



2026 Spatial Industry Transformation and Growth Agenda Action Plan

Summary of key initiatives and roadmap to drive the future of the Australian spatial sector

14
December
2016

DRAFT

Message from the Minister – TBD

Add here

- *NISA*
- *Digital Transformation*
- *Etc.*

The transformation

The spatial sector adds significant economic value to the Australian economy, and has been highlighted as one of the key industry growth sectors in which Australia has a global competitive advantage. The rapid advances in location-related technologies are quickly redefining the sector and its players; we are facing a great opportunity, but are at risk of missing out.

This Action Plan is the one of the key outcomes of the 2026 Spatial Industry Transformation and Growth Agenda (2026Agenda). It has been developed through national consultation with over 400 people who work with spatial and location technologies.

This Action Plan is the beginning of the transformation. It presents the vision, initiatives and scheduling that collectively will contribute to the accelerated growth of spatial technologies in Australia and to the further development of location-based industries and their impact right across the Australian economy and our broader society.

We have an exciting challenge ahead of us, and we want to take this opportunity to ask spatial businesses, academia and government agencies to take a leadership role in implementing this plan.

If you have not had the opportunity to participate in this conversation, we welcome you to do so. The 2026Agenda is a rolling plan that will be receptive to include new ideas to ensure we are at the forefront of the spatial developments.

Peter Woodgate

Glenn Cockerton

The 2026Agenda Framework

The 2026 Spatial Industry Transformation and Growth Agenda (2026Agenda) is a whole-of-sector initiative of business, government, research, academia and spatial-user organisations. It sets out the roadmap to drive accelerated growth that will transform the Australian spatial sector and location-dependent industries over the next 10 years. It will influence the economy Australia-wide and our broader society.

VISION

This vision has been collectively crafted following consultation with over 400 individuals:

Australia will excel in the development of location-related technologies, services and skills that deliver value to businesses and communities.

KEY PILLARS OF THE TRANSFORMATION

These pillars provide the framework for the 32 key initiative that are the engine of the transformation:

A PUBLIC INFRASTRUCTURE & ANALYTICS

Accelerate the realisation of location-related ideas through the provision of nation-wide, coordinated open access to public spatial information and to analytic tools that are easy-to-use and facilitate data mining and interpretation

B INNOVATION & ENTREPRENEURSHIP

Foster innovation and entrepreneurial skills in the spatial sector, leveraging the latest technological advances, developing creative business models to open up new markets and opportunities

C OUTREACH

Raise the profile of the spatial sector, clearly communicate the value and contribution that location intelligence brings to the Australian economy and society

D RESEARCH & DEVELOPMENT

Create a nation-wide, coordinated, collaborative and focused spatial R&D agenda that meets changing national needs and continues to grow linkages between research, innovation and commercialisation

E EDUCATION, TRAINING & CAPACITY BUILDING

Ensure the sector's workforce is well-prepared, diverse and benefits from fundamental spatial skills through the provision of location-related training at all education levels, nation-wide, and with special impetus on enabling regional communities

F REPRESENTATION

Unify and consolidate representative spatial bodies that speak with one voice, and provide effective leadership and advocacy for the sector

TRANSFORMATION AND GROWTH INITIATIVES

The Australian spatial sector has determined that this suite of high priority initiatives will make an essential contribution to the transformation and growth of the Australian economy and accelerate the realisation of benefits to the wider community over the next decade.¹

A. Public Infrastructure and Analytics

- A1.** Develop and publish a nation-wide framework and roadmap setting out all major public spatial infrastructure developments and supporting analytical capabilities for the next five years, including:
 - National Positioning Infrastructure (NPI)²
 - Foundational Spatial Data Framework (FSDF)
 - Nation-wide Single Data Infrastructure (NSDI)
 - Australian Geoscience Data Cube(s) (AGDC)
 - Land Registries Reform
 - Visualisation Engines and Globes
- A2.** Prioritise the collection of, and access to, public datasets of national importance to focus investment and publish the plans for their maintenance, upgrading and availability
- A3.** Complete the implementation of the development of the dynamic datum including the move to 3D
- A4.** Publish the plan for future improvements to the National Elevation Data Framework

