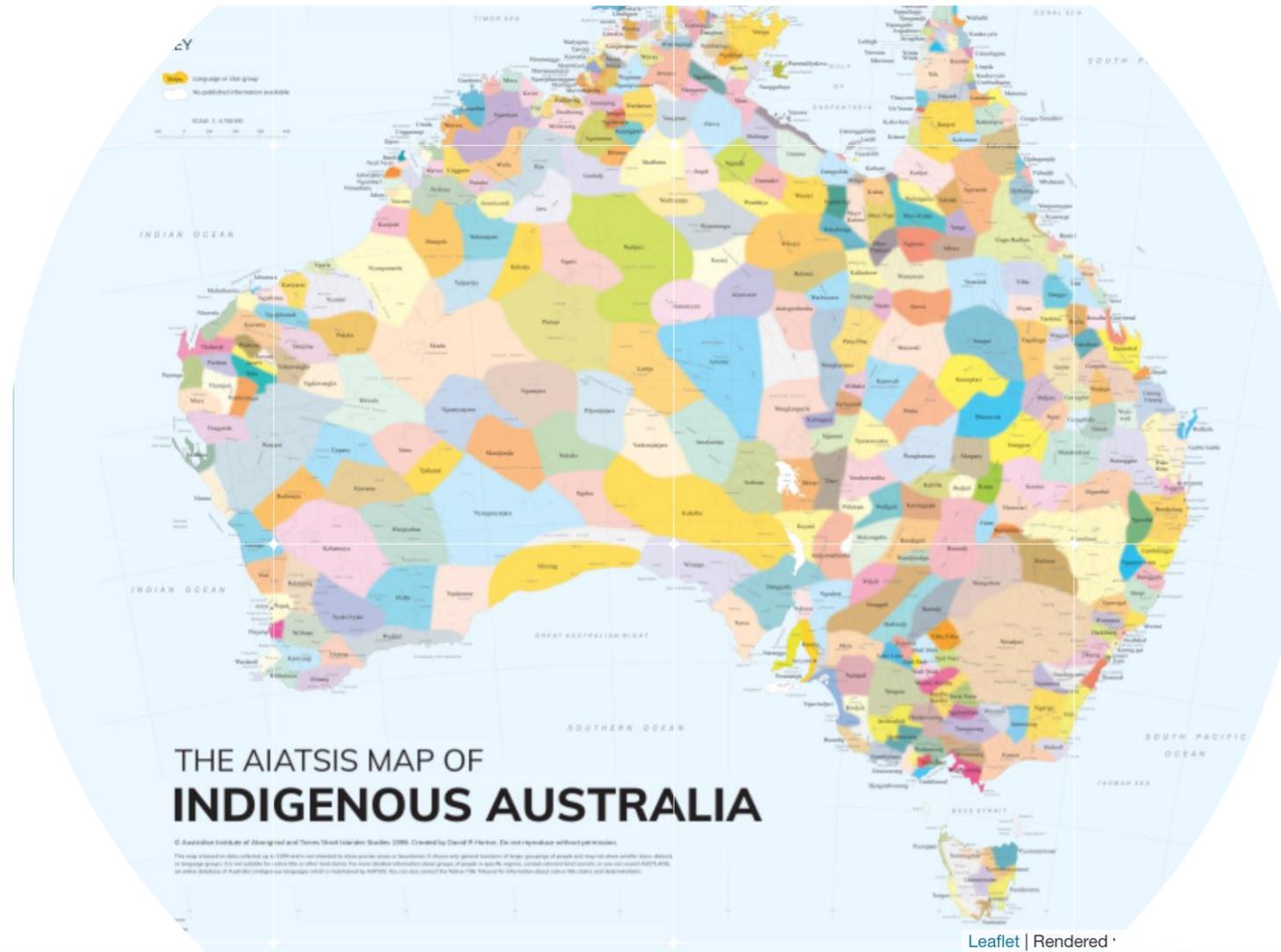


Welcome to ICSM

Craig Sandy – Surveyor-General of Victoria and ICSM Chair

Acknowledgement of Country





Robert Sarib
NT



Ken Sherwood
Greg Payne
QLD



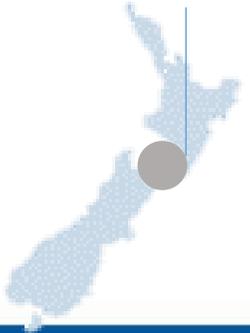
Thomas Grinter
Adrian White
NSW



Greg Ledwidge
ACT



Anselm Haanen
New Zealand



ICSM Members

35 years of intergovernmental leadership, collaboration, advocacy & delivery of geospatial excellence across Australia & New Zealand

