. To develop, for approval by the 2001 General Assembly, a list of authorities, responsibilities and duties for the Bureau, FIG Office, and the commissions;

2.2 Membership

- a. To increase membership within under-represented regions: especially, the Caribbean, and Central and South America;
- b. To increase secondary membership in countries that are already members of FIG;
- c. To increase FIG regional activities and to seek the support and the participation of member associations and commission delegates to these activities;
- d. To increase academic membership and promote the Surveying Education Database;
- e. To increase sponsor membership and develop the benefits of being a sponsor member;
- f. To arrange for Bureau members and other FIG representatives to visit all member associations;
- g. To encourage visits to the FIG office by member association representatives and to use the FIG office for Commission and other events;
- h. To develop strategies to encourage the surveyor to be customer oriented and to provide a quality service;

2.3 Commissions

- a. To improve coordination between the Bureau, ACCO and the Commissions;
- b. To develop FIG and its commissions' co-operation with international and regional surveying related organizations identifies by the commissions.

2.4 External Relations

- a. To develop and deepen co-operation with partner and sister organizations and to sign memoranda of understanding or agreements whenever needed;
- b. To enter into cooperative agreements with sister organizations to work together on areas of common concern;
- c. To identify and make contact with UN related agencies having common areas of interest with FIG and with whom FIG does not currently have a formal relationship;
- d. To enter into a co-operative agreement with the Economic Commission for Africa (UNECA), the Permanent Committee for GIS Infrastructure for Asia and the Pacific (PCGIAP) and other regional organizations and to act as a catalyst for the establishment of a formalized regional body in the Americas dealing with Spatial Data Infrastructures;
- e. To promote the activities of the UNCHS(Habitat) global campaigns especially the Global Campaign for Secure Tenure;
- f. To prepare a report on progress made during the five years since the Habitat II Conference for the June 2001 special meeting of the UN General Assembly in New York (Istanbul+5);
- g. To evaluate the possibilities to participate in the process of Rio + 10 to be held in 2002;
- h. To develop the coordination mechanisms for synchronizing the planning and budgeting of FIG/UN cooperative programs;
- i. To prepare for distribution, by the World Bank, compilations of the costs and benefits of various cadastre/land registration projects and checklists on how to successfully conduct land administration projects;
- j. To develop the mechanisms required to effectively liaise with FAO regional organizations;
- k. To co-operate with the World Trade Organisation in the promotion of global markets for surveying services;
- l. To develop further co-operation with certification and standardisation bodies to ensure that workable standards which take full account of the needs of FIG's members result;
- m. To develop strategies that facilitate the transfer of donated equipment to educational establishments in developing countries.

2.5. Communications

- a. To improve communication between the Bureau, the commissions, and the member associations and, through them, to their individual members;
- b. To establish effective methods of notifying member associations and their members of FIG services and products (e.g. seminars, workshops, publications);
- c. To publish an annual review which will serve as FIG's main medium of external communication and principal marketing tool;
- d. To publish FIG quarterly bulletin both as printed and internet versions;
- e. To develop FIG home page as the main channel for daily information delivery;
- f. To develop recommendations on the publication of a FIG journal containing selected papers presented at FIG or FIG sponsored events;
- g. To produce literature describing why clients should use the services of surveyors;
- h. To conduct a major internet campaign publicizing FIG's work;
- i. To build and maintain a database of international, regional, and national organizations whose activities are surveying related;
- j. To maintain an internet accessible system for holding FIG publications.

Commission Work Plans 1998-2002

Commission 1- Professional Standards and Practice

- Chairperson: Prof. John Parker (Australia)

Terms of reference

- Ethical principles and codes of professional conduct
- Guidelines relating to the provision of services
- Standards of business practice and total quality management
- Changes affecting the operation of surveying practices, their management and their professional structures
- International legislation affecting the profession
- The role of surveyors in the public sector.

Mission statement

Facilitate and encourage delegates from member associations to participate in the activities of the commission which include promoting the aims and objectives of FIG and in particular professional standards; ethical principles and codes of professional conduct; business practice; provision of services; management issues; and legislation affecting the profession.

Commission1 web site: FIG Home page: <http://www.FIG.net>.

Working Groups

Working Group 1.1 - Organisation

Policy issues

- Public sector organisational structures that cover FIG activities, including the management philosophy behind the structures and the method of providing services and the role of the private sector.
- Outsourcing/contracting out of government services.

Chair

Klaus Rürup (Germany).

Specific projects

- Documentation showing different organisational structures of various governments around the world.
- Paper addressing the management philosophy, including the role of the private sector in the provision of services.
- Paper on outsourcing/contracting out of government services.
- Draft clauses for possible inclusion in contracts relating to the contracting out of services with respect to management performance matters.

Workshop(s)

n/a

Publication(s)

See Specific projects – papers to be presented at FIG working weeks and on the commission home page.

Timetable

Conclude work by the time of the FIG working week, 2000.

Beneficiaries

International agencies, governments - particularly in developing countries and countries in economic transition.

Working Group 1.2 - Business practices**Policy issues**

- The importance of ethics in business.
- The impact of information technology on business practice.
- The provision of quality services and products, in particular the role that total quality management, quality assurance and quality awards criteria can play in the management of an organisation.
- ISO standards that may affect the management and business practices of surveying organisations.

Chair

Iain Greenway (UK).

Specific projects

- Promote the importance of ethics in business.
- Monitor and provide constructive comment on (i) the impact of information technology on business practice and (ii) relevant ISO standards (in collaboration with the FIG task force on standards).
- Research and promote all aspects of quality relevant to the management of surveying businesses.
- Produce a series of papers and/or reports to bring the foregoing issues to the attention of member associations and for discussion at FIG working weeks.

Workshop(s)

n/a

Publication(s)

See Specific projects, which may eventuate in an FIG publication.

Timetable

Conclude work by the time of the FIG working week, 2001.

Beneficiaries

Surveying businesses.

Working Group 1.3 Internet site

Policy issues

- Develop a commission home page, to disseminate news about its activities and provide access to various data bases of information.

Chair

Stephen Djaba (Ghana)

Specific projects

- Create a user friendly easily accessible site with links to and from other FIG home pages.
- Thereafter maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

Workshop(s)

n/a

Publication(s)

n/a

Timetable

Create site during 1999.

Beneficiaries

International agencies, member associations, surveying businesses, individuals.

Other activities

Professional Practice

Professional practice (individual), covering

- assistance to the FIG task force on under represented groups in surveying
- personal professional development, in collaboration with the Commission 2 working group on CPD and management skills.

Beneficiaries

- Individual surveyors.

Joint Working Group with Commission 3 on access to relevant data

Policy issues: Establish and chair a joint working group with Commission 3 on access to relevant data with particular regard to the implications of intellectual property and copyright (including the WTO's work on trade-related aspects of intellectual property rights (TRIPS)).

Chair: Chris Hoogsteden (New Zealand).

