

ANZLIC Strategic Plan 2020-24

Key highlights for roadmap implementation 2020-2021



Geocoded Addressing



Administrative Boundaries



Positioning



Place Names



Land Parcel and Property



Imagery



Transport



Water



Elevation and Depth



Land Cover and Land Use

ANZLIC Strategic Plan 2020-24

In March 2020, the Australia and New Zealand Land Information Council (ANZLIC) published its Strategic Plan 2020-24 which sets out ANZLIC's strategic and operational context and ANZLIC's strategic priorities for 2020-24.

The Strategic Plan provides details of how ANZLIC will measure its success and a roadmap of key initiatives for 2020-24 to deliver on ANZLIC's priorities.

The Intergovernmental Committee on Surveying and Mapping (ICSM) is ANZLIC's delivery arm, and is supporting ANZLIC in the delivery of the actions and initiatives outlined in the Strategic Plan.

Implementation of the roadmap

The purpose of this Progress Report is to:

- **Share information on key highlights achieved from January 2020 to December 2021** for each of the 10 initiatives in the ANZLIC Strategic Plan 2020-24.
- **Highlight case studies** of ANZLIC's collaborations with stakeholder groups in order to progress these initiatives.



Modernise ANZLIC's Foundation Spatial Data Framework (FSDF)

2020-2024

Over five years ANZLIC and ICSM will work to modernise spatial information to increase its accuracy and reliability and adopt 3D and 4D formats (where applicable) to meet emerging user needs. This will include a review of the FSDF to ensure it is fit for future purposes.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

June 2021

Victoria's 3D Regional Towns proof of concept project has completed delivery of 3D data for 20 regional towns. Victoria and GA have worked together to publish some of these 3D datasets through ELVIS, including building height models and canopy models (and source LiDAR).

May 2020

Resulting from a review of the FSDF to scope potential alignment with the UN-GGIM's 14 fundamental geospatial themes, ANZLIC endorsed the inclusion of four additional themes to the FSDF, namely: Buildings and Settlements; Population Distributions; Geology and Soils; and Physical Infrastructure. Moving forward, jurisdictions will collaborate through [ICSM](#) to investigate options and approaches for the inclusion of these four additional data themes.

August 2021

ANZLIC, together with the ICSM, held the Digital Twin and 3D Buildings Inter-jurisdictional Roundtable on 23-24 August 2021. The two-day roundtable brought together more than 100 government colleagues from around Australia and New Zealand to collaborate, align efforts and build on shared experiences.

July 2021

Five workshops were facilitated over July and August with key stakeholders in the addressing supply chain to inform the drafting of the ICSM Addressing Strategy 2035. The workshops provided the contextual landscape to inform the strategy development and explored current state issues and opportunities.

September 2021

Major developers are using the Brisbane "reality mesh" models commissioned by Department of Resources to help with development planning and heat mapping of major inner city residential unit developments that have the potential to be used as athlete villages for the 2032 Olympics.