Craig Sandy
Dr Andrew Mellor
VIC



Michael Giudici
TAS



Bradley Slape
Greg van Gaans
SA



Annaliese Walster
Dione Bilick
WA



Nicholas Brown
Shane Crossman
Zarina Jayaswal
Rohan Hill
Commonwealth



Nicholas Brown
Shane Crossman
Zarina Jayaswal
Rohan Hill
Commonwealth





SUSTAINABLE DEVELOPMENT GOALS



THE GLOBAL GOALS For Sustainable Development

“Leave No One Behind”



ANZLIC—the Spatial Information Council is the peak intergovernmental organisation providing leadership in the collection, management and use of spatial information in Australia and New Zealand.



© Intergovernmental Committee on Surveying and Mapping (ICSM)
A Standing Committee of ANZLIC – The Spatial Information Council

ANZLIC Strategic Plan 2020-24

Updated roadmap, May 2022

Driving spatial excellence and place-based intelligence across Australia and New Zealand

ICSM's Role

To support ANZLIC in the delivery of their strategic plan and initiatives in the Roadmap

By implementing appropriate standards and protocols for the sharing of information

Coordination and collaboration of the jurisdictions to achieve shared outcomes

Deliver projects of interest to New Zealand and all Australian jurisdictions to progress towards federated models and outcomes



Our Program

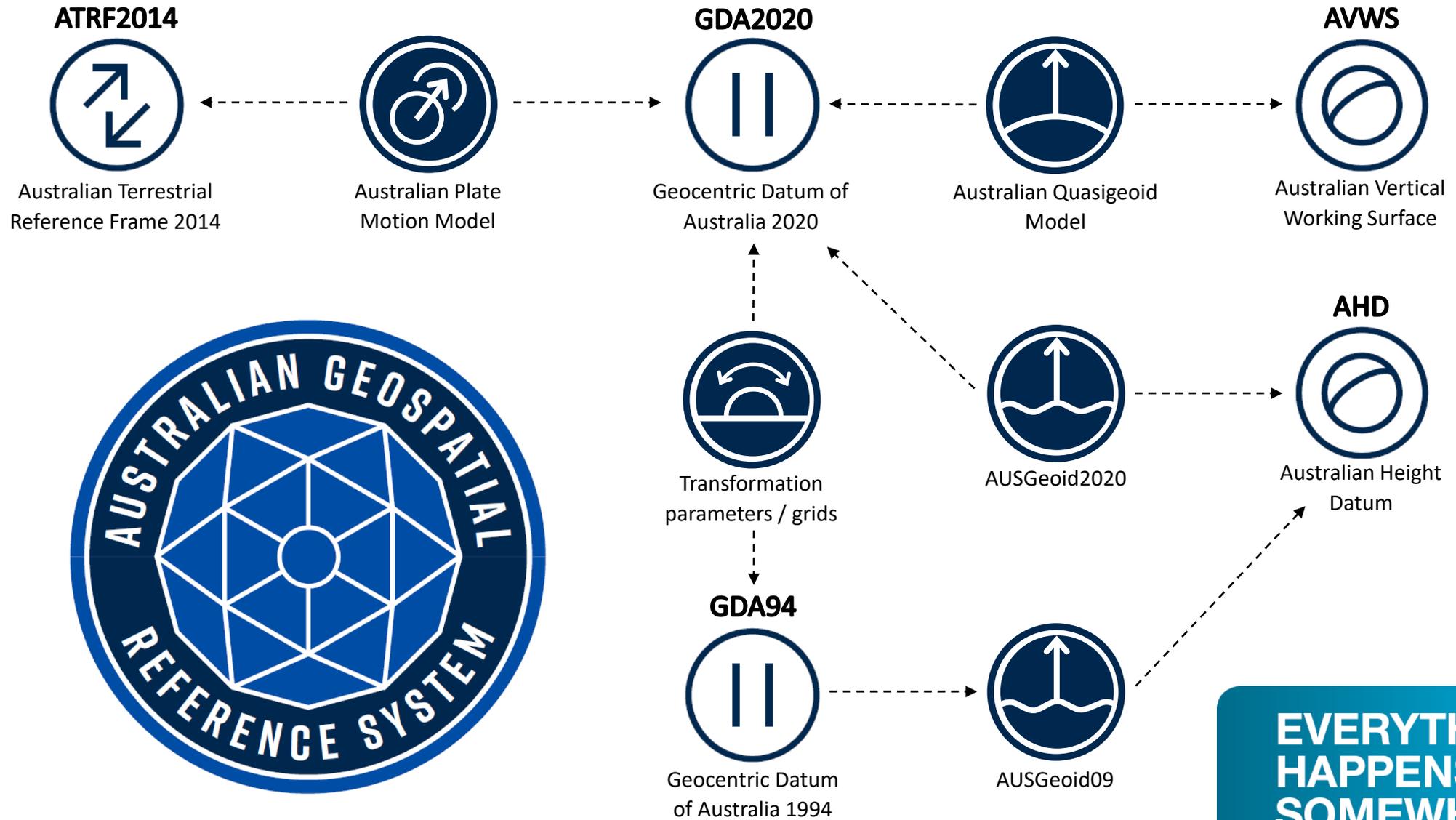
ANZLIC Strategic Plan 2020-24 Updated ICSM report, August 2022