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Commission 2 - Professional Education

- Chairperson Prof. Kirsi Virrantaus (Finland)

Terms of reference

- Education and teaching methods
- Continuing professional development
- The interaction between education, research and practice
- Encouragement of the exchange of students and personnel.

Mission statement

- Methods and content of education: develop and promote teaching and learning methods and the content of curricula with special emphasis on university level, high technology-based education.
- Interaction between academia and practice: stimulate interaction between university education, research and practice so as continuously to develop educational curricula and enable surveyors to put into practice the results of research and development.

- Academic and professional profiles: through the promotion of continuing professional development (CPD) and the practical application of research, help surveyors continuously to up-date their academic and professional profiles.
- Dissemination of knowledge: encourage the exchange of students and qualified surveyors, (i) to facilitate the sharing of knowledge between surveyors and between surveyors and members of allied disciplines and (ii) to create an awareness of different environments and cultures.
- Marketing: market surveyors as modern professionals on a par with other technical, economics and managerial professionals, with particular emphasis on young people who are selecting their field of study.

Commission 2 web site: <http://www.hut.fi/Units/Cartography/fig2.html>.

Working Groups

Working Group 2.1 - Management skills, professional competencies and CPD policies

Policy issues

- Equipping surveyors with management and problem solving skills.
- On-going promotion of continuing professional development (CPD).
- Putting research results into practice.

Chair

Chris Hoogsteden (New Zealand).

Specific projects

- Conclude work begun during the preceding plan period (1994-1998) on management skills.
- CPD.
- Co-operate with Commission 1.

Workshop(s)

None.

Publication(s)

"Management skills" (not final title) (as an FIG publication).

Timetable

Draft publication, 2000; final publication, 2002.

Beneficiaries

Universities and university teachers, individual surveyors.

Working Group 2.2 - Virtual academy - distance learning

Policy issues

- The movement from discrete computer assisted learning (CAL) tools towards an integrated virtual learning environment.

- Technical, political, legal, organisational and cultural problems.
- Copyright and accreditation problems.
- The role of the lecturer and human communication in general.

Chair

Henrik Haggrén (Finland).

Specific projects

- Establish an Internet forum for discussion of the virtual academy.
- Collect experiences from universities which have already introduced distance learning.
- Disseminate information about distance learning to universities which are starting to introduce the technique.
- Co-operation with Commission 3 on distance education and training in geoinformatics and with all other commissions as regards distance education and training in the disciplines they represent.
- Establish contacts with Internet/multimedia experts outside FIG.
- Set up a home page with hyperlinks to Web sites for distance learning relevant to surveying education.

Workshop(s)

- Virtual workshops and information delivery via the Internet.
- Presentations at FIG working weeks, 1999, 2000 and 2001.

Publication(s)

Digital material on Web sites.

Timetable

- Set up home page with hyperlinks to Web sites during 1998-99.
- Continuous communication via the Internet.
- Working group final report, 2002.

Beneficiaries

Universities and university teachers, distance learning students, individual surveyors, employers.

Working Group 2.3 - University curricula – content competencies, trends and assessments

Policy issues

- Who drives content: academia or professional practice?
- Trends in professional practice, possibilities deriving from academic research and curriculum responses to these trends.
- Curriculum redesign in response to outcome assessments.
- Necessary competencies for inclusion in surveying curricula.

Chair

Julian “Jud” Rouch (USA).

Specific projects

- Maintain contacts with all other commissions regarding the development of curricula in their respective fields.
- Study educational models in South Africa, South America and South Asia.

Workshop(s)

- "University curricula, teaching methods and quality systems", Wuhan, October 1998.
- Presentations at FIG working weeks, 1999, 2000 and 2001.

Publication(s)

Proceedings of workshop (by the host).

Timetable

- Proceedings of workshop, 1998.
- Working group final report, 2002.

Beneficiaries

Universities and university teachers, students, employers.

Working Group 2.4 - Surveying students**Policy issues**

- The need to involve students in the work of FIG and its commissions as well as in the work of national associations.
- The need to market surveying as a modern profession and field of science to young people who are selecting their field of study.

Chair

Prof. Pedro Caverro (Spain).

Specific projects

- Post-academic practical training for students.
- Possibilities for international training and international studies - both for undergraduates and young postgraduates.
- Information dissemination to schools on surveying as a profession.
- Practical problems of student/young graduate participation in the work of Commission 2 in particular and in the work of FIG in general (in collaboration with Commission 1 and the task force on under-represented groups in surveying).

Workshop(s)

Rosario, Argentina, 18-20 October 2000.

Publication(s)

Proceedings of workshop (by the host).

Timetable

- Proceedings of workshop, 2000.
- Working group final report, 2002.

Beneficiaries

Students, universities, FIG.

Joint Commission 2 and 9 Working Group - Education of valuation in FIG

Policy issues

- Education on valuation through information network in FIG (an integrated virtual learning environment). Let education move, not people.
- Educational ladder. A stepped way of advancing shall be planned for improving the knowledge of valuation.
- An educational package of valuation should be created and offered on the homepage of FIG. The developing countries and those under transition economy should intentionally be chosen as the target group.
- Co-operation in education / a network for supporting the contact persons.

Chair

Prof. Kauko Viitanen (Finland).

Specific projects

- Establish an Internet forum for discussion of the education on valuation.
- Collect information and determine terminology, basic theories, basic methodology on valuation.
- Create the educational package of valuation.
- Co-operation with Commission 2 and especially with the WP 2.2 (Virtual academy - distance learning) on distance education and training and with Commission 9 especially the WP 9.1 (Education and training of valuers in developing economies). Co-operation also with all other commissions as regards distance education and training.
- Establish contacts with the universities, the associations for valuation etc. outside FIG.
- Set up a home page with an educational package of valuation with hyperlinks to Web sites for distance learning.

Workshop(s)

- Virtual workshops and information delivery via the Internet.
- Presentations at FIG working weeks, Korea 2001, USA 2002 and Germany 2006.
- Discussions/presentations can be arranged also in some other seminars of Commission 9 (e.g. Copenhagen 2001).

Publication(s)

- Digital material on Web sites
- Short articles in journals

Timetable

- Set up home page with hyperlinks to Web sites during 2001-2005.
- Continuous communication via the Internet.
- Working group final report, Congress in Munich, 2006.

Beneficiaries

Distance learning students, individual surveyors, civil servants, politicians, landowners, employers, universities and university teachers etc.

Other activities

- Support for developing countries through the organisation of seminars highlighting different possibilities for and backgrounds to surveying education in various countries.
- Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.
- Maintain and up-date the surveying education data base (SEDB).

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Commission 3 - Spatial Information Management

- Chair Jes Ryttersgaard (Denmark)

Terms of reference

- Management of land, property and hydrographic information and the related processes, procedures and resources
- Spatial data infrastructure - data models, standards, availability and legal aspects; management of spatial knowledge
- The impacts on organisational structure, business models, professional practice and administration
- Management of spatial information supporting sustainable development.

