

Background only

The story: Trans –tasman partnerships

There are big benefits in collaborating, and leveraging off one another's experience

Three key things are important to make that happen:

1. There need to be institutions in place that allow this to happen (eg ANZLIC)
2. There needs to be a clear agenda to galvanise an agreed course of action
3. A harmonizing rather than homogenizing approach – it's ok to be a little different so long as your approach is fundamentally the same

Agenda for Aus/NZ – Data, and Standards.



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Geospatial collaboration: a Pacific perspective

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 **Land Information
New Zealand**
Toitū te whenua



New Zealand

Island nation

4.2 million population

Single unitary
parliamentary system

National Geospatial Strategy

Australia

Island nation

23 million population, but highly
concentrated along SE and SW coasts

Federation, with history of
collaboration/coordination

Strategy in development

Both Australia and New Zealand have significant maritime jurisdictions



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Key Australia/New Zealand spatial partnerships

- ANZLIC - Australia New Zealand Spatial Information Council - policy
- ICSM – Intergovernmental Committee on Surveying & Mapping – coordination & standards for maintaining the spatial framework across land and sea
- Cooperative Research Centre for Spatial Information
- Sector and industry activity - Statistics and Standards (e.g: OGC forum)



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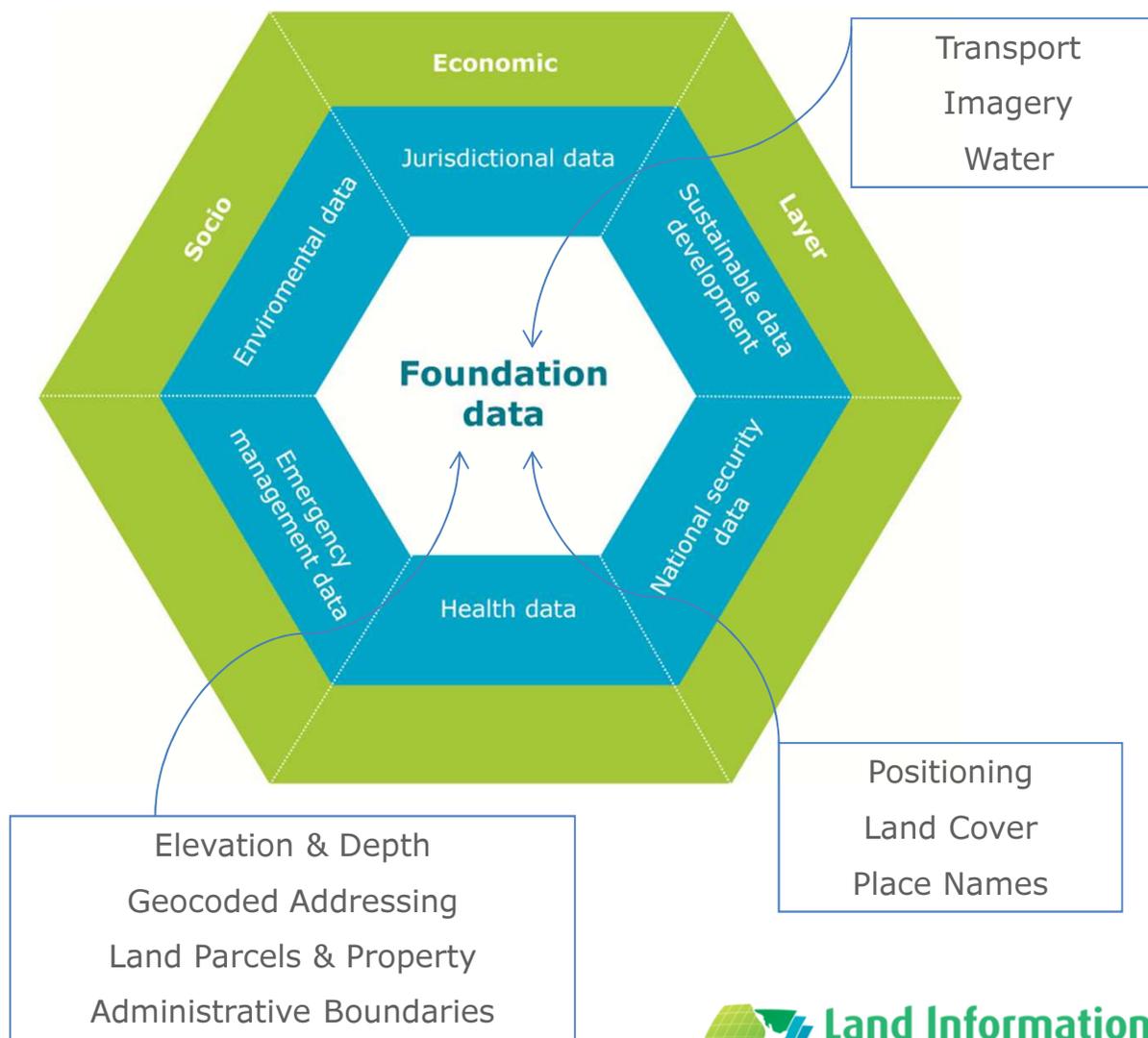
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ANZ Foundation Spatial Data Framework

