

Buenos dias, queridos colegas

Cadastre and Land Management

A Global Approach

Prof. Stig Enemark



President

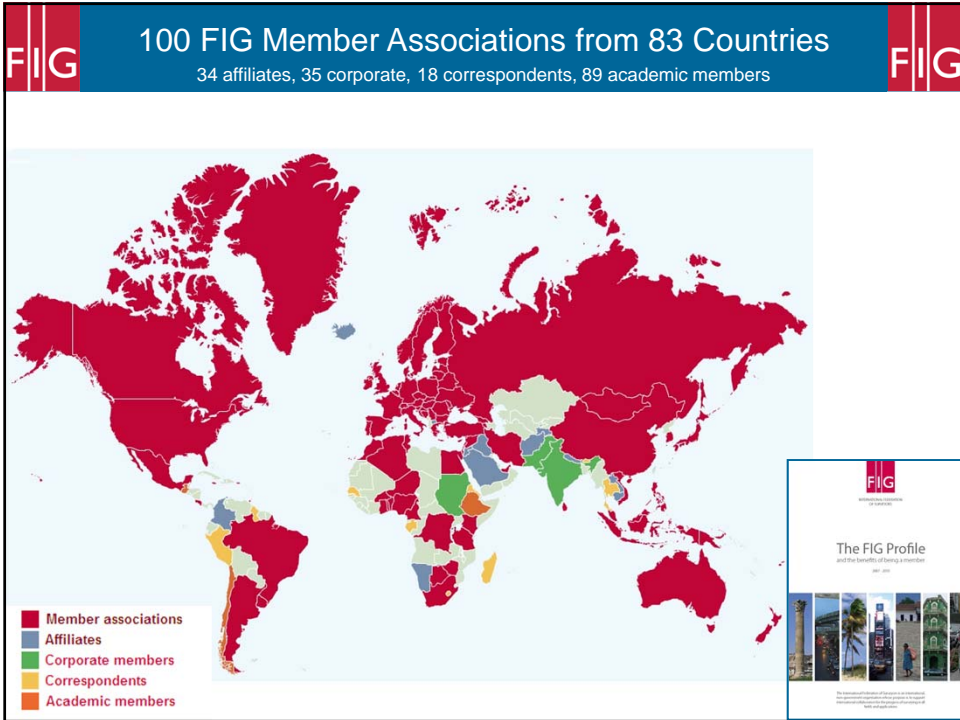
Aalborg University, Denmark

XI INTERNATIONAL CONGRESS
OF GEOMATICS, GEODESY, TOPOGRAPHY AND CADASTRE IN REAL-TIME
SAN JOSÉ, COSTA RICA, 16 - 18 September 2010