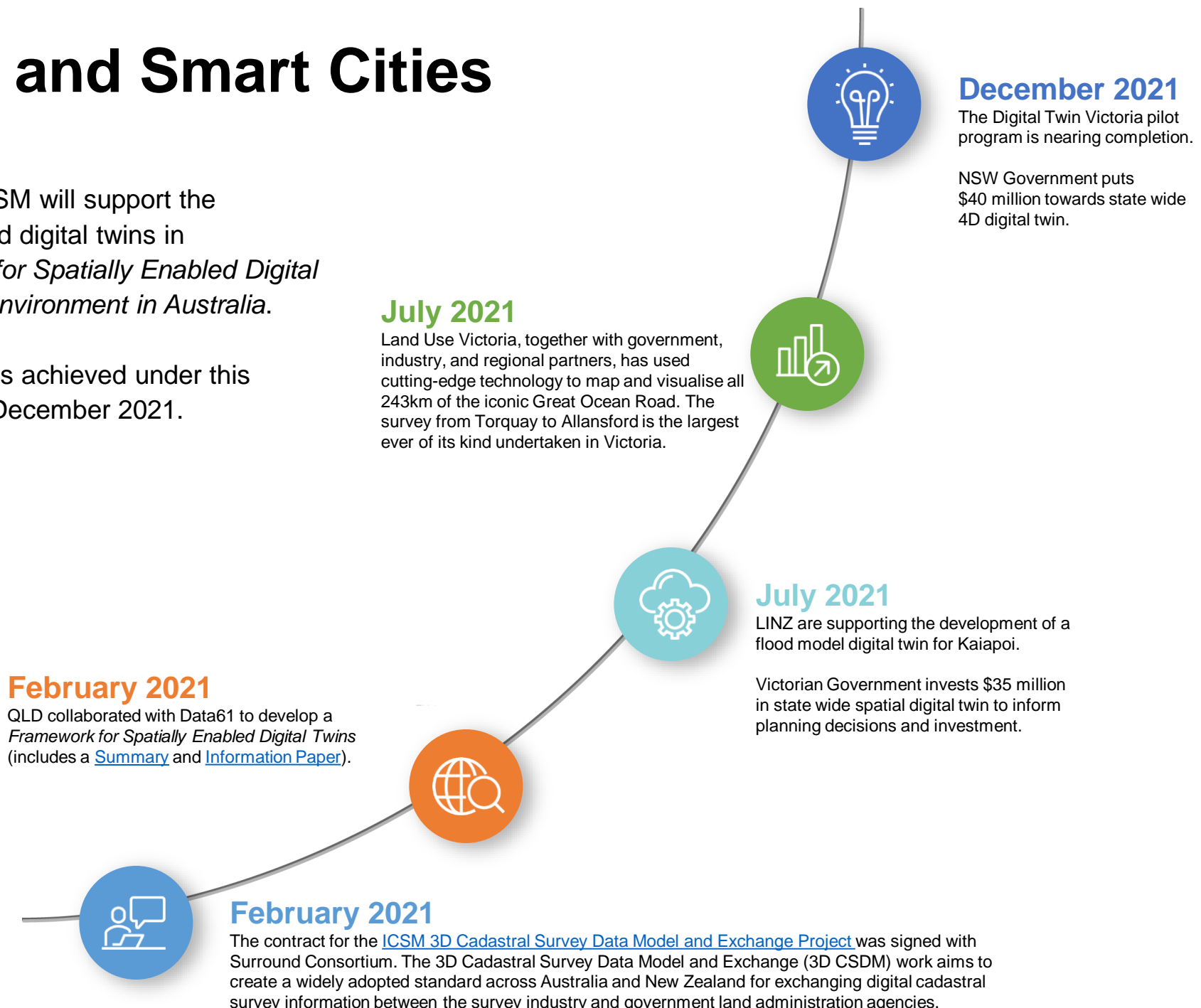
As the models are precisely spatially located, other data such as Bureau of Meteorology historical wind and temperature data, underground infrastructure, and proposed building designs can be easily integrated for more informed decision making.

Digital Twins and Smart Cities

2020-2024

Over five years ANZLIC and ICSM will support the development of standards based digital twins in accordance with the *Principles for Spatially Enabled Digital Twins of the Built and Natural Environment in Australia*.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.



December 2021

The Digital Twin Victoria pilot program is nearing completion.

NSW Government puts \$40 million towards state wide 4D digital twin.

July 2021

Land Use Victoria, together with government, industry, and regional partners, has used cutting-edge technology to map and visualise all 243km of the iconic Great Ocean Road. The survey from Torquay to Allansford is the largest ever of its kind undertaken in Victoria.

July 2021

LINZ are supporting the development of a flood model digital twin for Kaiapoi.

Victorian Government invests \$35 million in state wide spatial digital twin to inform planning decisions and investment.

February 2021

QLD collaborated with Data61 to develop a *Framework for Spatially Enabled Digital Twins* (includes a [Summary](#) and [Information Paper](#)).