Spatial information that is:

- Authoritative and reliable
- Consistent
- Widely available
- Underpins public safety and sustainability
- Enables innovation
- Critical for a range of national or government functions



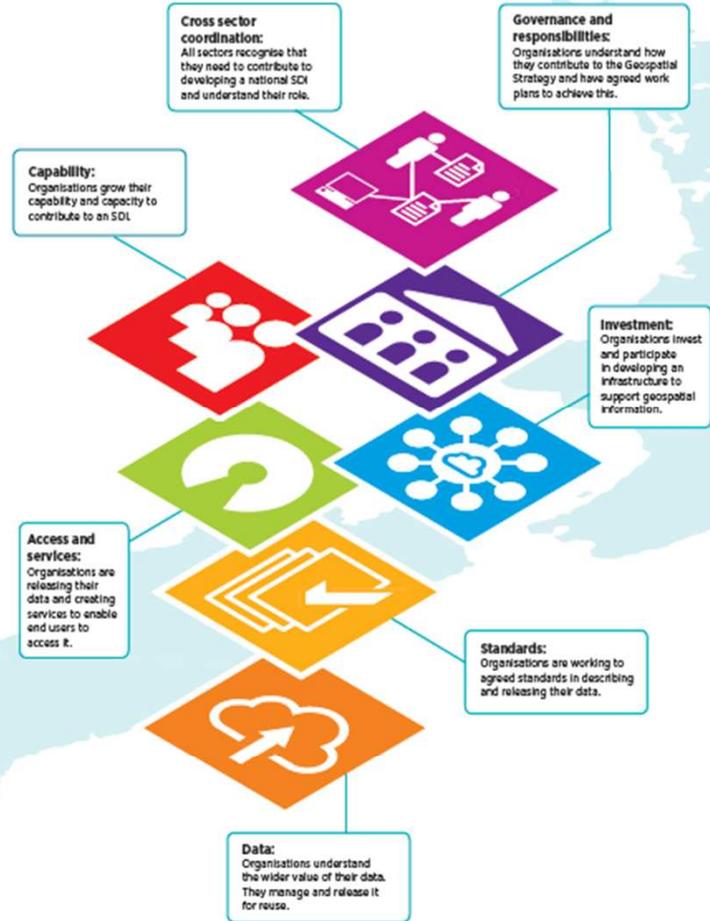
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SDI JOURNEY

- Data**
We have agreed 10 fundamental data themes that are nationally significant, and we have improved our core data - for example, the spatial parcel improvement project.
- Standards**
We are active in the development of international standards, and we are applying these to the maintenance and release of our own data.
- Access and services**
We developed and launched our online web service, the LINZ Data Service (LDS), which provides free access to over 40 of our key datasets.
- Investment**
We are investing time, effort and money in realising the strategy. We are developing a framework for investment in data as an asset, and we are modelling this in our approach to a coordinated national imagery service.
- Capability**
We've recognised that the right people and skills are core to developing an SDI. We are working across secondary and tertiary education to build New Zealand's future geospatial capability and we have succeeded in getting spatial scientists included on New Zealand's long term skills shortage list to address short to medium term capability.
- Governance and responsibilities**
We have a long term agreed work programme to support the New Zealand Geospatial Strategy, for example determining our stewards and custodians, and we have established the necessary governance structures to support this.
- Cross sector coordination**
We are working with other agencies to look at them adoption the LDS as a platform for releasing their data, and we are leading the development of a regional SDI in Canterbury.



