Buenos dias, queridos colegas

Cadastre and Land Management
A Global Approach

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Greetings from Copenhagen
Greetings from the FIG Home Base

100 FIG Member Associations from 83 Countries
34 affiliates, 35 corporate, 18 correspondents, 89 academic members
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

Estabilidad social
Crecimiento económico
Mercado de la Geografía
Seguridad en la tenencia de la tierra y las inversiones

Tenencia de la tierra
Derechos sobre la tierra
Medios legales

Valor de la tierra
Valoración, Régimen fiscal
Medios fiscales

SISTEMAS CATASTRALES

Garantías y fundamentos fiscales
Servicios financieros
Servicios públicos

Uso de la tierra
Control de la planificación
Medios del medio ambiente

Desarrollo territorial
Administración de los recursos
Sustentabilidad del medio ambiente

A Worldwide Comparison of Cadastral Systems

Cadastral Template
A Worldwide Comparison of Cadastral Systems

www.cadastraltemplate.org
International best practice

- Ideally land and title registration should be unified in only one institution.
- Two separate institutions may also work – but only if there is a **clear split** of duties and responsibilities and if there is a clear linkage between the two institutions.
- The **unique parcel** identifier should work as that link
LAS provide the infrastructure for implementation of land polices 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.

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**Sistemas de ordenamiento territorial...**

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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

Desarrollo sustentable
Económico, social y ambiental

Marco de la política territorial
Funciones del Ordenamiento territorial
Terreno de la tierra, valor de la tierra, uso del terreno, desarrollo territorial

Contexto de país
Sistemas institucionales

Infraestructuras de información territorial
Significance of the Cadastre

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Education and Professional Practice
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The Surveyors Profile

- Techniques
- Engineer
- Laws
- Lawyer
- Design
- Architect

Real Property

- Surveying
- Mapping
- Spatial
- Information
- Management
- Land Administration
- Spatial Planning

Chartered Surveyor

- Mapping
- GIS-Systems
- Land Management
- Consultancies
- Engineering
- Surveys
- Cadastral
- Works
- Spatial
- Planning
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.
The Educational Profile of the Future

MEASUREMENT SCIENCE  SPATIAL INFORMATION MANAGEMENT  LAND MANAGEMENT

Design/build/manage the natural/built environment and connected spatial/legal rights

The Aalborg Curriculum

Bachelor Degree
- Basic Studies
- Basic Studies
- Spatial Planning and Land-Use Management
- Large Scale Mapping
- Land Surveying
- Cadastral Management

Master Degree
- Final Thesis
- Internship - International Exchange - project work at AAU
- Measurement Science
- Spatial Information Management
- Land Managemen

4^th semester
3^rd semester
2^nd semester
1^st semester
8^th semester
7^th semester
9^th semester
10^th semester
Is the role of the Surveyors changing?
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*
MUCHAS GRACIAS POR SU ATENCIÓN