February 2021

The contract for the [ICSM 3D Cadastral Survey Data Model and Exchange Project](#) was signed with Surround Consortium. The 3D Cadastral Survey Data Model and Exchange (3D CSDM) work aims to create a widely adopted standard across Australia and New Zealand for exchanging digital cadastral survey information between the survey industry and government land administration agencies.

February 2020

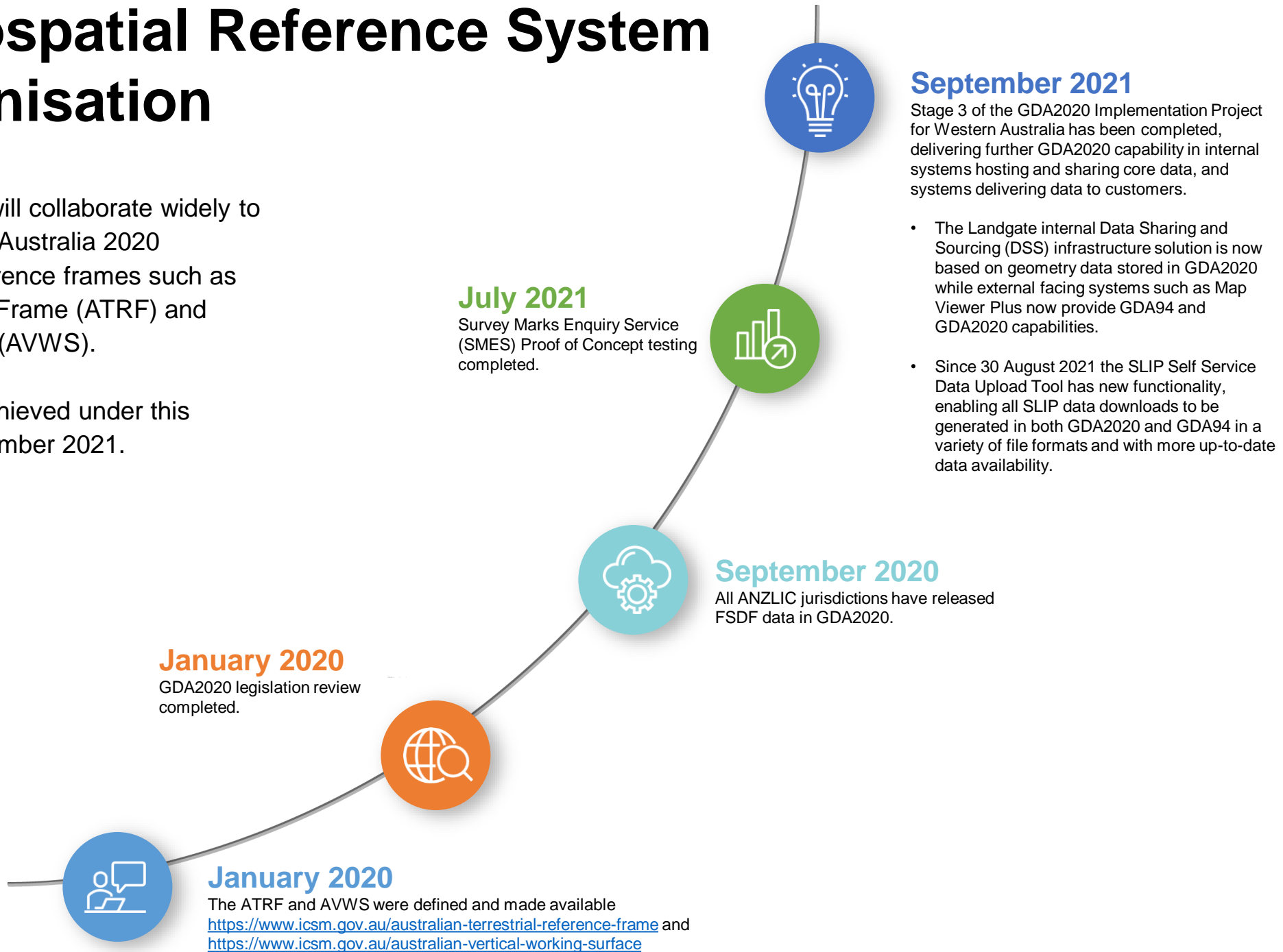
NSW spatial digital twin launched.