Priority Initiatives					
<p>MODERNISING THE FOUNDATION SPATIAL DATA FRAMEWORK</p> <p>Modernise FSDF information to increase its accuracy and reliability and adopt 3D and 4D formats (where applicable) to meet emerging user needs.</p> <p>Ensure the FSDF is fit for future purposes.</p> <p>ANZLIC and ICSM are working to modernise foundation spatial data to 3D and 4D (time) digital formats, this includes:</p> <ul style="list-style-type: none"> Streamlining processes to collect and supply spatial data to users across the full data lifecycle: capture, procure, access, standardise, maintain and value-add. Enabling better data management practices, focusing on governance, privacy and cyber security, discoverability and accessibility. Driving development and adoption of open spatial data standards that align with and inform international standards. <p>In addition, the ICSM Metadata Working Group is undertaking a work program that includes data governance, management and metadata and is applicable across all of the FSDF themes.</p>					
Theme	Objective	Who	What	Comment	When
Administrative Boundaries	Reinforce the Australian Bureau of Statistics' current Australian Statistical Geography Standard as the national Administrative Boundaries theme that reflects the location of people. Continue to make Administrative Boundaries data openly available.	Either an ICSM working group, or one (or more) jurisdictions. Department of Industry, Science, Energy and Resources	<ul style="list-style-type: none"> Update ANZLIC's FSDF to link to Australian Bureau of Statistics' Australian Statistical Geography Standard (ASGS) Continue to publish quarterly updated Administrative Boundaries data via data.gov.au 	ICSM members provide ongoing support and data to ABS and GA.	September 2022 Ongoing
Buildings and Settlements	Collaborate with stakeholders to develop a standard for a buildings dataset as a new theme in the FSDF, consistent with the UN- GGIM	ICSM Elevation, Depth and Imagery Working Group	<ul style="list-style-type: none"> Develop an approach for interoperability and exchange of 3D buildings data across jurisdictions 		June 2023
Elevation and Depth	Review existing Earth Observation acquisition approaches and identify opportunities to reduce costs, collaborate on procurement, achieve whole-of-economy licencing, and leverage new capabilities	ICSM Elevation, Depth and Imagery Working Group	<ul style="list-style-type: none"> Leverage the work of New Zealand to develop principles for a standardised approach across jurisdictions for LIDAR Digital Elevation Models Collaborate with the Australian Climate Service and the Australian Space Agency on Earth and Observation initiatives 	Initial discussions held. Ongoing	March 2024 Ongoing/as required
Geocoded Addressing	Develop an updated addressing strategy	ICSM Addressing Working Group	<ul style="list-style-type: none"> Publish the Addressing Strategy 2035 Identify the priorities for implementing the Addressing Strategy 2035 Develop and publish guiding principles for a whole-of-government approach for addressing in 	The Addressing Working Group plan to meet for an online meeting in Q2 of 2022/23 and they will workshop the priorities areas required to deliver Addressing 2035. The priorities will be	July 2022 June 2023



