



Where is Surveying Heading ? Issues in Educating the Public

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Presentation overview

- Introduction
- Supply and Demand
- Fundamental Problem
- Societal Changes
- Possible Solutions
- Conclusions

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Introduction

How do you recognise a Surveyor ?



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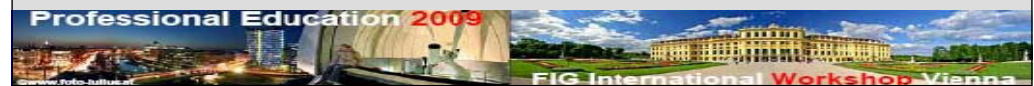


Introduction

What does a Surveyor do ?



Introduction - Supply and Demand - Fundamental Problem - Societal Changes - Possible Solutions - Conclusions



Introduction

- Land & Hydrographic Surveying
- Mapping & Positioning
- Global & Local Navigation
- Geographic Information Systems
- Engineering Surveying
- Cadastre & Land Registration
- Private, Regional & International Boundary Determination
- Dispute Resolution & Expert Witness
- Land Law, Administration & Reform
- Cartography
- Photogrammetry & Remote Sensing
- Spatial Data & Metadata Management, Interpretation and Manipulation
- Land, Coastal & Marine Information Management
- Ocean Bed & Resource Surveys
- Monitoring of Structures
- Project Management
- Research & Consultancy

Source: RICS Geomatics Faculty Business Plan

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Introduction

Critical questions

- What will constitute the core skills of professional surveyors in the medium to long term?
- What does the profession need to do, not only to retain its position of expertise within the professional community and in society, but also to enhance it?
- Have some areas become too niche?
- Are surveyors too generalist?

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Introduction

Critical questions (con't)

- Should measurement be the focus of the profession?
- Is valuation really a form of technical accounting?
- How should education develop to meet the challenges of a changing profession?
- Is the drive for niche courses driven by the educational institution's need to attract more students?

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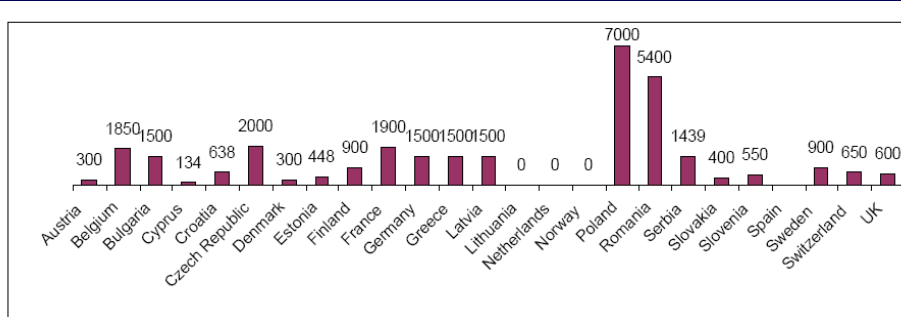
Supply and Demand

- Shift in the role of the 'professional'
- The technical expertise and breadth of specialisation across the range of skills
- Public perception of surveyors is varied
- Undefined market place protected / unprotected
- Demographic time bomb (ageing profile)
- How do we attract the best students?

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Supply and Demand

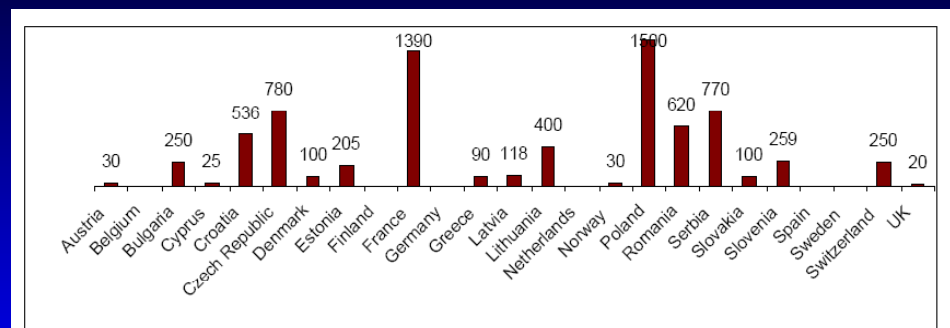


Approximate number of licensed cadastral surveyors (individuals) per country

The number of surveyors in a country depends on the size of the market and the amount of work it generates.

