National land market management in Australia

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3 take home points

- **Spatial** is *special*. By thinking of land market information as spatial information broader and better outcomes will result.

- Think *spatial enablement* when improving land market management. Spatial enablement leads to better whole-of-government and societal outcomes.

- **Collaboration** leads to *innovation*. Work with others and innovation will happen despite institutional inertia.
Outline

- Introduction to the complexity of Australia's federated system of government
- Emergence of spatial enablement of government
- National spatial data and spatial infrastructure
- The national electronic conveyancing strategy
- Conclusion and future directions
Introduction
Introduction

Significance of LPI to NSW

- Supports private trading of 1,000 properties per day worth $400 million
- Supports the collection of $24 million per day in duties, rates & taxes
- Underpins the spatial data infrastructure of the State of NSW
- Is a significant facilitator of economic activity in NSW
Introduction

Information Assets

- 1.7m registered plans defining the boundaries of discrete property titles
- 3.5m registered titles recording interests in land
- 30m registered dealings effecting interests in land
- 180,000 registered survey control marks
- 0.5 million paper maps
- 3.5 million polygons in the DCDB
- Aerial archive of NSW
- Full topographic coverage of NSW

Department of Lands
Introduction

Summary of Core Business Volumes

- Dealing Registrations: 1 million last year
- New Titles created: 70,000 per year
- Total Inquiries Processed Electronically: 6 million per year
- Search Transactions Processed via Internet: 4.7 million in the financial year 2003-04
Spatially enabled government (SEG)

- Security & counter-terrorism, managing the environment & climate change, the global financial crisis, etc. are issues requiring whole-of-government (WOG) solutions.
- The SEG vision is to establish an enabling infrastructure that will facilitate the provision of place (or location) to all human activities, and government actions, decisions, & policies.
- SEG helps facilitate WOG solutions.
Goals of a spatially enabled government ...

- More effective and transparent governance where voters can access spatial information to evaluate choices by elected decision-makers

- Creation of economic wealth through development of products and services based on spatial information collected by government

- Environmental sustainability through regular monitoring of a wide range of spatial indicators distributed throughout the world as a whole
National address management framework

Overview of NAMF

Who does this affect?

- Inaccurate and fraudulent addresses affect everyone
  - whether public or private sector organisations
  - medium to large businesses
  - industry associations and not-for-profit organisations
- Basically anyone who needs to contact a customer to provide a product or service needs to be working with accurate address data
National address management framework

Overview of NAMF

What is it?
- Fit-for-purpose authoritative data sets
- A standard for exchange and storage of address information
- Compliance standards for fundamental address operations

What will it do?
- Improve and standardise address management
- Allow accurate and reliable exchange of address information
National address management framework

strategic importance of address management
National address management framework

strategic importance of address management

DSE 47

49 Bell Street
Coburg, 3058

VMAS platform
National address management framework

strategic importance of address management
National address management framework

strategic importance of address management
National datasets

Reference Datasets

Transport & Topography
Over 1,000,000 kms of named road centrelines in a structured hierarchy maintained quarterly.
National rail network including tram lines.
Airports and Landing Grounds
National Drainage network consisting of Major and Minor water layers and polygon water bodies.

CadLite
Over 10,500,000 polygons representing the registered land parcels in Australia updated quarterly with incremental updates available.
Every parcel contains the legal parcel identifier that acts as a key to access richly attributed jurisdictional Digital Cadastral Data Bases (DCDB).
Also contains links to key administrative data layers including Local Government Area and Locality.
A property version of the dataset is also available.