ICSM's Working Groups

- Geodesy
 - GDA Modernisation Implementation
 - Survey Mark Enquiry Service
- Cadastre
- Place Naming
- Addressing
- Elevation Depth and Imagery
- Tides and Mean Sea Level
 - AUSHYDROID
- Telecommunications
- ELVIS
- Metadata
- S 100

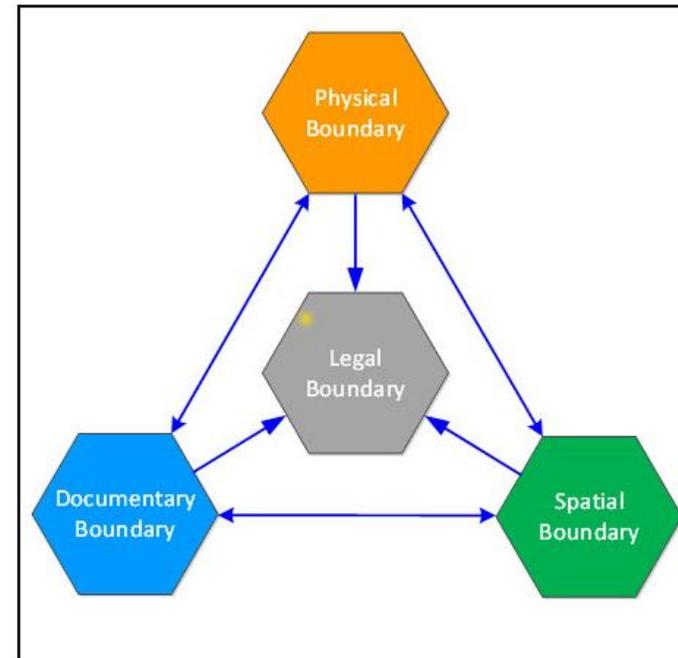


EVERYTHING HAPPENS SOMEWHERE

Cadastre

- Provide leadership on cadastral reform matters
- Raise awareness of the cadastre and the benefits of cadastral reform to industry and the community.
- Its role is to develop a coordinated approach to cadastral reform that incorporates the participation of all stakeholders, including other peak government and industry groups.

A Spatial Cadastre is defined as the official jurisdictional spatial representation of cadastral parcels and their boundary points and lines.



Source: [CRCSI Research Report Upgrading Spatial Cadastres in Australia and New Zealand: Functions, Benefits & Optimal Spatial Uncertainty](#)

3D CSDM Project goal and objectives

Goal: To create a new standard across Australia and New Zealand to facilitate consistent exchange of digital cadastral survey data between the survey industry and government land administration agencies

Objectives:

1. A harmonised **conceptual model** that supports all the essential elements of 2D & 3D cadastral survey data including related building subdivision components for use in Australian and New Zealand cadastral systems.
2. An **options analysis** of internationally-recognised (or widely adopted) transfer formats that could be implemented by major surveying software suppliers for encoding and exchanging 3D cadastral survey data



**CADASTRE
2034** | Powering Land
& Real Property

Cadastral Reform and Innovation for Australia -
A National Strategy

ICSM
ANGKIC COMMITTEE ON
SURVEYING & MAPPING

Addressing

Vision:

To support and promote a world leading interactive ecosystem that delivers a single point of reference for all Australian and New Zealand geocoded physical addresses

Mission:

Recognise and promote the importance of standardised addresses by;

- Providing a framework for delivery of consistent location addressing practices.
- Providing a framework for delivery of comprehensive addressing products.
- Facilitating the provision of expert advice to government and industry for effective decision making relating to addressing