Source: EuroGeographics – European requirements for cadastral surveyor activities

Supply and Demand



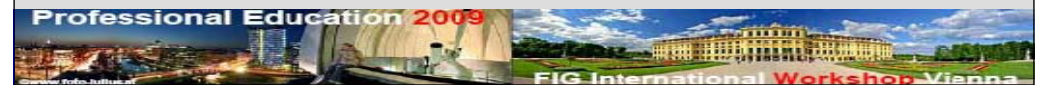
Approximate number of licensed companies that execute cadastral surveying

Source: EuroGeographics – European requirements for cadastral surveyor activities

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Supply and Demand

The primary marketing barrier is lack of public profile and understanding. A recent survey conducted by the NZIS revealed that many professional people had a:

“surprisingly low level of understanding of the surveyor’s tertiary qualification and career path, and some misunderstandings or ‘misty view’ of a surveyor’s skills and knowledge”

Toner 2006

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Fundamental Problem

Identity:

“the surveying profession is currently struggling for an identity in both the developed and developing worlds”

Williamson 1997

Over 10 years on has the situation improved?

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Fundamental Problem

Summary of FIG Definition of the Functions of the Surveyor

- A surveyor is a professional person with the academic qualifications and technical expertise to conduct one, or more, of the following activities:
 - To determine, measure and represent land, three-dimensional objects, point-fields and trajectories;
 - To assemble and interpret land and geographically related information,
 - To use that information for the planning and efficient administration of the land, the sea and any structures thereon; and
 - To conduct research into the above practices and to develop them

Source: www.fig.net/general/definition.pdf

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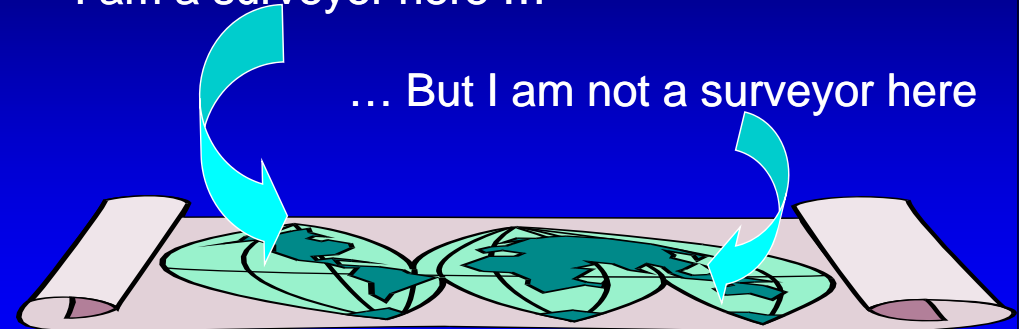


Fundamental Problem

National and Regional Variations

I am a surveyor here ...

... But I am not a surveyor here



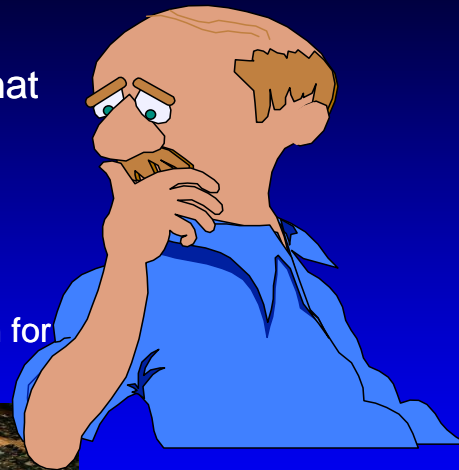
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Fundamental Problem

- A cynical view might be that senior members of the profession:

- Resist change
- Maintain their own status
- Fail to equip the profession for the future



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Fundamental Problem

- International Perception – two UN documents

- International Standard Classification of Occupations (ISCO)
 - 10 classifications of Surveyor, do not cover FIG definition of 'surveyor'
- International Standard Industrial Classification (ISIC Rev.3)
 - Hard to see how 'surveyors' fit

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Fundamental Problem

- We do not have a global coherent marketing message across the profession hence:
 - Poor public recognition
 - Poor student numbers in some areas
 - Poor understanding of surveying skills and practice
 - Poor remuneration

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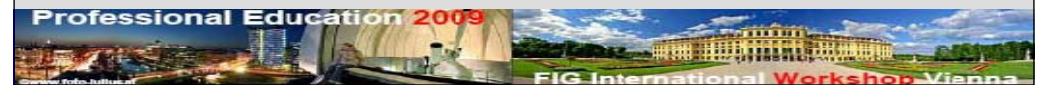


Societal Changes

The traditional professional whose position in society was secured by the implicit integrity and trust no longer exists. The increase in general education and consumer legislation, mandatory Professional Indemnity Insurance (PII) cover and an increasing litigious culture are combining to erode the traditional status of the professional.

Dabson, et al. 2007

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Societal Changes

'Knowledge workers . . . give the emerging knowledge society its character, its leadership, its central challenges and its social profile. They may not be the ruling class of the knowledge society, but they already are its leading class.'