Having access to up to date data is helping secure the future of the rural sector

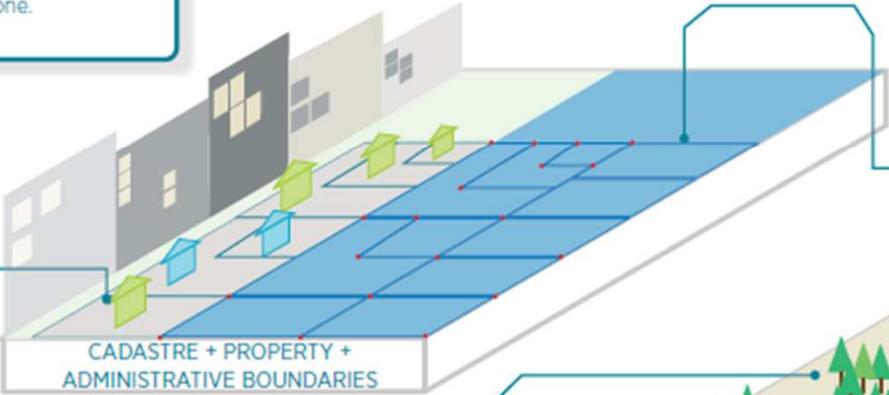
FarmsOnLine is a government-owned database that was sparked by a disease hoax. In operation since April 2011, it is now the authoritative source of rural property information for biosecurity management, helping the presence of and estimated quantity of stock and crops. This information allows MPI to develop sound policies to secure the future of the rural sector - a major contributor to New Zealand's economy. At its heart is the geospatial information it contains which is sourced from a range of providers including LINZ (cadastral), Animal Health Board, New Zealand Post, Geographix, TeraLink, DigitalGlobe and CNE's as well as industry data sets from a wide range of organisations, individual property owners and farmers.

By coordinating data, agencies are minimising the disruption to people as Canterbury infrastructure is rebuilt

The forward works programme is part of the Canterbury SDI programme, and will deliver a shared view and better coordination of the repair and rebuild of the roading and utilities infrastructure in the region. The programme involves designing and implementing web-based systems to enable existing and future planned construction work to be visualised by location and time, so that work being done by utility operators and road controlling authorities can be more efficiently coordinated, with minimal disruption to businesses and the public. Benefits of this programme include: reduced construction costs through shared trenching; reduced traffic delays; coordination and prioritisation of investment in infrastructure.

Stewards and Custodians

Administrative Boundaries are the collection of legislative, regulatory, political, statistical, maritime and other general boundaries. These are widely used by central and local government for the delivery of services. Other examples include electoral boundaries, and international boundaries such as New Zealand's Exclusive Economic Zone.

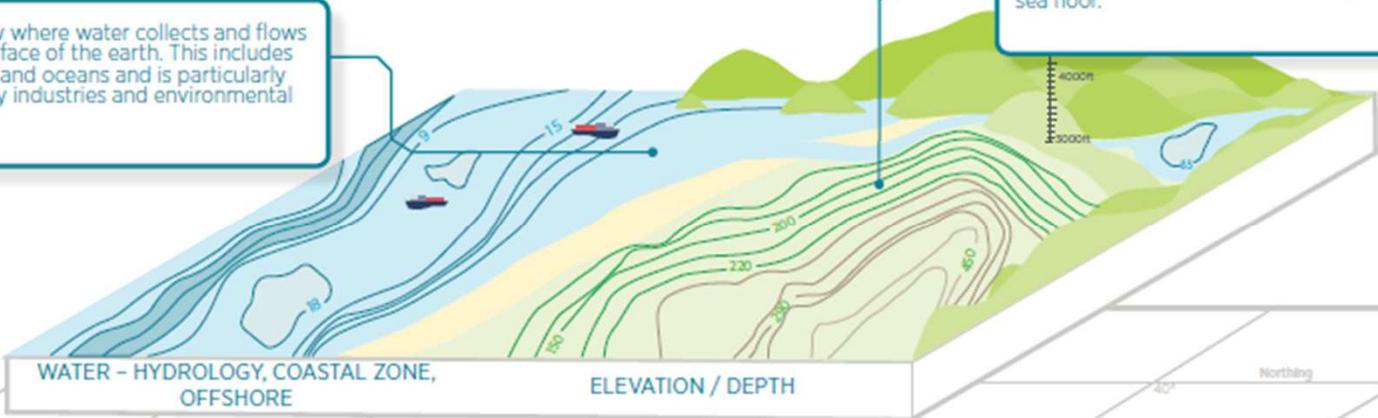


Cadastral and Property data are central to defining and managing our property rights. These rights are a cornerstone of New Zealand's free market economy as they provide economic and social certainty.