A vision for addressing

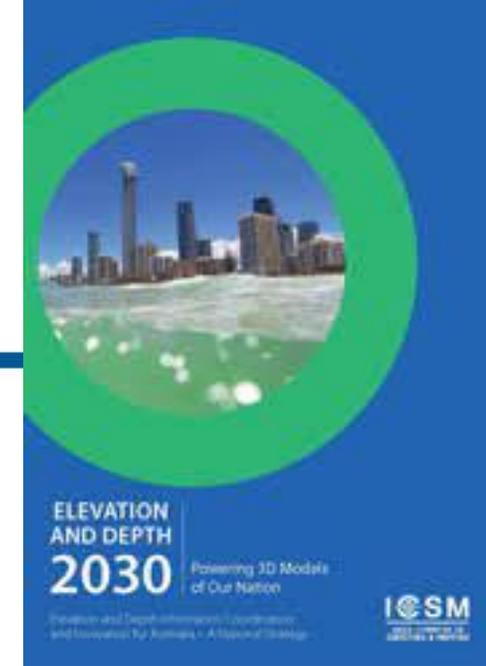
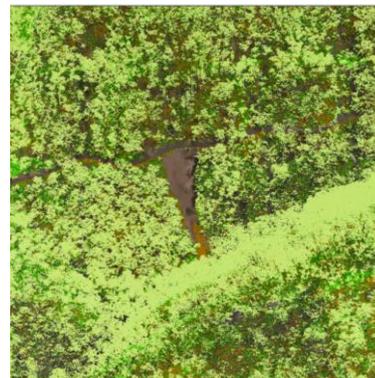
- Developed by ICSM for ANZLIC
- Strengthen standards and policy framework
- Enabling spatial digital twins with location driven addressing
- Recognition for First Nations peoples with multi-lingual addressing
- Interoperability with foundational datasets
- Launched by Melissa Harris in the Locate 22 Keynote May 2022



Elevation, Depth and Imagery

A standing panel of experts on high resolution earth observation data drawn from Australia and New Zealand government departments to improve standards and coordination for:

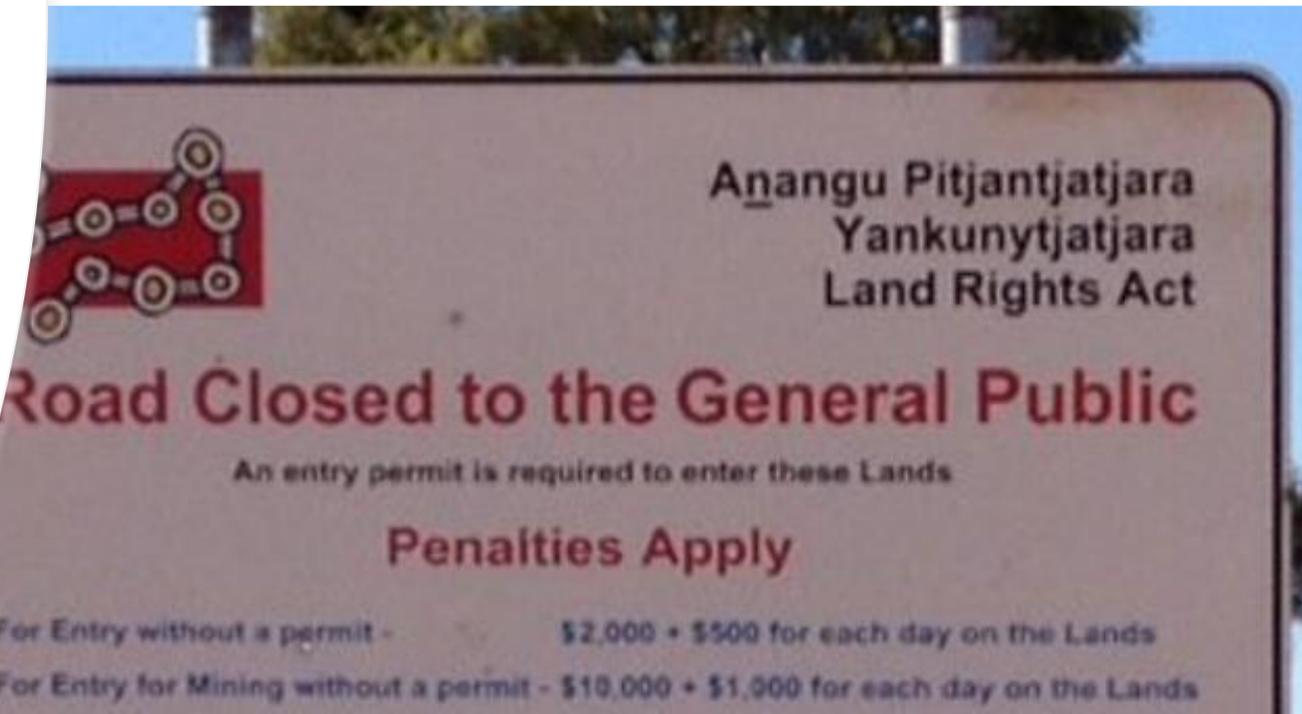
- Elevation and depth including coastline
- Very high-resolution imagery from all platforms
- Historic aerial imagery
- 3D datasets derived from imagery and elevation