Australian Geospatial Reference System (AGRS) Modernisation

2020-2024

Over five years ANZLIC and ICSM will collaborate widely to implement the Geocentric Datum of Australia 2020 (GDA2020), and introduce new reference frames such as the Australian Terrestrial Reference Frame (ATRF) and Australian Vertical Working Surface (AVWS).

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

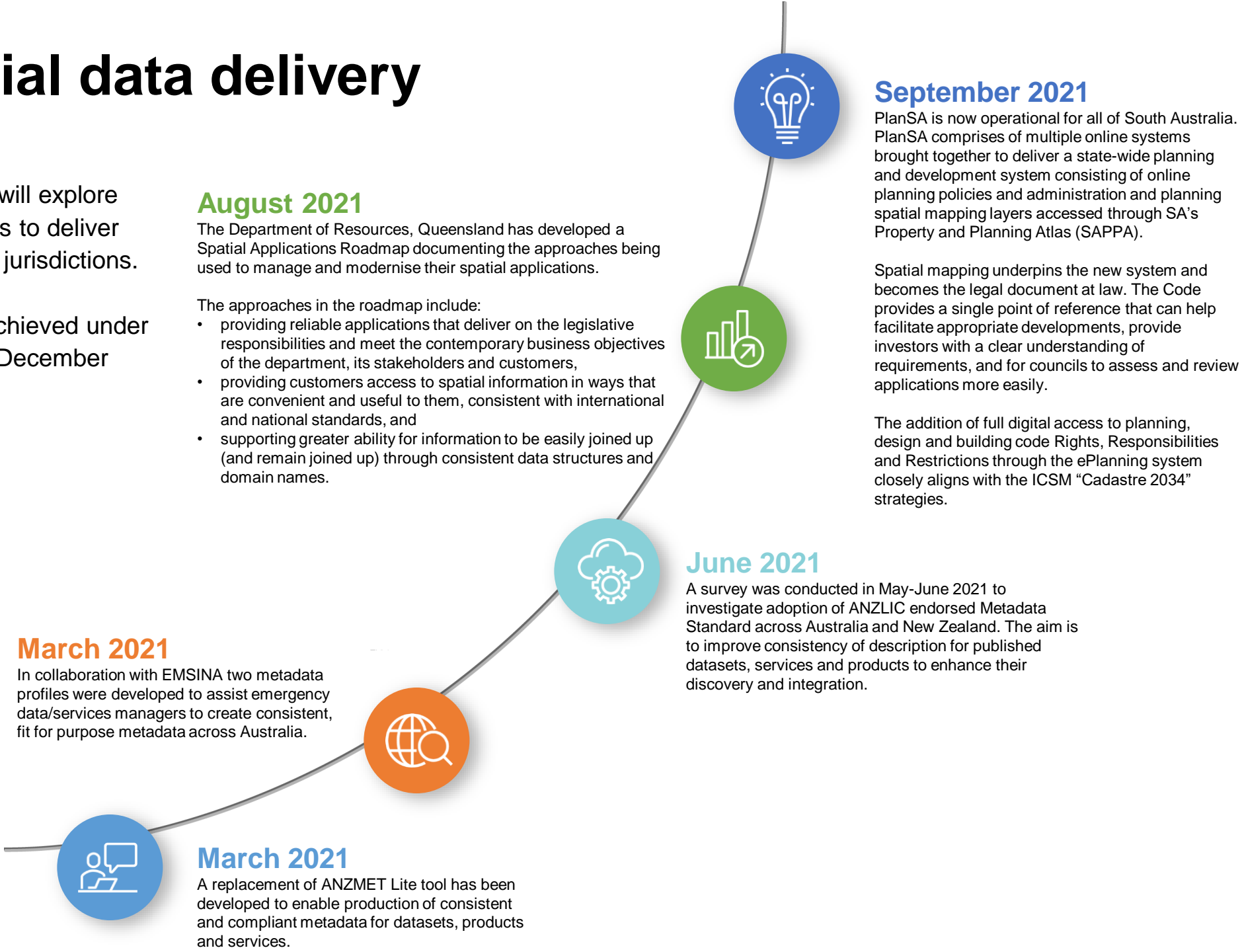


Improved spatial data delivery

2020-2024

Over five years ANZLIC and ICSM will explore improved, more efficient approaches to deliver spatial information and data across jurisdictions.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.



March 2021

In collaboration with EMSINA two metadata profiles were developed to assist emergency data/services managers to create consistent, fit for purpose metadata across Australia.

March 2021

A replacement of ANZMET Lite tool has been developed to enable production of consistent and compliant metadata for datasets, products and services.

August 2021

The Department of Resources, Queensland has developed a Spatial Applications Roadmap documenting the approaches being used to manage and modernise their spatial applications.

The approaches in the roadmap include:

- providing reliable applications that deliver on the legislative responsibilities and meet the contemporary business objectives of the department, its stakeholders and customers,
- providing customers access to spatial information in ways that are convenient and useful to them, consistent with international and national standards, and
- supporting greater ability for information to be easily joined up (and remain joined up) through consistent data structures and domain names.

June 2021

A survey was conducted in May-June 2021 to investigate adoption of ANZLIC endorsed Metadata Standard across Australia and New Zealand. The aim is to improve consistency of description for published datasets, services and products to enhance their discovery and integration.

September 2021

PlanSA is now operational for all of South Australia. PlanSA comprises of multiple online systems brought together to deliver a state-wide planning and development system consisting of online planning policies and administration and planning spatial mapping layers accessed through SA's Property and Planning Atlas (SAPPA).