Mission statement

- "Towards a digital earth" (an Al Gore statement) - how to change raw data into understandable information.
- Criterion of success: to initiate activities so interesting that colleagues will regard the commission as one base in their professional lives.
- Progress activities mainly through three working groups which will participate in the planning of workshops and short seminars held during and outside FIG working weeks; submit progress reports to those events; and present the final outcomes of their work as reports, statements and/or publications.

Working Groups

Working Group 3.1 - Spatial information management: Technical approaches

Policy issues

- Forecast: 4-Dimensions
- Accessibility and visualisation of spatial data and information
- From mapsheets to seamless spatial information.
- Interoperability: multi source, multi scale and multi system.
- Quality Control/Quality Assurance (QC/QA): management and technical aspects using standards and regulations for QC. How to "lie" with information filtering.

Chair

Dr. Chryssy Potsiou (Greece).

Specific projects

Presentations at the commission annual meetings.

Workshop(s)

4-7 October 2000, Athens, Greece.

Publication(s)

- Progress reports in the six-monthly Commission 3/7 newsletter.
- Workshop proceedings (by the host).

Timetable

- Workshop proceedings to be published by the host no later than three month after the event.
- Working group final report to FIG congress, 2002.

Beneficiaries

Organisations and surveyors dealing with spatial information

Working Group 3.2 - Spatial data infrastructure**Policy issues**

- Spatial data infrastructure.
- Standardisation, in collaboration with the FIG task force on standards.

Chair

Prof. Bernd Teichert (Germany).

Specific projects

Presentation of the findings of three discussion papers on SDI challenges and one comparative paper/framework at the commission annual meeting in Austria, April 2001.

Workshop(s)

21-23 October 1999, Budapest, Hungary.

Publication(s)

- Progress reports in the six-monthly Commission 3/7 newsletter.
- Findings (as an FIG publication).

Timetable

- Workshop proceedings to be published by the host no later than three month after the event.
- Findings, 2001.

Beneficiaries

Governments, NGOs.

Working Group 3.3 - Facilitating spatial information and knowledge management for decision support in Urban Management in Countries in Transition and Developing Countries.

Policy issues

To create Best Practice Guidelines for 'Spatial information and knowledge management for decision support in Urban Management' based on a set of 6 case studies that would be included in the Habitat's 'Best Practices in Improving the Living Environment' database. This activity has been agreed in the Memorandum of Understanding for 2000-2003 between UN Habitat and FIG in 2000. Chair Robin McLaren (UK) and Robert Mahoney (UK).

Specific projects

The initial planning stage will identify an initial maximum of 6 Case Studies for investigation. These will be limited to the African continent and will cover best practice in a wide number of Urban Management areas where spatial information & knowledge would be supportive. For example:

- Economic Development;
- Social Services;
- Environmental Management;
- Infrastructure, Communications, Transportation;
- Housing;
- Land Use Management;
- Urban Governance;
- Disaster & Emergency;
- Urban & Regional Planning;
- Technology, Tools and Methods.

The adopted Case Studies will be analysed to identify and classify the lessons learned.

A joint Habitat / FIG Best Practice workshop will then be run to analyse the Case Studies and generate consensus on the derived Best Practice.

The results of the workshop will be published as a set of Best Practice Guidelines; as hardcopy and also as entries in Habitat's 'Best Practices in Improving the Living Environment' database.

Workshop(s)

- Co-ordination Habitat/FIG meeting, June 2000
- Joint Habitat/FIG Workshop on spatial information and knowledge management in Urban Management in Developing Countries and Countries in Transition February 2001

Publication(s)

Associated set of Case Studies and Best Practice Guidelines, as hardcopy and also as entries in Habitat's 'Best Practices in Improving the Living Environment' database

Timetable

- Co-ordination Habitat/FIG meeting June 2000
- Initiate Case Study analyses July 2000
- Joint Habitat / FIG workshop Feb 2001
- Publish Best Practice October 2001

Beneficiaries

UN, Governments, NGOs, FIG member associations, individual surveyors.

Other activities

Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

Annual meetings: 21 - 23 October 1999; Budapest, Hungary; 4-7 October 2000; Athens, Greece and April 2001, Austria.

Ensure on-going publication of the Commission 3/7 six-monthly newsletter, under the editorial control of Bo Lauri and nominate two members of the editorial board.

Participate in the FIG task force on sustainable development (Commission 3 participant: Karin Haldrup) and the FIG task force on standards (Commission 3 participant: Hans Knoop).

Participate in the Commission 2 working group on virtual academy and distance learning (Commission 3 participant: Bela Marcus).

Participate in the joint Commission 1/3 working group on access to relevant data with particular regard to the implications of intellectual property and copyright (Commission 3 participants: Jaap Zevenbergen, John Exintavelonis and Harlan J. Onsrud).

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Commission 4 - Hydrography

- Chair Dennis St. Jacques (Canada)

Terms of reference

- Hydrographic surveying
- Marine environment
- Data processing and management
- Nautical charting and bathymetric maps – analogue, digital and ENCs.

Mission statement

- Promote the aims and objectives of FIG to hydrographers through the active involvement of national delegates from member associations and other interested parties in the activities of the commission.
- Develop guidelines and standards that will assist hydrographers in the provision of their services.
- Disseminate information relevant to the profession through participation in international meetings, conferences and committees.

Working Groups

Working Group 4.1 - Future technologies

Policy issues

- Provision of information on new and emerging technologies.
- Development of guidelines and standards.

Chair

Adam Greenland (UK).

Specific project(s)

Identify new and emerging technologies to be tracked and individual scanners to track them; prepare and distribute brief summaries of new developments; identify issues that may require further analysis by dedicated working groups.

Workshop(s)

Presentations at FIG working weeks.

Publication(s)

None expected. However, brief internal reports will be prepared.

Timetable

To be advised.

Beneficiaries

Commission delegates, commission officers and hydrographic surveyors.

Working Group 4.2 - Sustainable development in hydrography**Policy issues**

Develop and promote sustainable development guidelines in hydrography.

Chair

Dennis St. Jacques (Canada).

Specific project(s)

- Identify hydrographic activities that contribute to sustainable development with emphasis on the coastal zone and produce a summary report.
- Input to the FIG task force on sustainable development.
- Prepare guidelines for hydrographic surveyors.

Workshop(s)

None expected.

Publication(s)

Internal report to the FIG task force on sustainable development.

Timetable

To be advised.

Beneficiaries

Commission delegates, commission officers and hydrographic surveyors.

Working Group 4.3 - Electronic charts**Policy issues**

- Provision of information on new and emerging technologies.
- Development of guidelines and standards.

Chair

To be advised.

Specific project(s)

- Prepare guidelines for the collection of hydrographic data that is compliant with the S57 data standard.
- Prepare guidelines for the transformation of existing data sets to the S57 data sets.
- Provide input to FIG task force on standards.

Workshop(s)

Presentations at FIG working weeks.

Publication(s)

None expected.

Timetable

To be advised.

Beneficiaries

Commission delegates, commission officers and hydrographic surveyors.

