# Professionals - Officers of knowledge

Erik Stubkjær

Department of Development and Planning, Aalborg University, DK

Institute of Real Estate Studies, Helsinki University of Technology, October 2003

### **Overview: Professions and professional liability**

- What is a professional: Criteria for the surveyor
- Implications for professional work: The FIG Model Code of Conduct
- How we do it in Denmark
- Neighbouring professions

## Criteria of being a professional, e.g. a geodetic surveyor

- 1. Intellectual criteria: CLGE-definitions
- 2. Professional criteria: FIG Model Code of Conduct
- 3. ESt interpretation of 2)

#### CLGE: Definition of a Geodetic Surveyor

## A European Geodetic Surveyor

- is a person who practises a minimum of one or more of the functions listed below within the EU, Norway or Switzerland, and
- with professional knowledge of the majority of the remainder of those functions, and
- who has an academic qualification in geodetic surveying of at least BAC + 3 plus 2 years professional experience.

# **Functions carried out by Geodetic Surveyors:**

- Land and Geodetic Surveying
- Hydrography
- Photogrammetry and Remote Sensing
- Cadastral and Boundary Surveying
- Land and Geographical Information Systems
- Minerals and Mining Surveying
- Engineering Surveying and Metrology
- Cartography

# **Land and Geodetic Surveying**

Measuring, defining and portraying the physical features of and on the earth. (Geodetic networks, controls networks and geodetic reference systems in 2, 3 and 4 dimensions)

### **Cadastral and Boundary Surveying**

The determination and interpretation of boundaries and demarcations on the surface, or in space, from or into verbal, cartographic or mathematical description together with the abstract legal concept thereof.

## **Land and Geographical Information Systems**

The capture, compilation and manipulation of land and geographical information in a system usually computer based and the presentation of that data in ways and formats specifically required.

## Other functions carried out by Geodetic Surveyors:

### **Hydrography**

The measurement, portrayal and representation in three dimensions of the earth's surface covered by water including the provision of dynamic measurement, delineation and definition of water and it's movement in, on or under the land.

#### **Photogrammetry and Remote Sensing**

The art, science and technology of obtaining reliable information about physical objects and the environment through processes of recording, interpreting and measuring photographic and digital images.

# Minerals and Mining Surveying

The survey practises involved in the discovery, identification and location of minerals including operations involving geophysical, remote sensing, and such-like techniques; together with the accurate portrayal and three dimensional representation of mineral extraction and related works and operations.

#### **Engineering Surveying and Metrology**

The application of all or any of the above listed survey techniques to enable and facilitate civil or other engineering projects together with the application of diagnostic or other measurement techniques and methods, their analysis, compilation and presentation combined with spatial referencing; the application of specialised measurement techniques and equipment for precise lineal and angular determinations and location.

### Cartography

The art or technique of making maps or charts accurately and precisely, and representing three dimensions on various media of two dimensions.

#### FIG publication 17: A professional

is distinguished by certain characteristics including:

- mastery of a particular intellectual skill, acquired by education and training;
- acceptance of duties to society in addition to duties to clients and employers;
- an outlook that is essentially objective; and
- the rendering of personal service to a high standard of conduct and performance.

FIG PUBLICATION No 17 Statement of Ethical Principles and Model Code of Professional Conduct

#### **ESt interpretation:**

"acceptance of duties to society in addition to duties to clients and employers" implies:

- being member of a professional association
- with explicit code of conduct, and
- with instruments to enforce compliance by its members

### FIG 17 on Ethical responsibilities

Professional surveyors recognise that their ethical responsibilities extend to the public, to their clients and employers, to their peers and to their employees. Accordingly they acknowledge the need for integrity, independence, care and competence, and a sense of duty. They uphold and advance these values by:

- supporting and participating in the continuing development of the surveying profession;
- serving with honesty and forthrightness and within areas of their competence; and
- using their expertise for the enhancement of society and the stewardship of resources.

#### **Danish management of liability**

- 1926 Land Registry Act: Surveyors task to assist Registry Officer to allocate easements ->
- 1930s: Association establishes professional insurance
- 1960s: Surveyor ignored easement that prohibited subdivision ->
- in 1970s: Association declares the 'normal' service
- Since ? 1960s: At yearly convention, insurance cases are presented in anonymous form ->
- since 1980s: Feed-back into education on liability to prevent repetitions

#### **Neighbouring professions**

- Civil/ Construction engineers
- Lawyers
- Real Estate brokers / Valuars
- Notaries (in some countries)
- Accountants / Consultants

### **Summary: Professions and professionals**

- Noticed efforts at European level at defining the surveyor
- Heard of the role of profession in society: Carrying liability
- Recalled professions that surveyors co-operate with

est@land.auc.dk