Spatial mapping underpins the new system and becomes the legal document at law. The Code provides a single point of reference that can help facilitate appropriate developments, provide investors with a clear understanding of requirements, and for councils to assess and review applications more easily.

The addition of full digital access to planning, design and building code Rights, Responsibilities and Restrictions through the ePlanning system closely aligns with the ICSM "Cadastre 2034" strategies.

Coordinated earth observation (EO) data acquisition

2020-2024

Over five years ANZLIC and ICSM will review existing earth observation acquisition approaches and identify opportunities to reduce costs, collaborate on procurement, achieve whole-of-economy licencing, and leverage new capabilities.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

September 2020

The ICSM Elevation, Depth and Imagery Working Group updated their Elevation, Depth and Imagery roadmap, which incorporates the [Elevation and Depth 2030 Strategy](#).

January 2020

Geoscience Australia is delivering a range of EO data to end users, including via [Digital Earth Australia](#) which delivers satellite data to detect physical changes across Australia.

June 2021

There has been good progress from all jurisdictions on data sharing and coordination with Defence, particularly over capital cities, and for critical infrastructure. Defence is engaging with jurisdictions to align their formal agreements to support data acquisition and sharing.

April 2021

Geoscience Australia launched Digital Earth Australia (DEA) Coastlines. DEA Coastlines combines satellite data with tidal modelling to map annual coastlines at a consistent tide height (mean sea level) through time. The data is accurate to between 10 and 15 metres – and able to detect coastal change as small as 2.9 metres in certain locations

September 2021

The Australian Space Agency, in partnership with CSIRO, Geoscience Australia and the Bureau of Meteorology is finalising a national Earth Observations from Space Technology Roadmap. The roadmap will be released publicly soon and will highlight opportunities and priorities for Australia's space industry and the broader satellite Earth Observation community. This roadmap is part of a suite of technology roadmaps aligned to the priority areas in Australia's Civil Space Strategy.

Place Names

2020-2024

Over five years ANZLIC and ICSM will explore opportunities to improve place naming data, including dual place naming.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.