Greetings from Copenhagen



Greetings from the **FIG** Home Base





Beautiful Costa Rica

Outline of Presentation

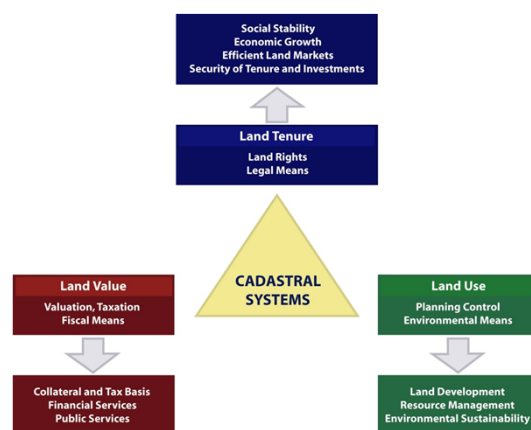
Land Administration Systems

- Rights – Restrictions – Responsibilities
- Significance of the Cadastre

Education and Professional Practice

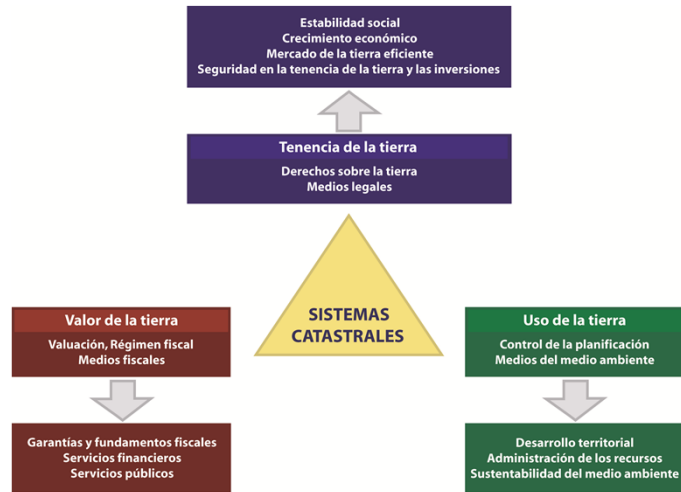
- The Role of Land Professionals
- The Educational Profile

Cadastral Systems



The concept of the multipurpose cadastre

Sistemas catastrales



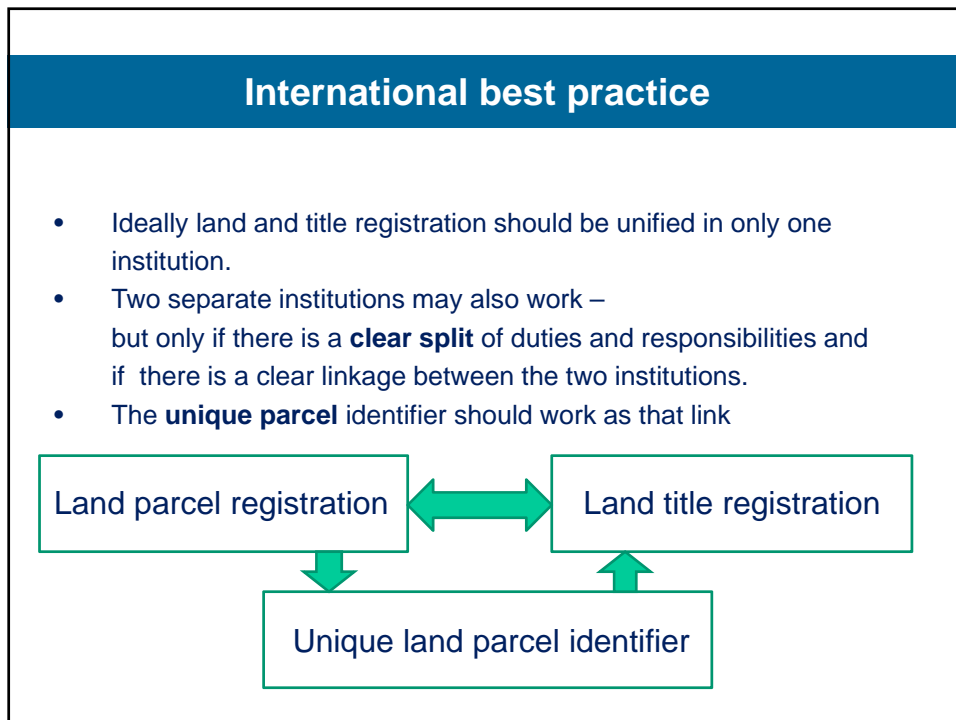
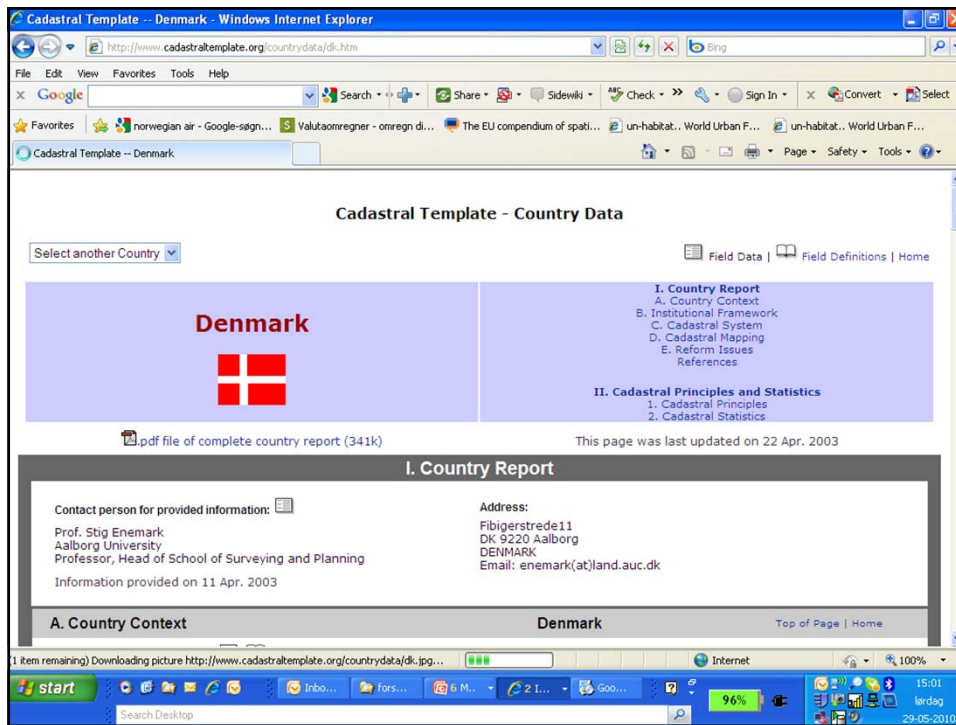
A Worldwide Comparison of Cadastral Systems