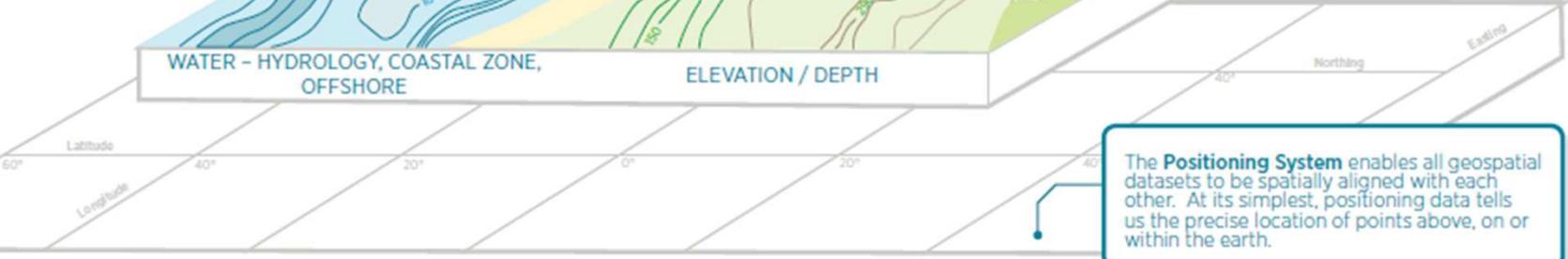
Land Use and Land Cover is data about man-made and natural features that sit on top of the earth. Examples of land cover include forests and deserts. Examples of land use include cities, roads, parks and farms.



Water datasets show where water collects and flows on and below the surface of the earth. This includes rivers, streams, lakes and oceans and is particularly important for primary industries and environmental protection.



Elevation and depth data provide a 3D view of the surface of the earth including the sea floor.



The **Positioning System** enables all geospatial datasets to be spatially aligned with each other. At its simplest, positioning data tells us the precise location of points above, on or within the earth.

DRIVERS

Government



Industry



Community

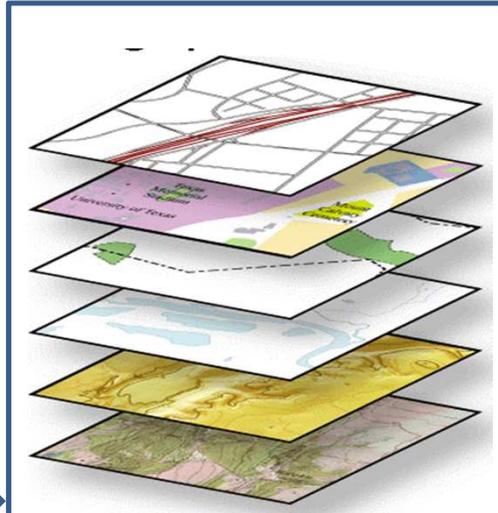


Federal

State

Local

THE AUSTRALIAN STORY...



Stand-alone and collaborative maintenance programs



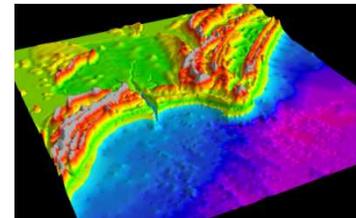
Industry Community

State, Territory And Federal

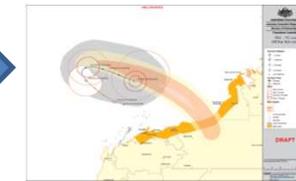
Aggregation of commercially-viable data



Research Standards



USES



Statistical spatial framework

UNGGIM key challenge: better integration of geospatial and statistical information as a basis for sound evidence-based decision-making

- Australian Bureau of Statistics and Statistics NZ are collaborating to develop Statistical Spatial Framework
- **key elements:** geocoding; data management; common geographic boundaries; metadata interoperability and related policies, standards and guidelines



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Standards

ANZLIC has actively provided forum for the development of standards:

- the ANZLIC Metadata Profile
- Sponsoring the OGC forum set up in 2012

Intergovernmental Committee on Surveying and Mapping (ICSM) working groups for development of standards and best practice:

- cadastre, geodesy, addressing, place names, tides & mean sea level, elevation, imagery and transport
- Alignment between working groups and ISO standards as part of the Foundation Spatial Data Framework



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Existing support in the region

- Maritime boundary, treaty delimitation, and extended continental shelf demarcation
- Vulnerability of island nations' groundwater to climate change
- Infrastructure and community exposure to severe wind, tropical cyclone, tsunami, and “all-risk”
- Further opportunities to collaborate?