October 2021

Transition of Composite Gazetteer of Australia to new infrastructure environment, along with minor enhancements to search and display functionality.



July 2021

Geographic Names Victoria released a draft naming rules document for places in Victoria. This latest review of the document has focused on encouraging greater gender equality and diversity when deciding on names for the future. This means ensuring best-practice naming including more places and streets named after women, Aboriginal people, or in an Aboriginal language.



March 2021

The NSW Geographical Names Board (GNB) has developed resources including a short video outlining the process required for reviewing offensive place names.



October 2020

There is an expectation by New Zealanders to use, spell and say Māori place names correctly. One way the New Zealand Geographic Board is responding is by producing a new version of maps for tangata whenua place names of New Zealand. Another initiative is a seven year programme started in October 2020 to approve as official around 30,000 existing recorded place names, both Māori and English, through a fast track process. Ultimately the Board wants everyone to use official place names, to know where they can be easily found, and to be assured that the information is accurate and authoritative.



July 2020

The Tasmanian Place Names Act 2020 came into effect on 1 July 2020. The Act modernises the administrative processes for official place naming and is accompanied by the Tasmanian Place Naming Guidelines which outline the processes for the proposal, consultation and advertising of place names.

Space and Spatial Integration

2020-2024

Over five years ANZLIC and ICSM will support downstream application of new space and satellite capabilities and data sources to maximise value to information supply chains, particularly for earth observation and positioning.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

June 2021

ANZLIC provided feedback on the Space and Spatial Industry Growth Roadmap 2030 via ANZLIC's Space and Spatial Industry Growth Steering Committee member.

June 2021

Geoscience Australia is delivering a range of data to end users, including via [Positioning Australia](#) which delivers satellite positioning technologies for precise navigation and positioning.

September 2021

In collaboration with [Position++](#) the Victorian Local Analysis Centre has had a major upgrade, including the latest measurement models, multiple Global Navigation Satellite System (GNSS) constellation processing and better cloud computing technology.

Surveyor-General Victoria (SGV) Geodesy is contributing to precise regional positioning data as one of only three Local Analysis Centres for the [Asia-Pacific Reference Frame](#) (APREF). APREF brings together GNSS ground station data from 33 countries to provide positioning information in a densified reference frame over the Asia Pacific region. It is the foundation for GDA2020 and underpins all modern spatial datasets used in Australia.



September 2021

Under the NPIC Collaborative Project Agreement Landgate is assisting Geoscience Australia (GA) with the transition of existing Continuously Operating Reference Stations (CORS), site surveys for new CORS and securing best practice land access across both existing and new CORS sites in WA. This also involves coordinating activities of Landgate and other agencies as required, in addition to Landgate preparing Deposited Plans for all existing and new CORS sites.

GA has now commenced the upgrade and expansion of the CORS network in Western Australia. The first package of work, which is scheduled for completion in late September 2021, will see the upgrade of five CORS (ESPA, YELO, RAVN, NORS and KELN) and the construction of a new station in Kanandah.



July 2021

Geoscience Australia released an alpha version of their Global Navigation Satellite System (GNSS) analysis centre software, known as Ginan (pronounced Ginarn).



Stakeholder engagement

2020-2024

Over five years ANZLIC and ICSM will proactively engage across government, industry and the research sector to communicate the value of spatial data and drive increased collaboration and R&D.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

March 2021

ANZLIC jurisdictions presented on many topics at yearly Locate Conference - [Locate21](#), including a presentation by the then ANZLIC Deputy Chair, Melissa Harris as part of the opening plenary session.

September 2021

Melissa Harris delivered the opening keynote address at a leading spatial conference to an audience of 500 people from 70 countries, including representatives from the World Bank and the United Nations.

The virtual conference held on September 20, celebrated 20 years of the Centre for Spatial Data Infrastructures and Land Administration (CSDILA) at the University of Melbourne and included a meeting of the International Federation of Surveyors (FIG).