Cadastral Template
A Worldwide Comparison of Cadastral Systems
 Cadastral country reports based on a jointly developed PCGIAP/FIG template.
 Under UN mandate by Resolution 4 of the 16th UNRCC-AP in Okinawa, Japan in July 2003.
 with endorsement for cooperation with UN-ECE WPLA, UN-ECA COIL and PCIDEA.

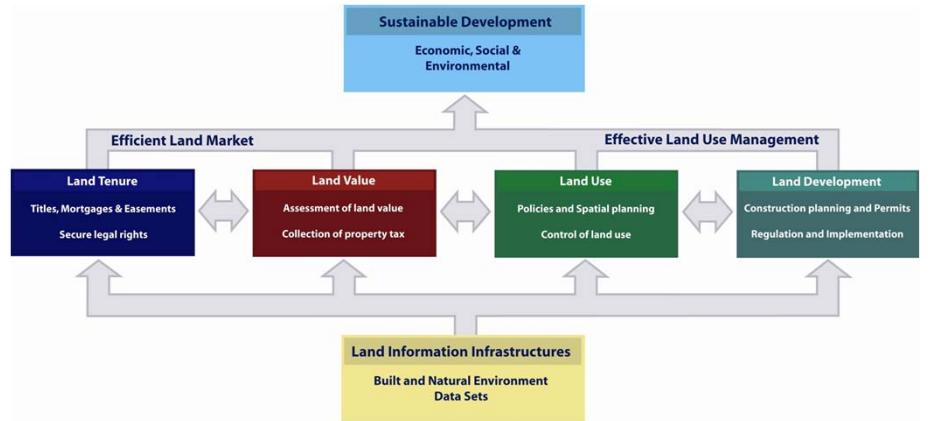
Latest Updates

- Update of country report of Finland (8 Sep. 2009)
- Country report of Cyprus (31 Dec. 2007)
- Country report of Norway (9 Aug. 2007)
- Country report of Israel (16 Oct. 2006)
- Updates of Latvia and Netherlands (5 Aug. 2005)
- Country report of Austria as 39th country (15 Jan. 2005)
- Country report of Latvia (26 Oct. 2005)
- Country report of Tanzania (12 Jul. 2005)
- Country report of Finland (28 Apr. 2005)
- Country report of Namibia (7 Jun. 2004)
- Country report of Venezuela (In Spanish) (28 May 2004)

www.cadastraltemplate.org



LAS provide the infrastructure for implementation of land policies and land management strategies in support of sustainable development.



