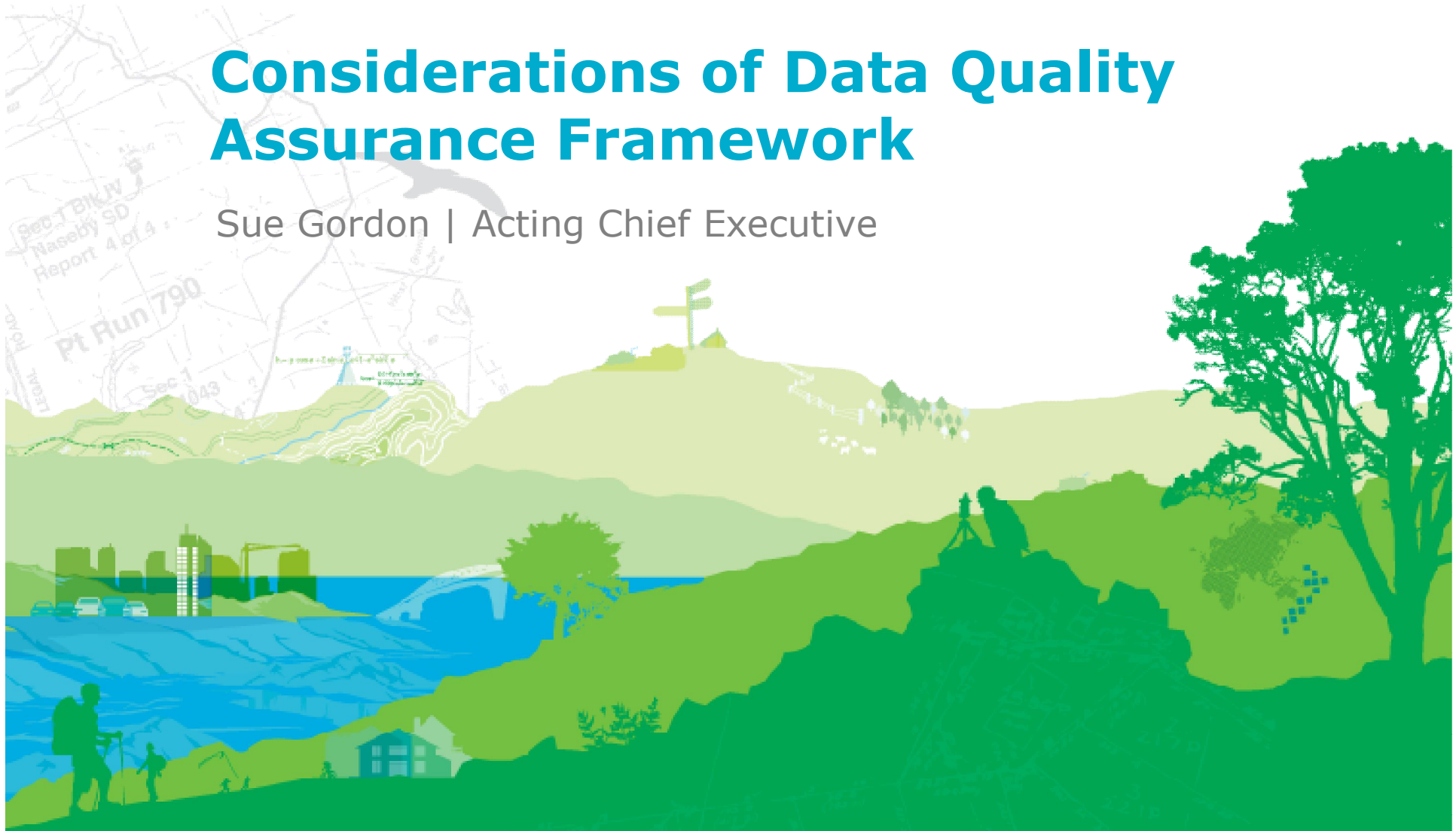


Considerations of Data Quality Assurance Framework

Sue Gordon | Acting Chief Executive



Content

- NZ general background
- Who is LINZ?
- NZ strategic context & data quality assurance framework
- Cadastral survey data example
- Learnings from the Canterbury Earthquake
- Regional and global considerations
- Conclusions