Place Names

Place names connecting people, information, and place through the past, the present, and into the future



Place Naming

- Provide a framework for standardised place naming practice.
- Provide a framework for delivery of comprehensive place names products
- Facilitate provision of expert advice to government and industry for effective decision making relating to place names
- Facilitate preservation of the heritage and cultural significance of place names



Metadata

- Artificial intelligence
- Machine Learning
- Robotics
- Automation
- Digital Twins
- Smart Cities



Telecommunications

- The newest Working Group
- 2019/2020 Bushfires have highlighted the need for nationally consistent data
- Lead by NSW Spatial Services
- First meeting held in May 2021
- Linking to the work of the Australia Climate Service



Tides and Mean Sea Level

The groups current activities include:

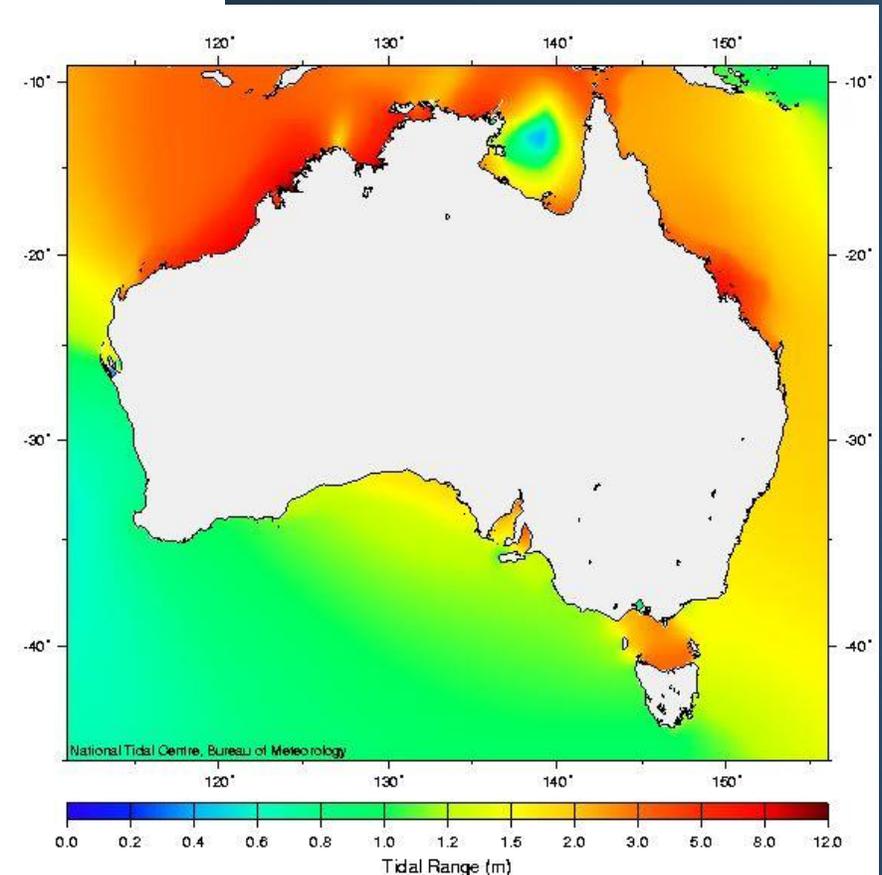
- Developing an Australian Tidal Data exchange format to assist in data exchange between agencies and users.
- Standardising tidal analysis methods to provide for improved tidal predictions for safe navigation of large vessels.
- Investigation of mean sea levels around Australia and their significance for land-based vertical datums.