Land Tenure: the allocation and security of rights in lands; the legal surveys of boundaries; the transfer of property through sale or lease; and the management; adjudication of disputes regarding rights and boundaries.
Land Value: the assessment of the value of land and properties; the gathering of revenues through taxation; and the management and adjudication of land valuation and taxation disputes.
Land-Use: the control of land-use through adoption of planning policies and land-use regulations at various levels; the enforcement of land-use regulations; and the management and adjudication of land-use conflicts.
Land Development: the building of new infrastructure; the implementation of construction planning; and the change of land-use through planning permission and granting of permits.

Sistemas de ordenamiento territorial...

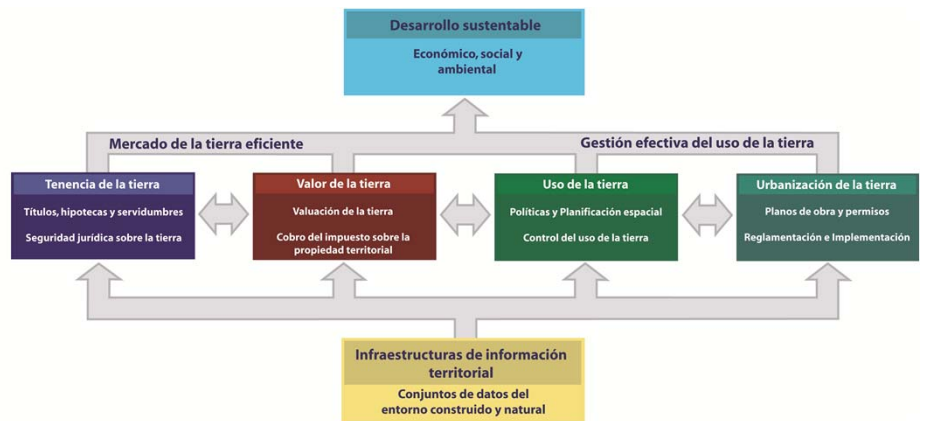


TABLE 1.1 – TRADITIONAL BENEFITS OF LAS	
Support for governance and rule of law	The formalization of processes used for land management engages the public and business, and, in turn, this engagement leads to their support for the institutions of government.
Alleviation of poverty	A primary means of alleviating poverty lies in recognizing the homes and workplaces of the poor and their agricultural land as assets worthy of protection.
Security of tenure	This is the method of protecting people's associations with land. It is the fundamental benefit of formal land administration. Ensuring security throughout the range of tenures used in a country helps provide social stability and incentives for reasonable land use. Conversion of some of the rights into property is the core process of commoditization of land needed for effective markets.
Support for formal land markets	Security and regularity in land arrangements are essential for successful, organized land markets. LAS manage the transparent processes that assist land exchange and build capital out of land.
Security for credit	International financing norms and banking practices require secure ownership of land and robust credit tenures (that is, tenures which support security interests in land) that can only exist in formal LAS.
Support for land and property taxation	Land taxation takes many forms, including tax on passive land holding, on land-based activities, and on transactions. However, all taxation systems, including personal and company taxation, benefit from national LAS.
Protection of state lands	The coherence of national LAS is dependent on its coverage of all land. Thus, management of public land is assisted by LAS.
Management of land disputes	Stability in access to land requires defined boundaries, titles, and interests. If LAS provide simple, effective processes for achieving these outcomes, land disputes are reduced. The systems also need additional dispute management processes to cover breakdown caused by administrative failure, corruption, fraud, forgery, or transaction flaws.
Improvement of land planning	Land planning is the key to land management, whether the planning is institutionalized within government or achieved by some other means. Impacts of modern rural and urban land uses affect adjoining land and beyond. These impacts need to be understood and managed by effective land planning assisted by LAS.