Background on New Zealand



- 4.2 million people
- 270,000 sq kms land area
- 1/3 of NZ - protected conservation areas
- 68% European, 15% Maori, 9% Asian, 7% Pacific Islanders, 1% other
- Constitutional democracy
- Parliamentary elections every 3 years
- 3 official languages – English, Maori, NZ Sign Language

Core responsibilities:

- Managing transactions
- Managing information
- Managing land

Also:

- Home to New Zealand Geospatial Office
- Responsible for New Zealand Geospatial Strategy

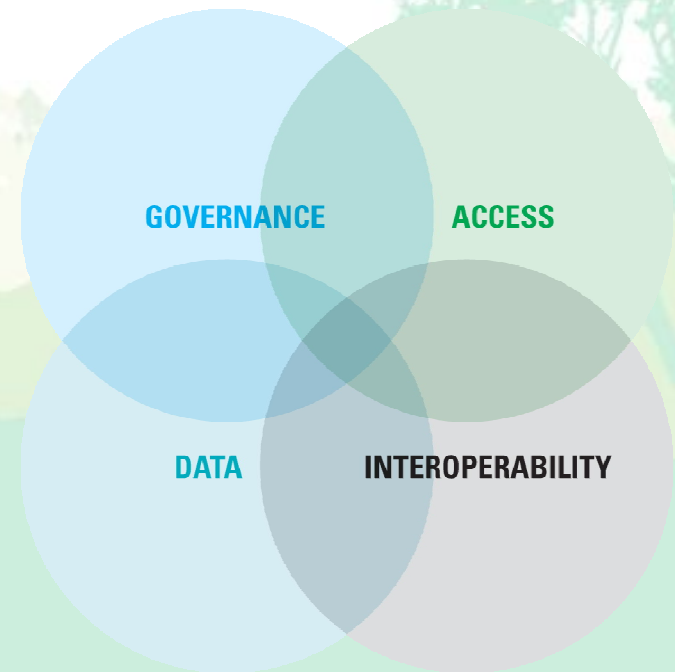
New Zealand's neighbours

- NZ does not have many close neighbours
- China is our 2nd largest destination for exports by value
- NZ has free trade agreements with both China & Australia
- Australia is our nearest partner for business and trade - largest destination for our exports by value



Geospatial direction for NZ

- ICT directions and priorities for Government – umbrella strategy
- *New Zealand Geospatial Strategy (2007)*
- Cabinet paper for establishing NZ SDI (2010)
- Declaration on Open and Transparent Government (2011)
- Four main goals set out in Geospatial strategy:



Fundamental datasets

- 13 key data themes
- Aligned with best international practice
- Data priorities

NZ fundamental datasets quality assurance framework



NZ Geospatial Office leads work to determine responsibilities of data Stewards & Custodians:

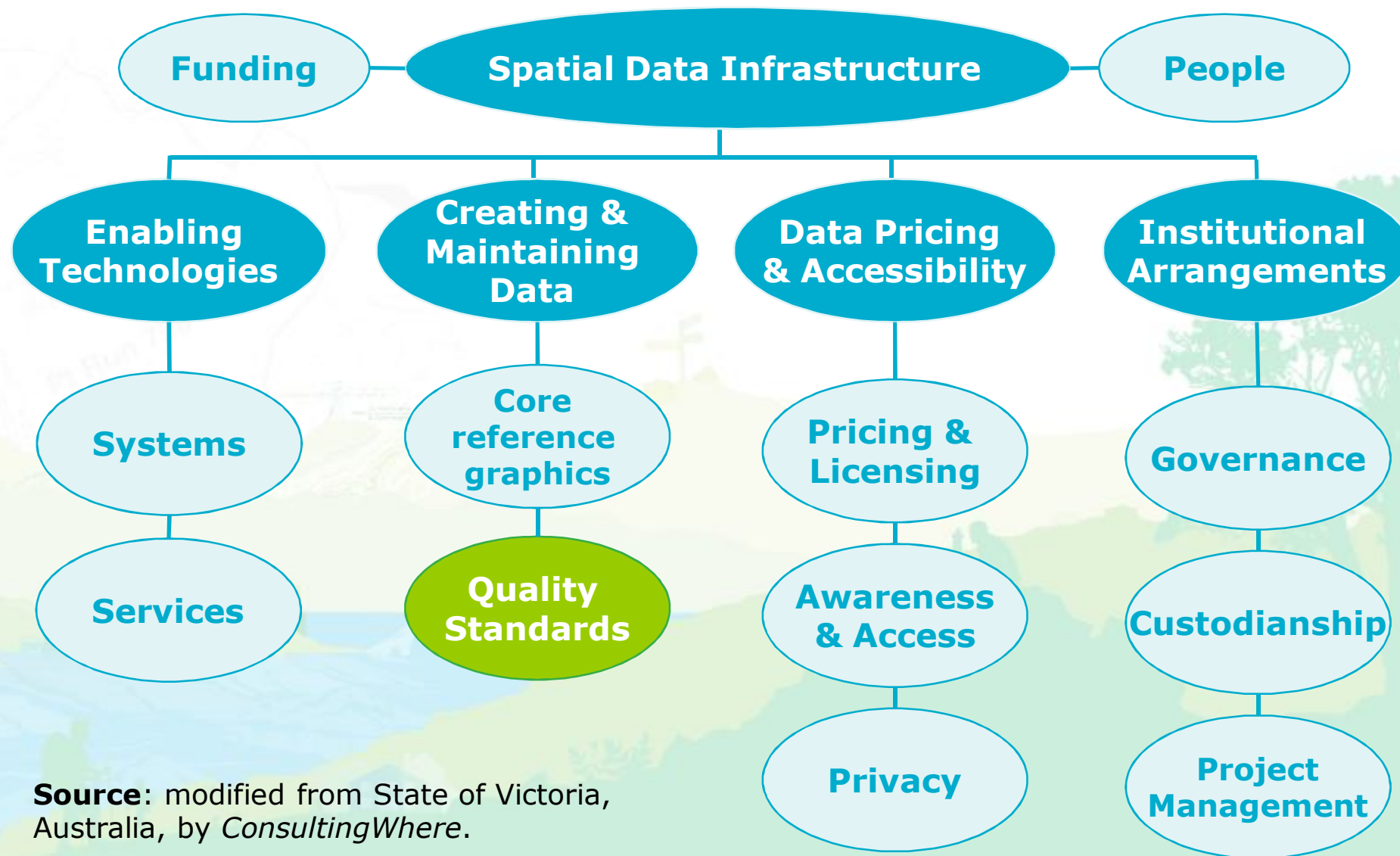
Data Stewards:

- collaborate with user community to define quality requirements of dataset
- Regularly audit the quality of datasets in their care

Data Custodians:

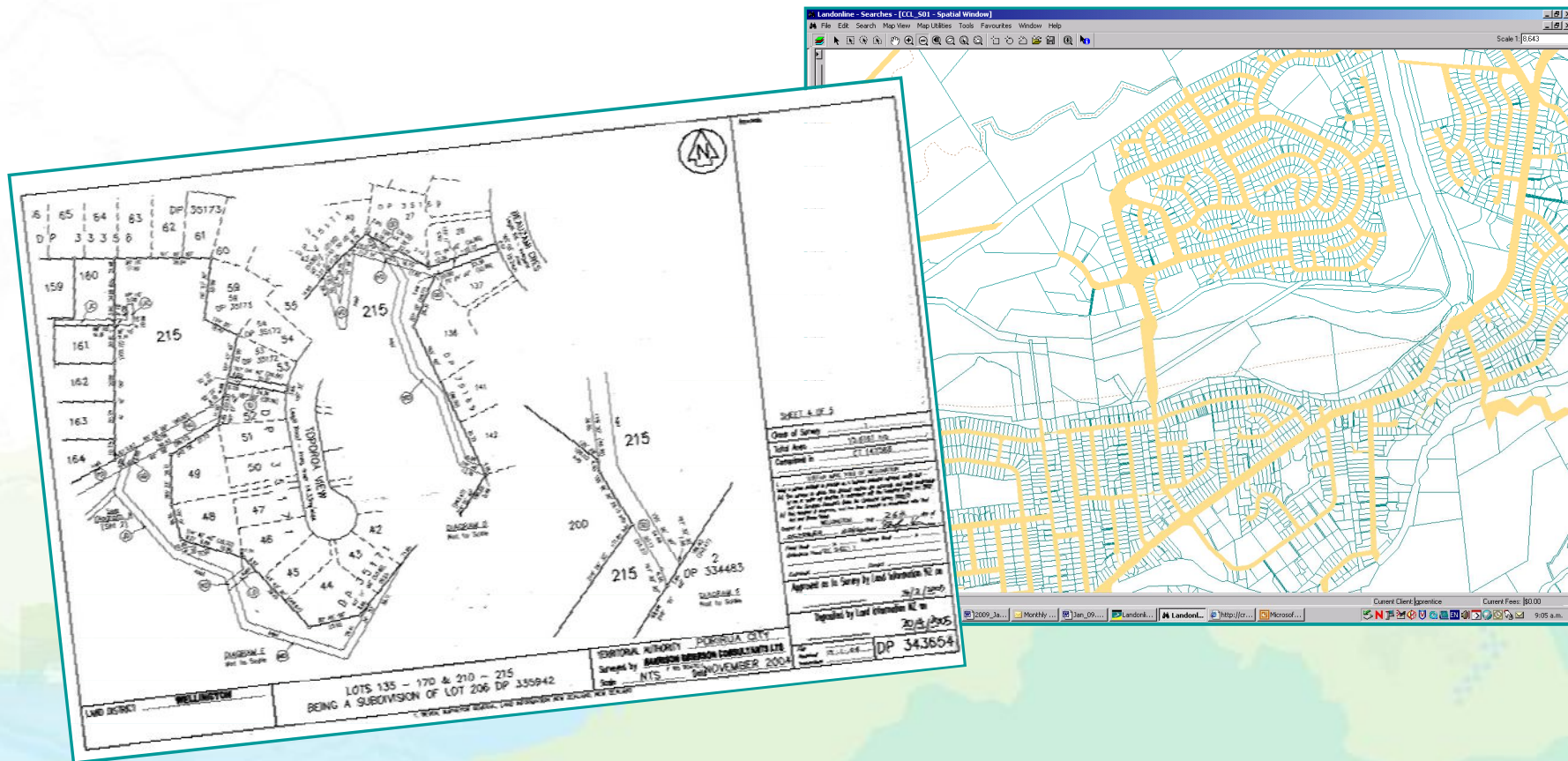
- collect and maintain the datasets under their custodianship to agreed quality standards
- standards determined by the steward in conjunction with the user community

Components of an SDI



Source: modified from State of Victoria, Australia, by *ConsultingWhere*.

Cadastral survey data



NZ Cadastral survey system



NZ cadastral system managed by LINZ, underpinned by detailed processes to ensure integrity and accuracy:

- Regulatory system – through Surveyor General
- Technical process and reporting
- Validation and approval process – risk based acceptance framework
- Education and training – industry and other agencies

NZ Cadastral survey system



Future focus

- Continual monitoring and feedback – drives improvements
- User centric view – alert to new uses
- Improvements needed – 3D cities, spatial planning
- Explore potential for cooperative positioning
- Appropriate spatial definition of legal land rights
- Development of cadastral strategy

Canterbury Earthquake example



- *Canterbury Earthquake website* – official ‘checked’ data, *Christchurch Recovery Map* – unofficial crowdsourced ‘unchecked’ data
- People initially confused about which to use, unofficial site eventually linked to from official one



Canterbury Earthquake example



- Opportunity to improve key data quality for rebuild
- Property Management Framework
- Earthquake rebuild needs can test data models
- Immediate (local) & long term (national) benefits



Regional & global considerations



ANZLIC **Spatial marketplace** Demonstrator project

- Single, consistent platform
- Internet-based hub of location-based data products, services and processes
- Drive efficiencies, productivity and innovation
- Easier to publish, discover and use information



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Conclusions

- the purpose ('the why') of the dataset should determine the appropriate level of data quality assurance
- Data quality assurance is central to SDI work, and other government open data programmes
- use crisis or reform as an opportunity to advance data quality in both short and long term

LINZ website:

www.linz.govt.nz

NZ geospatial direction:

www.geospatial.govt.nz

NZ Open Government Data:

www.ict.govt.nz/programme/opening-government-data-and-information