G-NAF
G-NAF contains over 12 million physical addresses and approximately 2.5 million aliases updated quarterly.
Data is sourced from AEC, Australia Post and Government Mapping Agencies and Land Registries.
Every address contains a Geocode (Latitude & Longitude) and metadata to assist in decision making.
Sophisticated data modelling to enhance application accuracy.
National datasets

Reference Datasets

Points of Interest
Over 200,000 Points of Interest including:
- Police Stations
- Hospitals
- Post Offices
- Museums
- Churches
- Airports
- Banks
- Swimming pools
- Libraries
- Theatres
- Shopping Centres

Postcode Boundaries
This definitive dataset has been developed by Australia Post and PSMA Australia and is updated quarterly.
Includes two layers:
- Boundaries – polygon data
- Centroid – point data

Administrative Boundaries
This dataset contains all of Australia’s major administrative boundaries including:
- Key ABS Statistical Geography
  - Mesh Blocks
  - Collector districts
  - Statistical local areas
  - Urban centre localities
- State Boundaries
- Electoral Boundaries
  - Commonwealth; and
  - State and Territory
- Local Government Areas
- Suburbs/localities
- Town points
National datasets
National datasets
National spatial infrastructure

1. A collection of web services and workflow management tools to automate business processes
National spatial infrastructure

2. A network connecting together each of the data custodians in each Government
3. A harmonised, extensible and highly normalised data model

PSMA Australia’s Integrated Data Model (IDM) is a core component of LYNX.

The integration and harmonisation of PSMA Australia Data through the implementation of the IDM has:

- Facilitated enhancements to the maintenance processes for all PSMA Australia datasets;
- Removed duplication and mismatch between duplicated information;
- Facilitated a greater degree of cross-dataset analysis and identification of inconsistencies;
- Enhanced the maintenance processes for all the datasets;
- Enabled greater support of PSMA Australia’s data lifecycle;
developing the ANZsi vision

- the ANZLiC vision is that by 2011 ANZsi will be a thriving spatial marketplace
  - public, private and academic sectors of the spatial industry will have cooperated to build and deliver ANZsi
  - all spatial resources — data, products, services and processes — will be easily discovered and acquired through the marketplace, driving benefits and value broadly across all sectors of the Australian economy, environment and community
  - spatial industry participants — the providers of those spatial data, products, services and processes — will also benefit strongly, both through increased breadth and depth of the market for spatial resources, and through the stronger awareness of the value and opportunities the spatial industry offers
developing the ANZsi vision

- five key market place roles:
  - publisher: publish resources (data, products, services, processes) to the market place
  - acquirer: acquire resources (data, products, services, processes) from the market place
  - value adder: watch and analyse market activity and transactions for business intelligence and opportunities to create improved or new resources (data, products, services, processes)
  - notifier/public input: allow users to participate — customer reviews of resources, notification of specific errors and omissions
  - administrator/regulator: manage the market place and facilitate the needs of publishers, acquirers, value adders
National electronic conveyancing

THE NEED FOR A BETTER WAY

Title Records Electronic
Financial Information Electronic
Conveyancing Processes Use Paper
THE NEED FOR A NATIONAL APPROACH

- State based land administration
- National regulation of major players
- Commonwealth digital signature standards
- National operations by trading banks
- Commonwealth identification protocols
- Existing central bank settlement systems
- Economies of scale
National electronic conveyancing

NATIONAL ELECTRONIC CONVEYANCING SYSTEM

Australia’s joint government and industry initiative to create an efficient and convenient way of completing property transactions and lodging land title dealings for registration
National electronic conveyancing

NATIONAL BUSINESS MODEL
National electronic conveyancing

NATIONAL BENEFITS

- Single electronic interface for conveyancing in all States and Territories
- Reduces the costs of property transactions
- Provides a platform to simplify / harmonise state and territory property law relating to land registration
Conclusion & future directions

- Land administration and cadastral systems support simple trading in land, not contemporary trading in complex commodities.
- Federated countries face challenges in managing a national land market. Solutions require whole-of-government approaches.
- These approaches are difficult for individual governments. They require leadership, strategic vision, and commitment.
Conclusion & future directions

- However, innovative approaches still possible (e.g. NAMF, NISS, PSMA, LYNX, ANZsi, NECS)
- Which is contributing to a spatially enabled government - more informed decisions and better services to its citizens
- More information at www.csdila.unimelb.edu.au
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