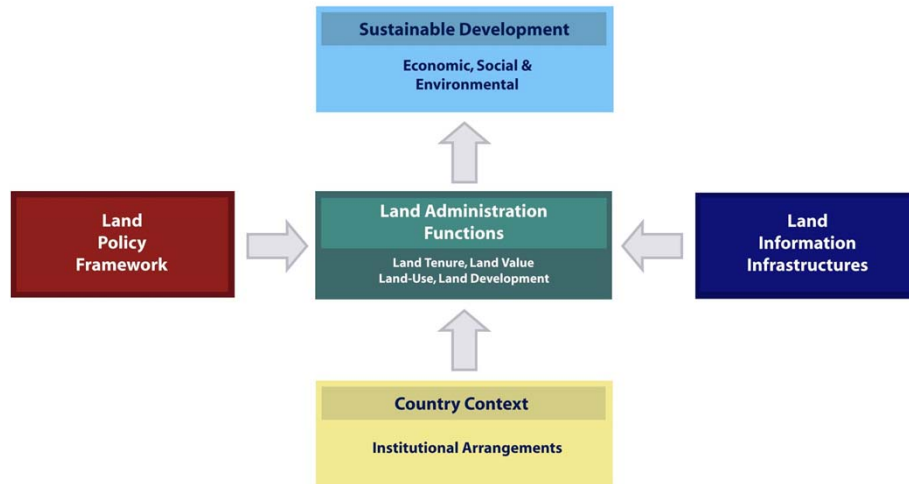
Williamson, Enemark, Wallace, Rajabifard, 2010

What is a good property system ?

- People in general can participate in the land market; widespread ownership; everybody can make transactions and have access to registration
- The infrastructure supporting transactions must be simple, fast, cheap, reliable, and free of corruption.
- The system provides safety for housing and business, and for capital formation

Only 25-30 countries in the world apply to these criteria.