FIG/IHO Committees

Commission 4 represents FIG in two FIG/IHO standing committees: the Technical Assistance and Co-operation Co-ordination Committee (TACC) and the International Advisory Board on Standards of Competence for Hydrographic Surveyors.

The objectives of TACC are

- to promote the importance of hydrography and nautical charting to all coastal states
- to encourage the provision of technical and financial assistance to hydrographic development projects
- to maintain an inventory of hydrographic projects involving technical assistance and co-operation.

During the work plan period Commission 4 will chair and actively participate in the activities of TACC. Its next meeting is scheduled from 26 - 29 April 1999 at the US hydrographic conference in Mobile, Alabama.

Commission 4 is seeking two additional members to represent FIG on TACC.

The role of the International Advisory Board on Standards of Competence for Hydrographic Surveyors is

- to develop and up-date international standards of competence for hydrographic surveyors
- to review the academic programme of educational institutions that are seeking IHO accreditation of their hydrographic programmes.

Commission 4 delegates to the Advisory Board will participate actively in its work during the next five years. The commission is looking for a member from the off-shore survey industry to augment the FIG contribution to the Advisory Board.

Other activities

Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

Sponsor a hydrographic session at the 6th Annual South East Asian Surveyors Conference, Perth, October 1999.

Commission officers and chairs of working groups

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Commission 5 - Positioning and Measurement

- Chair: Prof. Jean-Marie Becker (Sweden)

Terms of reference

- The science of measurement (instrumentation, methodology and guidelines)
- The acquisition of accurate, precise and reliable survey data related to the position, size and shape of natural and artificial features of the earth and its environment.

Mission statement

- Focus on modern technologies and technical developments and, through guidelines and recommendations, assist individual surveyors to choose and utilise those methods, technologies and instruments that are most appropriate to different applications.

- Follow technical developments through collaboration with other FIG commissions and other international organisations; participation in appropriate meetings; and the study of appropriate publications.
- Support research and development and stimulate new ideas in the fields of expertise represented within the commission.
- Collaborate with manufacturers on the improvement of instrumentation and its associated software.
- Present and promote the work of the commission and its working groups on an on-going basis at FIG working weeks and other relevant technical meetings and in appropriate FIG and other media.

Working Groups

Working Group 5.1 - Standards, quality assurance and calibration

Policy issues

- Influence the development of standards affecting geodetic instruments and methods, in collaboration with the FIG task force on standards and through participation in the relevant technical committees (TCs) of the International Standards Organisation (ISO) and other appropriate bodies.
- Acceptance controls, quality assurance and certification and their impact on the surveying profession.
- Checking and calibration of measuring instruments.

Chair

Dr Vaclav Slaboch (Czech Republic).

Specific project(s)

- Present and promote the use of standards and guidelines to the surveying community.
- Establish guidelines and recommendations for the checking and determination of field accuracy of total stations, digital levels, laser planes, etc and for their calibration, including lab calibration.

Workshop(s)

- 35th international geodetic information days, Brno, November 1998.
- "Geodesy and surveying in the future - the importance of heights", Gävle, March 1999.
- Dedicated session during FIG working week, 1999.
- "Standards, quality and calibration" during FIG working week, 2000.
- Contribution to technical programme forming part of FIG working week, 2001.

Publication(s)

- Guidelines for digital levels (by the commission).
- Guidelines for total stations (by the commission).
- Guidelines for laser planes (by the commission).
- Procedures for lab calibrations (by the commission).

Timetable

- Draft publications to FIG working week 1999 (digital levels) and 2000 (total stations and laser planes); publication in immediately following years.
- Timetable for procedures for lab calibrations to be advised.
- Working group final report: dedicated session, FIG congress, 2002.

Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors.

Working Group 5.2 - Height determination techniques

Policy issues

- Measuring issues when heighting with terrestrial and satellite techniques.
- The achievement of given/expected levels of accuracy with different techniques and instruments.
- Improvement of instrumentation, associated software and measuring techniques.

Chair

Prof. Michel Kasser (France).

Specific project(s)

- Follow technical developments concerning height determination techniques and instrumentation - for example, GPS, total stations, digital levels and laser planes - and prepare recommendations for making the best use of them to achieve expected accuracy in their different applications.
- Collaborate with other commissions, other international organisations such as IAG, and manufacturers on matters concerning height determination techniques.

Workshop(s)

- "Geodesy and surveying in the future - the importance of heights", Gävle, March 1999.
- Dedicated session during FIG working week, 1999.
- Contributions to technical programme forming part of FIG working weeks, 2000 and 2001.

Publication(s)

- Guidelines on height determination techniques using terrestrial methods (by the commission).
- Guidelines on height determination techniques using satellite techniques (by the commission).

Timetable

- Draft publications to FIG working week, 2000; publication in 2001.
- Working group final report: dedicated session, FIG congress, 2002.

Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors.

Working Group 5.3 - Kinematic and integrated positioning systems

Policy issues

- Investigation of performances and achievable accuracy of existing systems.
- Investigation of utilisation possibilities and different applications.
- Influencing technical developments.

Chair

Dr Naser El-Sheimy (Canada).

Specific project(s)

- Report on performances (possibilities, limitations and developments) of different systems.
- Prepare guidelines for practitioners on making the best use of systems to achieve certain accuracy for specific applications.
- Follow up and report on surveying methods and instrumentation for the study of deformations, especially slow motion deformations, and dynamic co-ordinates.
- Collaborate with other commissions, other international organisations (including IAG and ISPRS) and manufacturers on matters concerning kinematic and integrated positioning systems.

Workshop(s)

- "Mobile mapping technology", Bangkok, April 1999.
- "New trends in kinematic real time and integrated positioning systems/techniques" during FIG working week, 2001.
- "Real time mobile mapping systems" session at KIS 2001, Banff, June 2001.

Publication(s)

- Report on performances of existing systems and developments (by the commission).
- Guidelines on making the best use of existing systems (by the commission).
- Report on slow motion deformations and dynamic co-ordinates (by the commission).

Timetable

- Draft report on performances to FIG working week, 1999; draft guidelines on best uses and draft report on slow motion deformations to FIG working week, 2000; publications in immediately following years.
- Working group final report: dedicated session, FIG congress, 2002.

Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors.

Working Group 5.4 -Integration of techniques for digital mapping

Policy issues

- Modern data collection techniques - for example, digital photogrammetry, remote sensing, GPS and scanners - for digital map production.
- Modern digital map production techniques together with modern equipment and covering the complete profile of the surveyor, thereby complementing the work of ISPRS and ICA.

Chair

Prof. Nicolas Paparoditis (France).

Specific project(s)

- Study and follow technical developments and performances of integrated survey systems including digital photogrammetry, geodesy and other techniques for digital mapping production purposes.
- Follow up the implementation in different areas of these integrated systems - for example, digital aerial photogrammetry applications.
- Study how to apply these integrated techniques for the establishment of 3-D databases for monitoring the near environment (urban areas, buildings, etc).

Workshop(s)

Contribute to technical programmes forming part of FIG working weeks in 1999, 2000 and 2001.