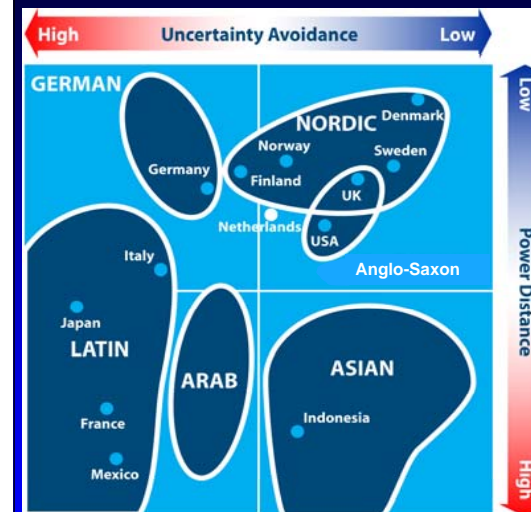
In their characteristics, their social positions, their values and their expectations, they differ fundamentally from any group in history that has ever occupied the leading, let alone the dominant position'.

Druker (1994)

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Societal Changes



Uncertainty avoidance

The preference of structured situations over unstructured or flexible ones

Power distance

The degree of inequality among people accepted by the population

Geert Hofstede (2001).
Professor of Organizational Anthropology and International Management
(1985-93), Maastricht University, the Netherlands

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Societal Changes

As a profession we act as 'professional facilitators' and a number of major changes are occurring within:

- Engineering
- Land administration
- Cadastral systems
- GIS
- Marine projects

with the result that multi-professional groupings are being created to generate holistic complete life cycles solutions, of which the surveying profession can form an integral component.

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Possible Solutions

- Reviewing the Definition of “Surveyor”
- Review core competencies - as a starting point
 - Spatial measurement
 - Geospatial information
 - Valuation
 - Land administration, including cadastre
 - Planning and development
 - Project management and professional studies

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Possible Solutions

- Identifying ‘Successes and Failures’
 - Changing names - not a solution
 - Focused marketing - essential
 - Co-ordinated marketing - essential
 - High levels of remuneration - attractive

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Possible Solutions



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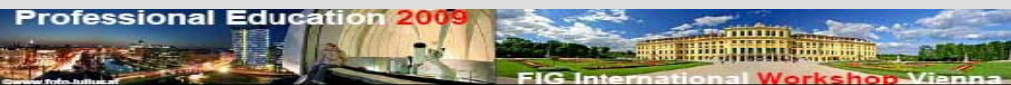
Conclusions

- We need radical, dynamic, technological, managerial and procedural solutions
- Review core competencies
- Marketing to national and international institutions
- Sharing marketing resources

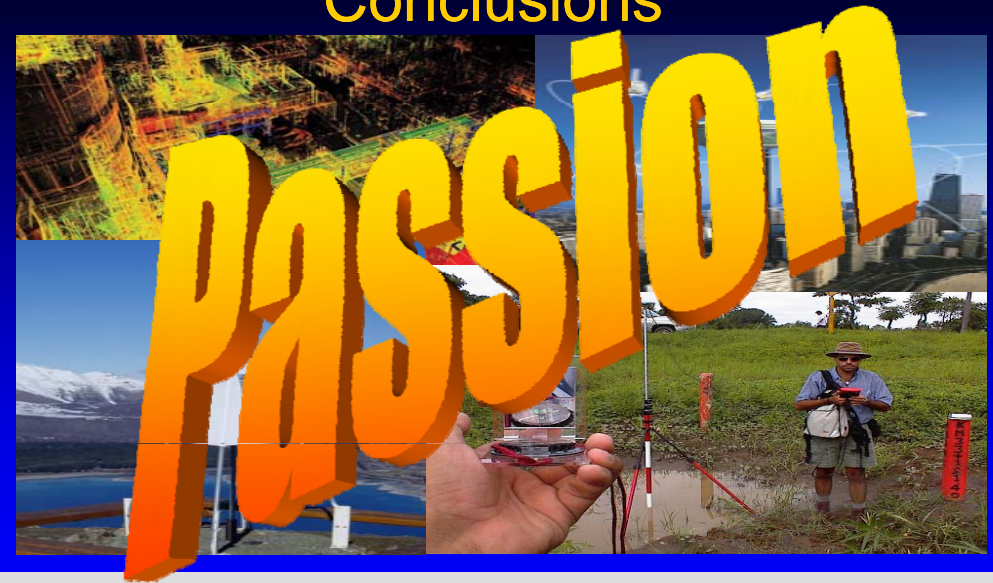


Photo by courtesy of Reinfried Mansberger

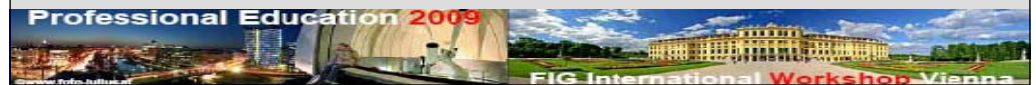
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Conclusions



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"In the middle of difficulty lies opportunity"

Albert Einstein (1879-1955)

Danke
Thank you

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