Developing Cadastres to Service Complex Property Markets

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Background

National Australian project

*Incorporating sustainable development objectives into ICT enabled land administration systems*

**Funding**
Department of Education Science and Technology

**Partners**
Switzerland, The Netherlands, Denmark and Germany

**Primary goal**
Explain *European cadastres*
Perspective of Land Policy Adviser

Set context of framework, problems, trends and comparative solutions

Understand the issues and options

Advise on choices appropriate for national Australian LAS

Defend the selection
Dynamism in market, administration and research environments

Cadastres are robust and useful tools -

  Reflecting their countries of origin
  Changing to incorporate new demands
  Absorbing new technical opportunities
Universal Model of Land Management

Enemark, Williamson and Wallace, 2004
Land markets are dynamic and complex.

Administration systems are capable of supporting markets in more ways than we thought possible.

GIS and modelling will change the way we think.
Relationship between land, land administration and wealth creation

**LAS** is fundamental to the land market
De Soto and critics

Modern LAS is supported by ICT, cognitive capacity of community and professional activity

Land objects in cadastral standardisation reflect simple commodities – *sale, parcellation, lease, mortgage*.

“owner-parcel-right” typology.
The challenge

Government systems of administration support market activities in

simple commodities

highly geared and complex commodities

Cadastres and LAS should support complex commodities with

- modeling of concepts
- dynamic ICT and
- open information access.
Land Market Stages

Stage

Preliminary Stages
1. Land
2. Land Rights

Market Stages
3. Land Trading
4. Land Market
5. Complex Commodities Market

Features

Societal Resources
Secure Tenures
Initial grants
Private Ownership
Land Transfer
Land securitisation
Dynamic Land Trading and Securitisation
Added Investment
Parcelisation procedures
Financial Instruments
Dynamic trading in Complex Commodities
Secondary Securitisation
Corporatisation of Land Ownership

Result

Minimum Social Stability
Initial Resource Distribution
Resource Reallocation
Wealth Generator
Multiplier Effect

Land Distribution
Simple Land Market
Mature Property Market

Wealth Acceleration
Development of Complex Commodities

Wallace and Williamson, 2004

Developing Cadastres to Service Complex Commodities
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Centre for Spatial Data Infrastructures and Land Administration
University of Melbourne
Concept modeling

is advanced for simple land objects.

The challenge is to ask what we really should be modelling?

The emerging commodities will not necessarily be physical objects.

Complex commodities may sit on top or outside of the model. The relationship should be articulated.

The models should not close out capacity to service complex markets.
Benefits of using standardized data modelling techniques

- Capacity to deliver land information to government and business in organised way
- Basis for flexible, efficient and comprehensive information systems
- Data and information exchange across different systems without information loss, interpretation or specialist IT
- Basis for system-independent tendering process (product-rather than method-oriented)
- Quality checking and assurance
- Long-time archiving
- Especially suitable for federated states

Steudler 2004
Case Studies

Australian issues –
Water
Secondary Mortgage Market
Restrictions and Responsibilities
Water

Scarcity drives commodification.

Australian attempts to create marketable water rights -

• **Conservative attempt**: Victoria

• **Aggressive attempt**: national vision for tradeable water rights separated from land and water use.

Management of commodity trading in Torrens registers ???
Secondary mortgage market

Abstract and detached commodification of securities by financial instruments

New standardisation techniques could allow cadastres and information they contain to be organised to support these markets.
Restrictions and Responsibilities

Land registries  traditional focus on **private rights**

Growth of public law  government controls over land
Restrictions and Responsibilities

Range of solutions under development

Inclusive cadastre/land registry
Mixing public and private interests

Layering of information using GIS and other technology …

Control points
Land cover
Single objects
Heights
Local names
Ownership
Pipelines >5bar
Administrative subdivisions

Steudler, 2004
For policy makers

Technological opportunities are rapidly improving.

GIS focus is on matching people/activities/locations and presenting these in visually exciting and original ways.

Land registration systems contain vital information for government, and also for private sectors.

Conclusion -

Focus on management of narrow trading in simple commodities will change as technology meets the new markets.
For professionals

We need to assist the policy makers to understand why the cadastre as the vital layer of spatially enabled systems.

We must be prepared to use the cadastre in new and exciting ways.
We look forward to your continued assistance in building a national ICT enabled LAS for sustainable development ……..

And applaud your vision for modular standards

Thank you