Understanding the Land Management Paradigm

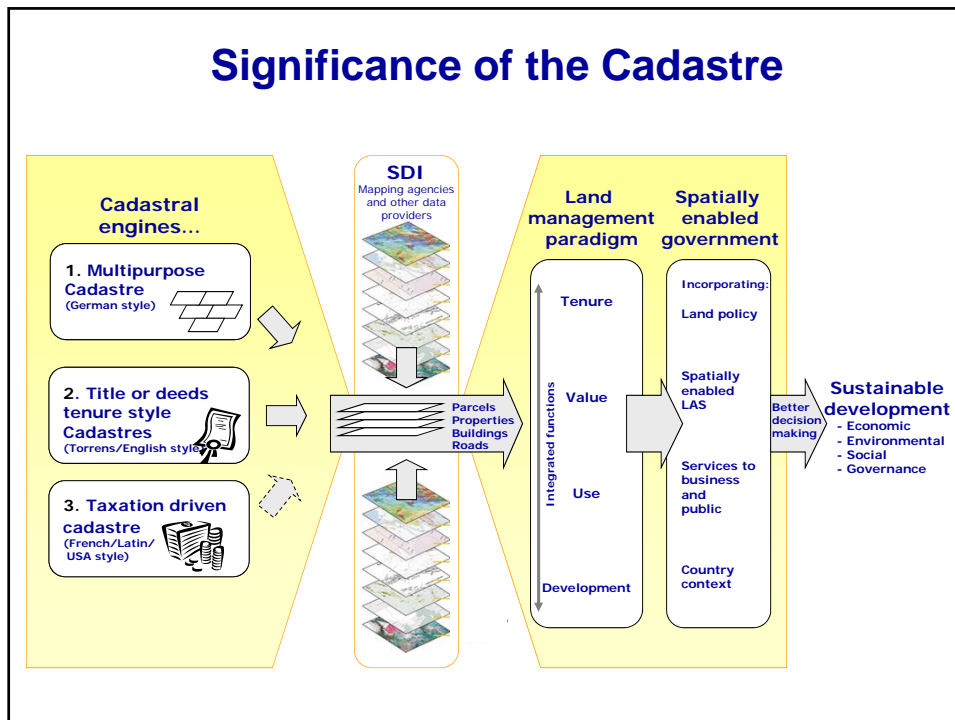


Land Management includes all activities associated with the management of land and natural resources that are required to fulfill political objectives and achieve sustainable development.