Publication(s)

- Report on instrumentation for integrated digital mapping systems and their applications (by the commission).
- Report on the best use of different integrated digital mapping systems (by the commission).
- Report on the use of 3-D monitoring of the near environment (by the commission).

Timetable

- Draft report on instrumentation for integrated digital mapping systems to FIG working week 2000; draft reports on the best use of integrated digital mapping systems and on the use of 3-D monitoring to FIG working week, 2001; publication in immediately following years.
- Working group final report: dedicated session, FIG congress, 2002.

Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors.

Working Group 5.5 - Reference frame in practice

Policy issues

- Inventory of approaches from different countries.

- The best use of global, national and local co-ordinates (horizontal and vertical components) for applications in urban and rural areas.
- Transformation parameters for the best use of modern surveying techniques in their different applications - for example, road construction.
- Quality aspects concerning requirements from a regional point of view.

Chair

Prof. Paul Cross (UK)

Specific project(s)

- Prepare and present regular status reports based on an inventory of existing approaches.
- Prepare guidelines to help surveyors to manage their work at local and regional level and to manage data such as co-ordinates and transformation parameters in a correct and efficient way.
- Report on the configuration, establishment and densification of local control networks for the best use of modern surveying techniques in urban and/or rural areas, especially to support their application in developing countries.
- Finalise the report on height datum transformations.
- Prepare a report on the future of levelling networks.
- Collaborate with other international organisations (including IAG) and with Working Group 5.3's work on deformation measurements.

Workshop(s)

- "Geodesy and surveying in the future - the importance of heights", Gävle, March 1999.
- Dedicated session during FIG working week, 1999.
- Contribution to technical programmes forming part of FIG working weeks, 2000 and 2001.

Publication(s)

- Report on height datum transformations (by the commission).
- Report on the future of levelling networks (by the commission).
- Report on the best use of modern techniques in urban and/or rural areas (by the commission).

Timetable

- Final report on height datum transformations to FIG working week, 1999.
- Draft publications on levelling networks and on modern techniques to FIG working week, 2000; publication in immediately following year.
- Working group final report: dedicated session, FIG congress, 2002.

Beneficiaries

FIG member associations, manufacturers and users of survey equipment, governments, standardisation organisations, decision makers, GIS developers and users, surveying businesses, individual surveyors.

Other activities

Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

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Commission 6 - Engineering Surveys

- Chair Dr. Michel Mayoud (France)

Terms of reference

- Acquisition, processing and management of topometric data and of all related information throughout the life cycle of a project
- Development and implementation of adequate survey methods in engineering projects
- Metrology, quality control and validation for civil construction and manufacturing of large objects
- Deformation monitoring, analysis and interpretation
- Prediction of deformation and movements in engineering projects, mines and areas of geological hazard.

Mission statement

- Promote the knowledge, skills and abilities of surveyors in civil and industrial works within the various professional fields of engineering.
- Support all development and multidisciplinary expertise leading to integrated survey methods, using various instruments and sensors and combining geometry with all other data relevant to each engineering problem.
- Provide a forum for the development and exchange of knowledge on the engineering analysis of survey data for the study of structures.
- In addition to the links with related Working Groups of IAG and ISPRS, look for possible connections within organisations of civil, structural and mechanical engineers and within those dealing with metrology and quality control - at the national and international level.

Working Groups

Working Group 6.1 - Deformation measurement and analysis

Policy issues

- Automation of monitoring surveys
- Enhancement of geometrical modelling of deformations from integrated deformation surveys
- Physical interpretation of deformations including numerical modelling and prediction of deformations and back analysis.

Chair

Prof. Adam Chrzanowski (Canada).

Specific project(s)

Regular symposia and exchanges between researchers and professionals concerned.

Workshop(s)

- 9th International Symposium on Deformation Measurements, Olsztyn, Poland, September 1999
- Regular cycle called "International Symposium on Deformation Measurements"
- Contributions to various joint meetings and FIG working weeks

Publication(s)

Proceedings of the meetings (by the host).

Timetable

See Events on FIG home page (<http://www.ddl.org/figtree>) or Commission 6 announcements of forthcoming events.

Beneficiaries

Geodetic engineers dealing with comparative measurements of deformed or unstable objects, geologists, geophysicists, civil and structural engineers concerned on this issue.

Working Group 6.2 - Special equipment for industrial and engineering applications

Policy issues

- Promoting the use of adapted survey techniques in industry and engineering.
- Contributing to the development of special instruments and methods.

Chair

Prof. Heribert Kahmen (Austria).

Specific project(s)

Regular symposia; intensification of links with industry and engineering.

Workshop(s)

- Optical 3D measurement methods, Vienna, October 2001.
- Co-organiser of a regular cycle called "Optical 3D Measurement Methods"
- Contributions to various joint meetings and FIG working weeks.

Publication(s)

Proceedings of the meetings (by the host).

Timetable

See Events on FIG home page (<http://www.ddl.org/figtree>) or Commission 6 announcements of forthcoming events.

Beneficiaries

Surveyors wanting to acquire more expertise in these special applications, designers and manufacturers in various industrial or engineering activities, engineers dealing with quality control of large objects or structures, manufacturers and users of survey instruments.

Working Group 6.3 - High precision metrology for large scientific equipment

Policy issues

- Accurate measurement of large equipment or structures in R and D sectors (mainly for particle accelerators and their detectors) and the development of adequate special techniques.
- Integration of various survey and alignment sensors and actuators for on-line monitoring and control of a given process (dynamic positioning systems).
- Pluridisciplinary collaboration between survey engineers and R and D scientists on special measuring tools and techniques.

Chair

Dr. Michel Mayoud (France).

Specific project(s)

- To enlarge links between this specialised community and other surveyors dealing with engineering and industrial problems.
- To ease the communication of information in this field of application.

Workshop(s)

- International workshop on accelerator alignment (IWAA), ESRF - Grenoble, October 1999, with an additional FIG/IAG day
- Co-organiser of a regular cycle called "International Workshop on Accelerator Alignment" (IWAA)
- Contributions to various joint meetings and FIG working weeks.

Publication(s)

Proceedings of the meetings (by the host).

Timetable

See Events on FIG home page (<http://www.ddl.org/figtree>) or Commission 6 announcements of forthcoming events.

Beneficiaries

Physics laboratories dealing with particle accelerators and detectors, fusion rings, gravitational antennas, power lasers, etc; all scientists and engineers dealing with large scale metrology and accurate positioning in R and D sectors or in industry (in connection with WG 6.2); universities and manufacturers involved in the development of special instruments.

Working Group 6.4 - Transportation and utility lines

Policy issues

- Development of standards and methods for reliable data acquisition techniques, and techniques for data up-date which cope with the interdisciplinary characteristics of such tasks.
- Co-ordination of these activities with network providers and research institutes, and establishing connections to the GIS industry and to leading international organisations.

Chair

Dr. Théophile Engel (Switzerland).

Specific project(s)

- Cost optimisation in co-ordinates-based transportation and utility lines
- Integration of GPS technology for machine control in road and rail construction and maintenance
- Track data communication standards (optionally extendable to a rail and road data communication standard)
- Track machine guidance
- Development of road data surveying technology
- Real-time use of CAD data.