Key publication

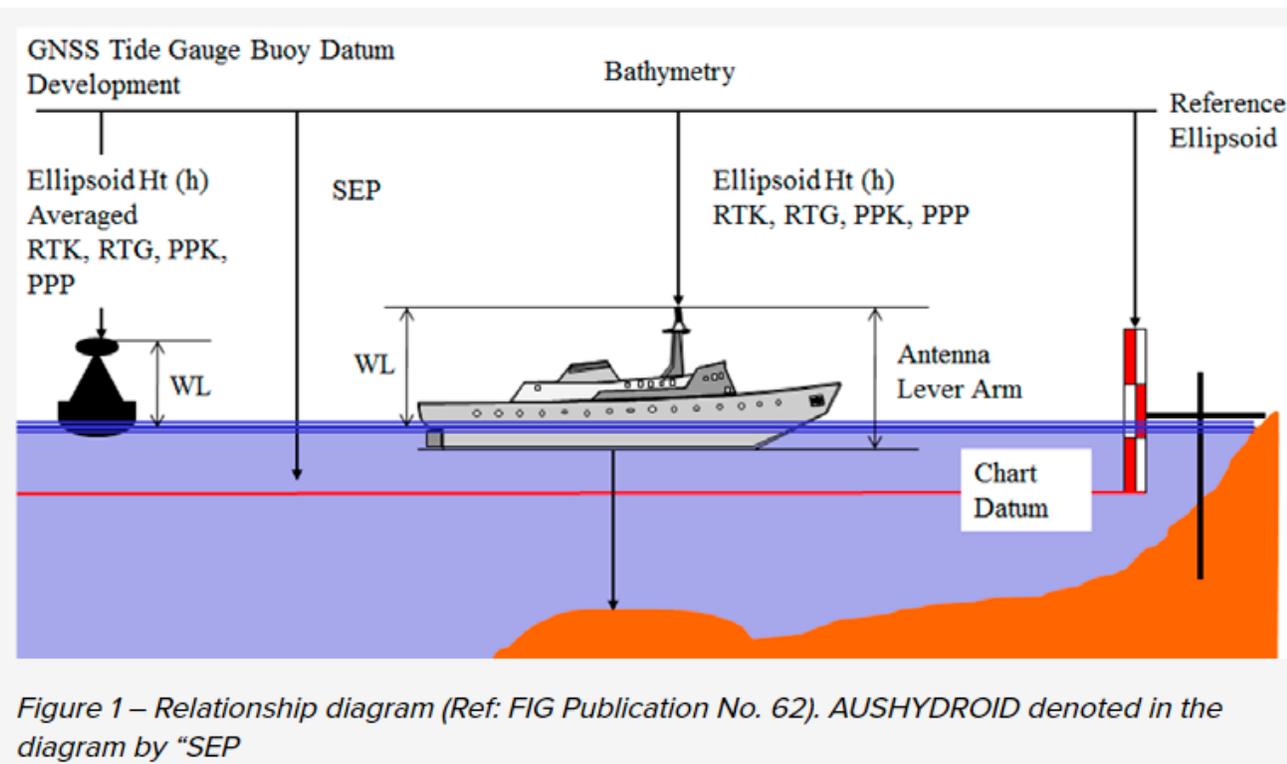
Australia Tides Manual (SP), latest version 5.0 released in 2018

Software

Australian Coastal Vertical Datum Transformation (AusCoastVDT)
Software Version 1.21 last updated in Sept 2019



AUSHYDROID



- Biggest challenge - difference between ellipsoid and chart datum
- PPP and 2nd Gen SBAS make measuring the z component feasible
- This model is called AUSHYDROID
- Benefit to shipping industry \$200 Million per annum

Collaboration



Questions and Discussion



Intergovernmental Committee on Surveying and Mapping

Delivering leadership across Australian & New Zealand to allow anyone anywhere anytime to access foundation spatial data

Government Administration · Symonston, ACT · 409 followers



Susan works here · 2 employees

✓ Following

Visit website 

More

Overview

The Intergovernmental Committee on Surveying and Mapping (ICSM) was established by the Prime Minister, State Premiers, and the Chief Minister of the Northern Territory in 1988. Since that time the Australian Capital Territory and New Zealand have joined ICSM. The Australian Defence forces are also represented on ICSM.

Membership is comprised of senior representatives of surveying and mapping agencies.