November 2020

The 2020 Victorian Spatial Showcase and eSummit was held online on 18 to 19 November 2020. DELWP, SSSI and SIBA worked in partnership to bring together two well known annual events into one festival for the spatial and surveying sectors. The theme was exploring how the spatial industry is enabling the UN's Sustainable Development Goals through innovation.



December 2021

ICSM is developing a new communications strategy.



July 2021

Digital Twin Victoria's showcase event [Introducing Digital Twin Victoria](#) attracted over 900 attendees from around the world including Singapore, Malaysia, India, Argentina and the UK.



Diversity and Inclusion

2020-2024

Over five years ANZLIC and ICSM will actively lead progress on diversity and inclusion in the spatial sector and within ANZLIC jurisdictions.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

May 2021

Since 12 May 2021, Land Information New Zealand has been leading with its te reo Māori name, Toitū Te Whenua, followed by Land Information New Zealand. For many years the agency has had dual English and te reo names, and the change reflects a deepening commitment to the partnership with Māori. Toitū Te Whenua means the land remains. The name Toitū Te Whenua is a reminder that the land and our responsibility to care for it is enduring.



July 2020

The Spatial and Surveying Diversity Leadership Network (SSS-DLN) published several case studies (including one from ANZLIC) on its [website](#), alongside a feature article that appeared in the June/July 2020 edition of Position Magazine.



July 2021

Land Use Victoria's Chief Executive, Melissa Harris, made history, becoming the first female to be appointed as ANZLIC Chair. This is also the first time in ANZLIC's 35-year history that two females hold its highest office, with Sandy Carruthers (Executive Director, Strategy, Science & Corporate Services, Department for the Environment and Water) also becoming ANZLIC's Deputy Chair.



August 2021

The SSS-DLN launched the Inclusion@Work Index to measure diversity and inclusion in the space, spatial and surveying sectors. A key outcome of the survey will be to benchmark, monitor and report on the state of diversity and inclusion to build the evidence base for action. ANZLIC has a representative on the SSS-DLN and co-funds the bi-annual Inclusion@Work Index alongside partner organisations, SSSI, SIBA/GITA, CSN, EOA and S & SNZ.



September 2021

Working with Victorian Land Registry Services, an Acknowledgement of Country has been added on to all Register Search Statements (title searches) in the Victorian Online Titles System (VOTS). This addition is significant in that it further demonstrates to the Victorian community that the government is committed to acknowledging Traditional Owners' and Aboriginal Victorians' connection to Country.

Skills and capability

2020-2024

Over five years ANZLIC and ICSM will identify opportunities to address spatial skills shortages and actively share and grow spatial capability.

This slide contains key highlights achieved under this initiative from January 2020 to December 2021.

November 2020

The annual [Indigenous Mapping Workshop](#) went 100% online, to offer free training to Aboriginal and Torres Strait Islander communities and organisations in geospatial and digital skills to map their own cultural significant sites on Country. The Department of Environment, Land, Water and Planning (DELWP), Victoria was a principal partner to help deliver the training.



November 2020

Geoscience Australia advocated and arranged for a young professional to participate in a UN-GGIM meeting as an observer.



November 2020

The geospatial capability team at Toitū Te Whenua Land Information New Zealand (LINZ) began partnering with members of the Māori GIS Association to facilitate a series of online step-by-step tutorials based on many of the shared key interests of Māori communities.



December 2020

ANZLIC published its [Guidance on the collection and use of data for location-based analysis](#).



September 2021

[Surveyors Registration Board of Victoria](#) (SRBV) has initiated a once-in-a-generation review of how licensed surveyors are registered in Victoria.

Consultations have involved SRBV members, the Project Advisory Committee, the [Institution of Surveyors Victoria](#), [Consulting Surveyors Victoria](#), [Surveying and Spatial Sciences Institute](#), [Spatial Industry Business Association and Geospatial Information & Technology Association ANZ](#), [Surveyor-General Victoria](#) and other jurisdiction surveying boards. This engagement helped inform the development of an issues paper that was open for feedback until 24 September 2021.