Workshop(s)

- A co-sponsored Symposium on Railway Construction and Maintenance, December 1999, Beijing, China
- Dedicated sessions or contributions in various joint seminars, workshops and symposia.

Publication(s)

- "Survey for modern track construction" in "Engineering Showcase" 10/98.
- Proceedings of meetings (by the hosts).

Timetable

See Events on FIG home page (<http://www.ddl.org/figtree>) or Commission 6 announcements of forthcoming events.

Beneficiaries

Engineering surveyors, national and international railway and road associations, universities and manufacturers involved in the development of specific domains of transportation and utility lines.

Working Group 6.5 - Facility management systems**Policy issues**

- The role of the surveying engineer as the responsible manager of spatially referenced information.
- Support for the co-ordination of the activities of other disciplines.

Chair

Prof. Lothar Gründig (Germany).

Specific project(s)

- Concepts of data models for the mapping of relevant 4D or 5D project data, covering 3D geometry, time, and descriptive attributes.
- Exchange, provision and presentation of facility management data in computer networks.

- Data integration for this subject, taking into account the presence of redundant data and different sources of information.
- The automation and combination of feasible data acquisition techniques.

Workshop(s)

- Dedicated session during the Turkish-German joint geodetic days, June 1999.
- Sessions and contributions to joint seminars, workshops and symposia.

Publication(s)

Proceedings of the meetings.

Timetable

See Events on FIG home page (<http://www.ddl.org/figtree>) or Commission 6 announcements of forthcoming events.

Beneficiaries

Surveying engineers, engineers and managers involved in facility management tasks.

Commission officers and chairs or working groups

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Commission 7 - Cadastre and Land Management

- Chair Dr. Paul Munro-Faure (United Kingdom)

Terms of reference

- Land management and administration
- Cadastral reform and multi-purpose cadastres
- Parcel-based land information systems and computerisation of cadastral records
- Cadastral surveying and mapping; land titling, land tenure, land law and land registration
- Urban and rural land consolidation with emphasis on environmental and economic issues
- National and international boundaries
- Land and marine resource management.

Mission statement

- Continue to sponsor and support wherever possible initiatives and conferences in the commission's area of specialisation and encourage greater recognition in the community of the importance of land management and the cadastre.
- Focus work through three groups with responsibility for developing their own work plans with specific planned outputs; running their own meetings during each of the commission's one week annual meetings; and devising and delivering at one of these meetings a one-day international symposium with published proceedings.
- Monitor (i) the commission's input to FIG'98 and (ii) subsequent annual meetings, using questionnaires, to assist in the design of future meetings.
- Increase the commission's contribution to FIG member associations by encouraging delegates to disseminate widely reports and material from commission meetings.

Working Groups

Working Group 7.1 - Reforming the cadastre

Policy issues

- Create a framework for the determination of progress and the effectiveness of cadastral reforms.
- Work out key criteria to determine the benefits of cadastral reforms.
- Identify criteria for the classification of cadastral systems.

- Complete the commission inventory of cadastral systems and reforms.

Chair

Jürg Kaufmann (Switzerland).

Specific project(s)

- Develop and undertake specific research into the issues raised in connection with projects reforming the cadastre.
- Establish a task force, "Definition of Commission 7 ISO standards" (chair: Winfried Hawerk, Germany), to outline the framework for standardisation of cadastre and land management, identify issues to be standardised, draft the standards and prepare for their implementation in collaboration with the FIG task force on standards.

Workshop(s)

One-day international symposium, 2001, at the annual meeting venue (to be decided by the commission).

Publication(s)

- Report of working group (by the commission).
- Report of international symposium (by the host).
- Draft ISO standards (for the FIG task force on standards).

Timetable

- Publication of international symposium report(s) by the commission, 2001/2.
- Draft ISO Standards, as available.
- Working group final report to FIG congress, 2002.

Beneficiaries

FIG member associations, governments and relevant agencies, international agencies, international finance agencies, individual surveyors.

Working Group 7.2 - Land ownership in the 21st century: access to land

Policy issues

- Future ownership patterns.
- Access to land by the landless and informal settlements.
- Access for women.
- Access for recreation.

Chair

Paul van der Molen (Netherlands).

Specific project(s)

- Develop and undertake specific research into the issue of access to land.
- Establish a task force, "Women's access to land" (chair: Agneta Ericsson, Sweden), to collect, analyse, prepare and present material on access for women, in collaboration with the FIG task force on under-represented groups in surveying.

Workshop(s)

- Global workshop and conference "Land tenure and cadastral infrastructures to support sustainable development", Australia, 1999.
- "Women's access to land" international symposium, New Zealand, 1999.

Publication(s)

- Report of working group (by the commission).
- Report of international symposium (by the host).
- Report of commission task force (by the commission).

Timetable

- Publication of workshop and conference report(s) by the commission, 2001.
- Working group final report to FIG congress, 2002.

Beneficiaries

FIG member associations, governments and relevant agencies, international agencies, international finance agencies, individual surveyors.

Working Group 7.3 - Land markets**Policy issues**

- Land market processes.
- Regulation, restriction and transaction costs.
- Land market structures.
- Volumes of transactions.
- Improving the functions of the market.
- Encouraging consolidation.

Chair

Andras Ossko (Hungary).

Specific project(s)

Prepare, circulate and analyse questionnaire; prepare programme for one-day international symposium based on an evaluation and summary of the responses; develop and publish strategies and recommend ways for improving the functions of land markets.

Workshop(s)

International symposium, Germany, 2000.

Publication(s)

- Brochure on land markets (by the commission).
- Report of working group (by the commission).
- Report of international symposium (by the host).

Timetable

- Publication of brochure in time for commission annual meeting, 2001.
- Working group final report to FIG congress, 2002.

Beneficiaries

FIG member associations, governments and relevant agencies, international agencies, international finance agencies, individual surveyors.

Other activities

Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

Ensure on-going publication of the Commission 3/7 six-monthly newsletter, under the editorial control of Bo Lauri and nominate two members of the editorial board.

Seek a publisher for the book on land management issues (subject matter and authors selected during the 1994-98 plan period).

Collaborate with the Commission 4 working group on sustainable development in hydrography through the appointment of Diane Dumashie (UK) as the Commission 7 corresponding member.

Commission officers and chairs of working groups

Dr. Paul Munro-Faure, Chair of Commission 7
(UNITED KINGDOM)

Chief, Land Tenure Service, SDAA

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Commission 8 - Spatial Planning and Development

- Chair Dipl.-Ing. Helmut Brackmann (Germany)

Terms of Reference

- Regional and local structure planning
- Urban and rural land use planning
- Planning policies and environmental improvement
- Urban development and implementation
- Public-private partnership
- Informal settlements and urbanisation in developing countries
- Environmental impact assessments.

