

The International Federation of Surveyors: An Overview

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EDITOR'S NOTE: This article, and the following article describing Commission 1 of the International Federation of Surveyors (FIG), are reprinted with permission from Surveying and Land Information Systems, the Journal of the American Congress on Surveying and Mapping (ACSM), Volume 58, Number 4, December 1998 and Volume 59, Number 1, March 1999. They are the first two in a series of articles describing the Federation, the most recent of which describes Commission 6 and is printed in Volume 60, Number 2, June 2000 of the Journal.

FIG is an international body which represents land surveyors in 66 nations world-wide through national surveyors' organizations. Canada is currently represented by the Canadian Institute of Geomatics. Traditionally, the Canadian Council of Land Surveyors is been asked by CIG to nominate the Canadian delegate to Commission 1 which is responsible for professional standards and practice. The 1994 – 1998 session of Commission 1 was chaired by Ken Allred, an Alberta Land Surveyor and past president of the CCLS. Mr Fowlers closing comments in the first article about the applicability of the FIG Commissions to American land surveyors will pertain equally to Canadian and American surveyors.

It is not the intention of the editor to reprint all of this series but to provide an introduction and refer interested readers to the ACSM Journal or FIG itself for more information. The ACSM can be reached by telephone at 301-493-0200, by fax at 301-493-8245, or on the web at www.acsm.net. Copies of the ACSM Journal can be found in the AOLS library.

ABSTRACT: This paper describes the institution and work of FIG, the International Federation of Surveyors. The operations of the Federation are discussed. The commissions are defined and their primary areas of interest are described. In future issues of Surveying and Land Information Systems each commission will be presented in a comprehensive discussion of its composition and goals, and the people who will achieve them.

Introduction

The International Federation of Surveyors (FIG: Federation Internationale des Geometres) is a federation of national associations of surveyors and the only international body that represents all surveying disciplines. FIG was founded in Paris in 1878 by the national associations of surveyors in Belgium, Germany, France, Italy, Switzerland, Spain, and the United Kingdom. One hundred and twenty years later the Federation is comprised of 73 national associations from 66 nations.¹

Membership

A member association of FIG is a national association of "individuals who possess relevant academic qualifications (which should normally be equivalent to at least ISCED² level 5 degree) plus approved professional experience and who provide

professional services in accordance with ethical standards." An affiliate of FIG is "an organization comprised of individuals who practice the profession of surveying, which does not fulfill the criteria for membership as a member association."

Affiliates may assign delegates to commissions. The International Federation of Surveyors also recognizes sponsors, academic members, and correspondents, all of whom are entitled to participate in the work of the commissions. Affiliates, sponsors, academic members, and correspondents may be heard but may not vote in general assemblies.

The Aims of FIG

The International Federation of Surveyors is a United Nations-recognized non-governmental organization whose aim is to ensure that the disciplines of surveying and all who practice them meet the needs of the markets and communities they serve. The Federation realizes its aim by promoting the practice of the profession and encouraging the development of professional standards. The objectives of FIG, as stated in its Strategic Plan are to:

- Represent its members in international forums;
- Develop professional standards;
- Support the development and improvement of foundational education and

- continue professional development;
- Provide a forum for the development of policies, statements, and strategies;
- Evaluate and disseminate technical and professional information;
- Facilitate the evolution and development of the profession;
- Form strategic alliances with relevant bodies; and
- Promote the profession.

Governance

The governance of FIG consists of a general assembly composed of delegates from the member associations, a bureau which travels from country to country on a four-year rotational basis, and an auditor of accounts. The Bureau is made up of a president, a vice president, a secretary general, a treasurer, and a congress director, all from the country hosting the Bureau. Two additional vice presidents, one from the preceding Bureau and one from the Bureau designate, are also members of the current Bureau.

The Federation is governed by the General Assembly which meets once each calendar year. The business of the Federation is directed by the Bureau under the authority of the General Assembly. As of January 1999, administrative tasks will be conducted from a new permanent office in Copenhagen, Denmark, while the

¹In countries where surveying is organized in separate associations representing different activities of the profession, more than one national association may belong to FIG. This is true of the representation from the United States whose members are the American Congress on Surveying and Mapping and the Appraisal Institute.

²ISCED is the International Standard Classification of Education.

Bureau continues to direct the business of the Federation.

The Technical and Professional Work of FIG

The technical and professional work of FIG is performed by the commissions whose existence, assignment, and duration are determined by the General Assembly. Commissions are made up of delegates from the member associations and affiliates, who may each assign one delegate to each commission. Each commission is led by a chair and vice-chair both of whom are elected by the General Assembly for a term of four years, with the vice chair normally succeeding to the office of chair upon the expiration of the chair's four-year term.

At the beginning of each four-year cycle each commission submits a plan of work to the General Assembly which details the specific tasks and objectives for the coming term. At the end of each chair's term he or she will submit a comprehensive report to the General Assembly of the accomplishments of the commission according to its plan of work. It is intended that the technical and professional aims of the FIG Strategic Plan will be addressed by the work plans of the commissions, and that collectively, the commissions will cover all the activities listed in the FIG definition of surveyor (see following), and will anticipate and respond to market trends and client needs.

The Commissions

The commissions of FIG and their areas of interest are:

Commission 1: Professional Standards and Practice

Codes of ethics and guidelines relating to the provision of services; standards of business practice and total quality management; the operation, management and structure of surveying practices; international legislation affecting the profession; and the role of surveyors in public service.

Commission 2: Professional Education

Education and teaching methods; continuing professional development and training; the interaction between education, research and practice, and an encouragement for the exchange of students and personnel between countries.

Commission 3: Spatial Information Management

Land and geographic information systems; their design, establishment and administration; methods used for the collection, storage, analysis, and dissemination of, and

access to, data within those systems.

Commission 4: Hydrography

The marine environment; hydrographic surveying; data processing and management; nautical charts and bathymetric maps-analogue, digital, and electronic.

Commission 5: Positioning and Measurement

The science of measurement; acquisition of accurate, precise, and reliable survey data related to the position, size, and shape of the natural and artificial features of the earth and its environment.

Commission 6: Engineering Surveys

Acquisition, processing, and management of topographic and related information throughout the life cycle of a project; setting out methods in engineering projects; validation and quality control for civil construction and manufacturing; deformation prediction, monitoring, analysis, and interpretation.

Commission 7: Cadastre and Land Management

Land management and administration; cadastral reform and multi-purpose cadastres; parcel-based land information systems and computerization of cadastral records; cadastral surveying and mapping; land titling, land tenure, land law, and land registration; land consolidation; national and international boundaries.

Commission 8: Spatial Planning and Development

Regional and local structure planning; urban and rural land use planning; planning policies and environmental improvement; urban development and implementation; environmental impact assessment.

Commission 9: Valuation and the Management of Real Estate

Valuation of property; property investment and development finance; management of property; maintenance of systems to ensure the efficient use of resources; investment planning; advice on housing finance.

FIG Definition of Surveyor

A surveyor is a professional person with the academic qualifications and technical expertise to practice 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.

Comment

The commissions of the International Federation of Surveyors are constituted to cover all the activities of surveying as "surveyor" is defined by the Federation. Surveyors in the United States will recognize in this definition activities that are not normally considered surveying in the U.S. But everything that the U.S. surveyor does is included in the interests of FIG; the work of all the commissions, with the exception of Commission 9, will be of interest to some surveyors in the U.S., while the work of Commissions 1, 2, 3, and 5 should be of interest to every surveyor in the U.S.