El paradigma del manejo de la tierra



Significance of the Cadastre



Outline of Presentation

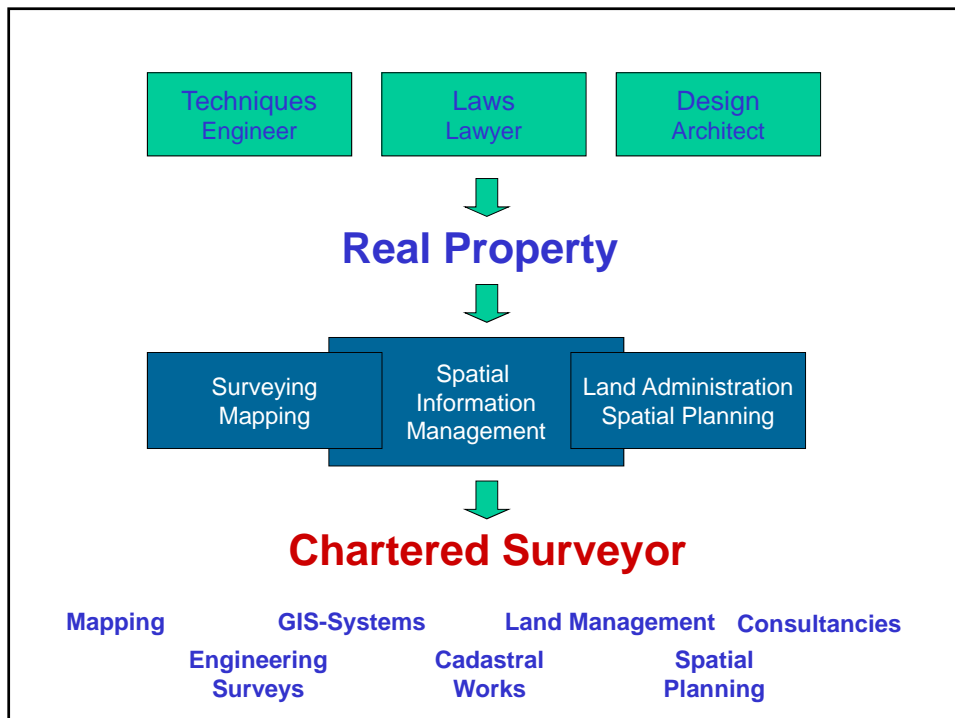
Land Administration Systems

- Rights – Restrictions – Responsibilities
- Significance of the Cadastre

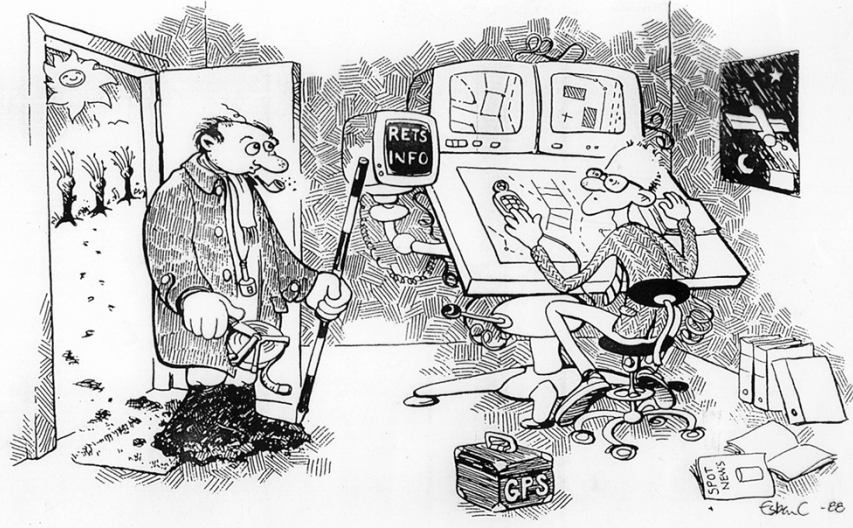
Education and Professional Practice

- The Role of Land Professionals
- The Educational Profile

The Surveyors Profile



The only constant is change

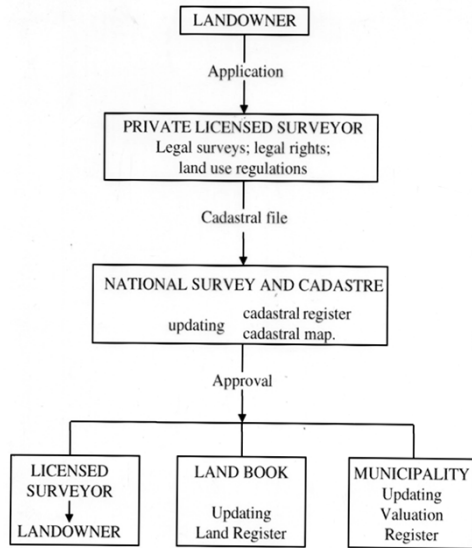


Private Licensed Surveyors



- Liberal profession (such as lawyers, veterinarians, etc.)
- Licensed for boundary determination and cadastral work such as parceling out
- Work areas also include:
 - Mapping
 - Engineering surveys
 - GIS
 - Consultancy on real estate and land law issues
- About 1 licensed surveyor for 10,000 people

The Cadastral Process



- The cadastral procedures must be controlled through firm regulations.
- The duties of the local land offices must be clearly defined and monitored.
- The qualifications and liability of the private professionals such as the surveyors should be ensured through requirements for license, liability, and code of ethics.



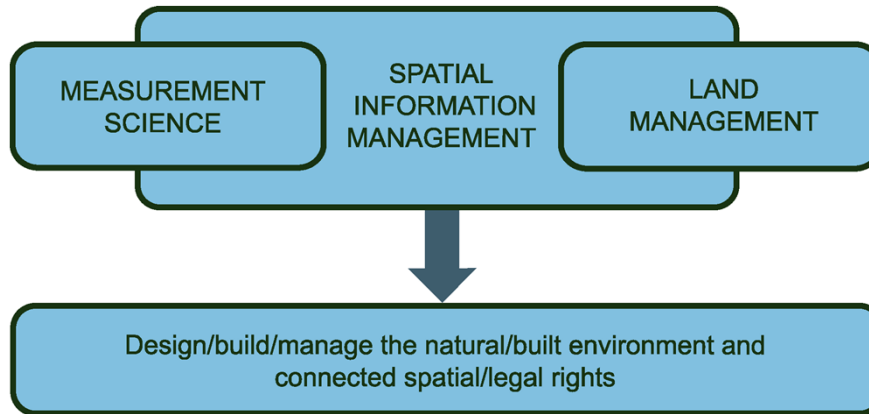
Real Property



Chartered Surveyor

Mapping GIS-Systems Land Management Consultancies
Engineering Surveys Cadastral Works Spatial Planning

The Educational Profile of the Future

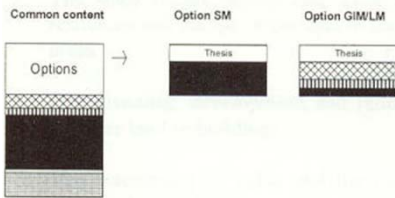


The Aalborg Curriculum



Educational Profiles in Europe

Germany, Bonn (4,5 years)