Mission Statement

- Focus on physical planning at all levels, undertake and learn from case studies and enhance understanding and knowledge of planning systems. The importance of sustainable development, environmental issues in planning and environmental impact assessments (EIA) in spatial planning procedures will be key issues throughout the plan period.
- Continue to co-operate with countries in social and economic transition, in eastern Europe and other parts of the world.
- Assist with the implementation of Agenda 21 (from the Rio Earth Summit) and the Global Plan of Action (from the HABITAT II conference in Istanbul) at the local and urban level. Pay particular attention to informal settlements and urbanisation problems in developing countries.
- Focus on implementation problems, especially in inner city areas, and on public/private partnership and other tools that promote planned and sustainable land use development.

Working Groups

Working Group 8.1 - Urban regeneration

Policy issues

- Inner cities and the regeneration of established urban areas.
- Determination of the extent to which methods used to solve a particular problem might be successfully applied elsewhere.

Chair

Paul Lohmann (Netherlands)

Specific project(s)

- Observe different projects over a long time scale in such a way as to determine whether the methods or instruments used might be successfully applied to other projects in other countries.
- Produce an interim report of findings during the preceding plan period (1994-1998), drawing on material presented at the FIG Congress, 1998.

- Consider further findings of case studies already under way in the Netherlands and Germany.
- Extend case studies to Slovakia, Norway and Finland and, if possible, to venues outside Europe - for example, in Australia and the Far East.

Workshop(s)

"Urban regeneration", 22 - 25 September 1999, Rotterdam, Netherlands.

Publication(s)

- Workshop reports (by the commission), as hard copy and on the commission home page.
- Interesting case studies (possibly).

Timetable

- Reports of workshops: 1999 and 2000.
- Case studies: at the end of the project.
- Working group final report to FIG congress, 2002.

Beneficiaries

FIG member associations, governments, international agencies, individual surveyors and others working on urban regeneration problems.

Working Group 8.2 - Surveyors and EIA

Policy issues

- Promote sustainable development and environmental issues in spatial planning.
- Deliver knowledge to developing countries and countries in transition.

Chair

To be advised.

Specific project(s)

- Exchange knowledge and examples of best practice.
- Expand on work undertaken during the preceding plan period (1994-1998) by the working group "Surveyors and EIA".
- Undertake and present the results of case studies.
- Collaborate closely in all of the foregoing with the FIG task force on sustainable development.

Workshop(s)

At FIG working weeks, 1999, 2000 and 2001.

Publication(s)

- "Surveyors and EIA" including guidelines (by the commission), on the commission home page and possibly as hard copy.
- Workshop reports (by the commission), as hard copy and on the commission home page.

Timetable

- Reports of workshops: 1999, 2000, 2001.

- "Surveyors and EIA": 2002.
- Working group final report to FIG congress, 2002.

Beneficiaries

FIG member associations, governments, international agencies, individual surveyors and planners involved in spatial planning and EIA.

Working Group 8.3 - Global urbanisation process and mega cities

Policy issues

Global urbanisation problems and processes and the special problems of mega cities including informal settlements.

Chair

To be advised.

Specific project(s)

- Collect ideas and build up a network for the exchange of experiences and sustainable models, working closely with the other FIG commissions, the FIG task force on sustainable development and UNCHS.
- Participate in the URBAN 2000 congress, Berlin.

Workshop(s)

At FIG working weeks, 1999, 2000 and 2001.

Publication(s)

- Workshop reports (by the commission), as hard copy and on the commission home page.
- Working group report and statement.

Timetable

- Reports of workshops: 1999, 2000, 2001.
- Working group final report and statement, FIG congress, 2002.

Beneficiaries

FIG member associations, governments, international agencies, individual surveyors and others involved in the problems of urbanisation.

Other activities

Maintain and develop the commission home page, linkages to other relevant home pages and new pages or other networks for special projects, to keep commission delegates, other FIG members, users of surveying services and the public involved in and informed about the work of the commission.

Publish commission newsletters on a continuing basis, including on the commission home page.

Consider establishing a working group on public/private partnerships to study different procedures for making contracts to plan and implement more sustainable development in

cities, to prepare best practice examples and to see how these influence financial and social outcomes.

Endeavour to produce abstracts of workshop and seminar papers in French, German and other languages.

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Commission 9 - Valuation and the Management of Real Estate

- Chair G Michael Yovino-Young (USA)

Terms of Reference

- Valuation - the estimating of value of real estate by valuers and appraisers for various purposes including market value, property taxation, eminent domain, claims of damage or impact on value by some cause or event, and acquisitions for public use or public policy
- Investment market value and investment planning
- Development finance, land use feasibility planning
- Management of property, as a single asset or by management companies
- Management of property systems to ensure efficient use of public and private resources
- Management of public sector property.

Mission Statement

- Identify valuers and appraisers in emerging economies and developing countries and co-ordinate their activities with those of FIG.
- Increase FIG members' participation in valuation theory and methodologies, especially in countries without established real estate market protocols and infrastructure.
- Liaise with other appraisal and valuation organizations and co-operate on matters of mutual interest.
- Create, refine and expand a world dictionary for valuers and appraisers.
- Investigate new evidence of the influence of environmental hazards on property use, value, and demand.

Working Groups

Working Group 9.1 - Education and training of valuers in developing economies

Policy Issues

- Disparities and deficiencies in educational programmes.
- Valuation training.

Chair

Bill Rodney (UK).

Specific projects

- Distribute Commission 9 syllabus guidelines ratified by the FIG XX Congress in 1994.
- Compile a selected bibliography of literature in the field.
- Investigate possible academic links.

Workshop(s)

Contributions to technical programmes forming part of FIG working weeks, 1999, 2000, 2001.

Publication(s)

- Report on core curriculum - survey and model (possibly) (by the commission).
- Report on educational programmes - survey of sources (possibly) (by the commission).

Timetable

- Reports - to be advised.
- Working group final report, FIG congress, 2002.

Beneficiaries

FIG member associations, other involved professional organisations, international agencies.

Working Group 9.2 - Environmental influences on real estate

Policy issues

- Creating a global awareness of the negative influences of contamination and ecological degradation.
- Requirements for new training and protocols for valuation practitioners.

Chair

Michael Yovino Young.

Specific projects

- Investigate and catalogue types, extents and impacts of contamination of real estate.
- Identify resources available for practitioners including bibliographies, source organizations, remediation industry programmes, procedures, protocols, and related cost criteria.

Workshop(s)

Contributions to technical programmes forming part of FIG working weeks, 1999, 2000, 2001.

Publication(s)

Report on results of work group investigations and reports (by the commission).

Timetable

- Report of results of investigations and reports, 2000.
- Working group final report, FIG Congress, 2002.

Beneficiaries

FIG member associations, other international and national professional organizations, international agencies, governments.

Working Group 9.3 - Research funding**Policy Issues**

- Seeking sources of funding for research and delivery of papers.
- Encouraging participation in Commission 9's educational presentations at FIG working weeks.

Chair

Simon Adcock (Australia).

Specific Project(s)

n/a

Workshop(s)

n/a

Publication(s)

Annual report on names of recipients, amounts of grants, subjects of research papers, where presented, availability.

Timetable

See publications.

Beneficiaries

FIG members and other academics/practitioners.

Working Group 9.4 - Promoting valuation membership of FIG**Policy issues**

The under-representation of valuation organisations within FIG.

Chair

David Millard (USA).

Specific projects

- Identify groups and organisations of valuers/appraisers world wide and invite them and their members to participate in FIG events and to liaise with Commission 9 officers and delegates.
- Where possible visit organisations in their home countries.

Workshop(s)

n/a

Publication(s)

Annual list of organisations approached, responses and recommendations for further contact.

Timetable

See publications.

Beneficiaries

FIG; Commission 9.

Joint Commission 2 and 9 Working Group - Education of valuation in FIG**Policy issues**

- Education on valuation through information network in FIG (an integrated virtual learning environment). Let education move, not people.
- Educational ladder. A stepped way of advancing shall be planned for improving the knowledge of valuation.
- An educational package of valuation should be created and offered on the homepage of FIG. The developing countries and those under transition economy should intentionally be chosen as the target group.
- Co-operation in education / a network for supporting the contact persons.

Chair

Prof. Kauko Viitanen (Finland).

Specific projects

- Establish an Internet forum for discussion of the education on valuation.
- Collect information and determine terminology, basic theories, basic methodology on valuation.
- Create the educational package of valuation.
- Co-operation with Commission 2 and especially with the WP 2.2 (Virtual academy - distance learning) on distance education and training and with Commission 9 especially the WP 9.1 (Education and training of valuers in developing economies). Co-operation also with all other commissions as regards distance education and training.
- Establish contacts with the universities, the associations for valuation etc. outside FIG.
- Set up a home page with an educational package of valuation with hyperlinks to Web sites for distance learning.

Workshop(s)

- Virtual workshops and information delivery via the Internet.

- Presentations at FIG working weeks, Korea 2001, USA 2002 and Germany 2006.
- Discussions/presentations can be arranged also in some other seminars of Commission 9 (e.g. Copenhagen 2001).

Publication(s)

- Digital material on Web sites
- Short articles in journals

Timetable

- Set up home page with hyperlinks to Web sites during 2001-2005.
- Continuous communication via the Internet.
- Working group final report, Congress in Munich, 2006.

Beneficiaries

Distance learning students, individual surveyors, civil servants, politicians, landowners, employers, universities and university teachers etc.

Other Activities

Expand communications to valuers and appraisers worldwide through the commission home page.

Through the internet and other means of communication, act as a clearing house for practical research, data base development, data searches and educational opportunities,

Reach out to academia, both faculty and students, to encourage future research papers for presentation at FIG events.

Interact with other FIG commissions, especially Commission 2 - professional standards - and Commission 2 - professional education - in matters relating to valuation practices and protocols.

Organise presentations of technical papers by practitioners of interest to valuers and appraisers as Commission 9's contribution to FIG events.

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Ad Hoc Commission on Construction Economics and Management

- Chair John Collinge (United Kingdom)

Terms of Reference

- Construction Economics
- Quantity Surveying
- Building Surveying
- Cost Engineering
- Project Management
- Construction Management
- Construction Law

Mission Statement

- To encourage wider membership of FIG of National Associations of professionals working in Construction Economics and Management.
- To identify and associate with other international groupings of professionals in related fields to optimise the dissemination of information between the members of the organisations.
- To encourage participation of representatives of national member associations in the Working Groups of the Ad Hoc Commission and in the work of other related international groupings.

- To promote the professions related to Construction Economics and Management.
- In association with Commission 1, to maintain and develop high standards within the profession.
- In association with Commission 2, to maintain and develop high standards of professional education, continuing professional development and to develop mutual recognition of qualifications between member associations.
- To assist with the development of the Construction Economics and Management professions in the developing world and the emerging economies.
- To encourage recognition of the value of services which can be provided by the surveying professions in the field of Construction Procurement, Construction Economics and Management with international and governmental organisations.

Working Groups

Working Group 1 - The development of a data base professional associations in the fields of construction economics, quantity surveying, cost engineering and construction and project management world-wide.

Policy Issues

- To provide a basis for encouraging membership of FIG, associations with other relevant international groupings.
- To develop systems for the dissemination of information to the membership of members associations and associated groupings.

Chair

Dr Kenneth Humphreys (USA)

Working Group 2 - A review and comparison of construction procurement - Europe, and of different procurement policy

Policy Issues

- To compare construction procurement methods - Europe
- To assess the comparative benefits and problems of different procurement systems particularly with regard to:
 - tendering costs
 - comparability of tender
 - accountability for contractor selection
 - program implications
- To review developments in procurement necessary to comply with EC guidelines

Chair

John A. Collinge (UK)

Working Group 3 - Research and Development

Policy Issues

- To identify what research is being carried out in the fields of construction economics.
- How best to disseminate the results of that research to practising professionals.

Chair

Tba.

Working Group 4 - A comparison and analysis of the methods of design, procurement and construction of buildings and their engineering installations.**Policy Issues**

- To identify the methodology of design and procurement of engineering services and other building elements.
- To study the resolution of conflicts between engineering installation and other building works.
- Can information technology assist in the resolution of conflicts.

Chair

David Chelmick.

Working Group 5 - The development of recommended standards and practices in cost engineering**Policy Issues**

- Map each cost engineering skills and knowledge process.
- Issue Professional Practice Guides containing the best of published articles.
- Develop generic Recommended Practices and Standards with basic terminology, methods, data applicable to any enterprise or industry.
- Develop enterprise or industry specific Recommended Practices and Standards.

Chair

Frank Postula

In association with ICEC/AACE international.

Working Group 6 - Professional Education Data Base**Policy Issues**

- To compile a database of professional education for construction economics.
- Co-ordinate with Commission 2 to add to the FIG database.
- Commence a comparative study of courses and training to develop the work of mutual recognition of qualifications.
- Commission officers and chairs of working groups

Commission officers and chairs of working groups

John Collinge, Chair of Ad hoc Commission and WG2

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Appendix

FIG DEFINITION OF SURVEYOR

A surveyor is a professional person with the academic qualifications and technical expertise to practise the science of measurement; to assemble and assess land and geographic related information; to use that information for the purpose of planning and implementing the efficient administration of the land, the sea and structures thereon; and to instigate the advancement and development of such practices.

Practice of the surveyor's profession may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals.

1. The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth.
2. The positioning of objects in space and the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth.
3. The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities.
- 4-. The design, establishment and administration of land and geographic information systems and the collection, storage, analysis and management of data within those systems.
5. The study of the natural and social environment, the measurement of land and marine resources and the use of the data in the planning of development in urban, rural and regional areas.
6. The planning, development and redevelopment of property, whether urban or rural and whether land or buildings.
7. The assessment of value and the management of property, whether urban or rural and whether land or buildings.
8. The planning, measurement and management of construction works, including the estimation of costs.
9. The production of plans, maps, files, charts and reports.

In the application of the foregoing activities surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.