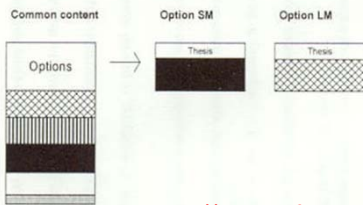
Core subjects

- Real Estate Economics (REE)
- Land Management (LM)
- Geographical Information Management (GIM)
- Surveying and Mapping (SM)

Support subjects

- Other
- Maths, statistics, data etc. (Maths)

Denmark, Aalborg University (5 years)



Enhancing Professional Competence of Surveyors in Europe



<http://www.fig.net/pub/CLGE-FIG-delft/report-1.htm>

Current FIG Policies

Is the role of the Surveyors changing ?

FIG Policies - the big swing

▪ **From Measurement**

Surveyors will still be high level experts within measurement science, but due to technology development the role is changing into managing the measurements

▪ **To Management**

Surveyors will increasingly contribute to building sustainable societies as experts in managing land and properties

The Land Professionals

Facing the new challenges

- Climate change
- Food shortage
- Energy scarcity
- Urban growth
- Environmental degradation
- Natural disasters
- Global financial crisis

**All these challenges relate to governance and management of land
The surveyors – the land professionals - play a key role**

Global partnership drives development for achieving the MDGs

Global recognition → national recognition → local recognition

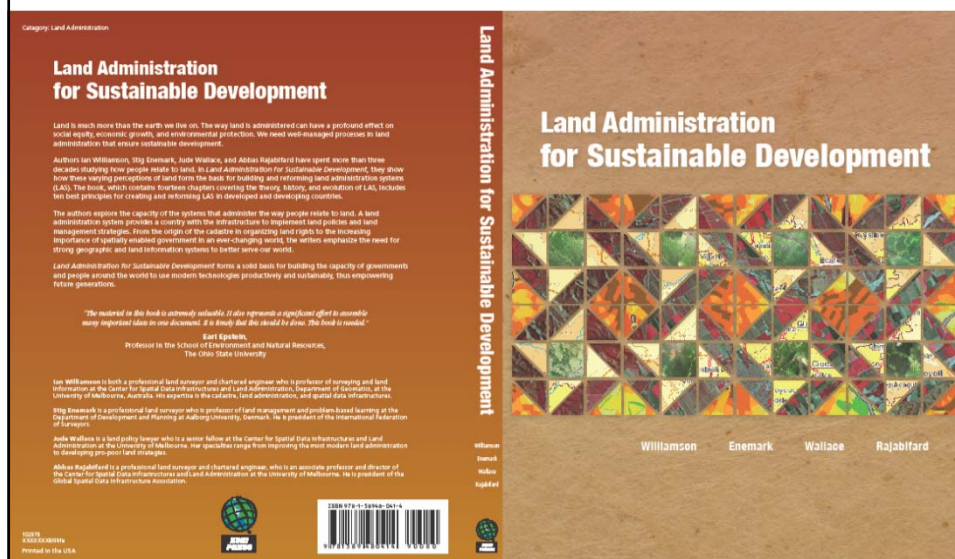
The role of the land professionals

Dealing with the land issue will require skills in the following areas:

- High level geodesy models to predict future change
- Modern surveying and mapping tools to support management and implementation
- Spatial data infrastructures to support decision making on the natural and built environment
- Secure tenure systems and sustainable systems for land valuation, land use management and land development
- Systems for transparency and good governance

Land governance is an interdisciplinary and cross-cutting area mixing technical, natural and social science

Land Administration for Sustainable Development Williamson, Enemark, Wallace and Rajabifard 487 pages Publisher - ESRI Press Academic, 2010





MUCHAS GRACIAS POR SU ATENCIÓN