B. Innovation and Entrepreneurship

- B1.** Conduct systematic analyses of problems and challenges in priority sectors, and their value chains, that can be solved with location technologies and services.
 - The high priority growth sectors are: **transport, agriculture, health, defence and security, energy, mining and emerging industries**
- B2.** Create nation-wide location innovation ecosystems that allow entrepreneurs, start-ups and researchers to access real-world data with 'sand-pits' for fast prototyping and development of business expertise to facilitate the transition from idea-to-commercialisation
- B3.** Establish and grow relationships between the spatial sector and the venture capital industry and growth funds
- B4.** Publish information about existing programs and organisations that can support the export of products and services from Australia-based spatial businesses
- B5.** Undertake a pilot exercise with one jurisdiction that is already offering an innovative procurement program so that the benefits of the new procurement approach, using spatial and location examples can be showcased
- B6.** Create a program to develop and deploy low-cost dedicated Australian earth observation sensors and satellites to supply nation-critical data
- B7.** Implement a pilot international sponsorship program for recruitment of spatial professionals who can accelerate Australia-based innovation
- B8.** Promote the adoption of the use of digital location information in legislation and progressively replace the use of analogue map-based information in current legislation
- B9.** When the time is right, develop a bid to create a Space and Spatial Growth Centre

C. Outreach

- C1.** Grow relationships with peak industry bodies from the priority growth sectors (**B1**)
- C2.** Arrange for the spatial peak bodies and their members to specifically target conferences and forums in the priority growth sectors (**B1**) and to ensure a spatial presence
- C3.** Develop and run an awareness campaign promoting the benefits to the economy and society provided by location-related technologies, ensuring the message and language are accessible to the Australian public
- C4.** Regularly publish information about the size, composition, impact and value of the spatial sector in Australia
- C5.** Create a Location Youth Engagement Program targeting spatial and STEM graduates and young professionals
- C6.** Re-purpose the Locate Conference to: 1) include streams specifically focused on the priority growth sectors (**B1**) to promote cross-sectoral participation, 2) report on progress with the implementation of this Action Plan, 3) seek advice on improvements and updates to the Action Plan

¹ These initiatives stem from the whole-of-sector collective discussions, ideas and proposals presented through the 2026Agenda national consultation. A general timeline for implementation is included at the back of this document. The full list of ideas for initiatives is available online at: <https://2026agenda.userresponse.com/>

² All acronyms, information on programs or initiatives and any other technical detail will be provided in an accompanying Resources document.

D. Research and Development

- D1.** Develop a nation-wide, nation-building research agenda that sets out the major spatial challenges in the short, medium and long term
- D2.** Identify, implement and showcase at least one transformative R&D initiative for each priority growth sector (B1)
- D3.** Publish a plan setting out the incentives that will ensure the supply of industry-ready spatial PhDs for the next decade
- D4.** Publish information on available mechanisms and benefits that can reward businesses that invest in spatial R&D

E. Education, Training and Capacity Building

- E1.** Develop a strategic framework to coordinate management of education, training and capacity building (K1-12, TAFE and universities), comprising:
 - A nation-wide plan to maintain high priority spatial disciplines at the tertiary education level including geodesy, surveying, photogrammetry, spatial analysis and new future-fit competences including business subjects
 - A plan to include fundamental spatial knowledge in cross-disciplines where location-related technologies and skills are gaining importance (e.g. data science, ICT, statistics)
 - Scaling up the nation-wide spatial curriculum in primary and secondary schools
- E2.** Implement a program of training offering up-skilling opportunities in spatial disciplines to existing employees in the workforce, including both technical and management streams
- E3.** Develop and facilitate a spatial professionals exchange program across government, business and academia
- E4.** Establish and grow relationships with Regional Development Australia and the Regional Australia Institute to grow location-related regional capacity
- E5.** Design and implement a nation-wide action plan to mitigate the forecasted shortage of surveyors and geospatial specialists in Australia over the next 10 years
- E6.** Identify and facilitate the implementation of initiatives that will improve diversity in the spatial sector workforce

F. Representation

- F1.** The two peak bodies (SSSI and SIBA) to form one spatial organisation
- F2.** Align strategies and roadmaps of representative organisations in the spatial sector
- F3.** Prepare and publish a single explanatory statement of the roles of the key peak bodies across the spatial sector and how they complement each other

About the Spatial Sector

The spatial sector has been identified as one of the key industry growth sectors in which Australia has a global competitive advantage. Traditionally, the spatial sector has focused on positioning, measuring and mapping the earth's surface; including areas such as cadastral surveying, geodesy, engineering and mine surveying, remote sensing, GIS, and cartography. In recent times however, the use and generation of location data has expanded rapidly to other areas of the economy.

Earth Observation currently provides \$500 million in direct benefits to Australia and is projected to grow to \$1.7 billion by 2025. Precise positioning was estimated to have added over \$2.3 billion to Australian GDP in 2012, and is projected to exceed \$8 billion in 2020. These technological advances are aligned with estimates of current global growth of 30% per annum for geo-services and at 54% compound annual growth rate (CAGR) for location-based services.

In addition, over the next five years, we will see hundreds of new and higher-resolution imaging satellites and a near-doubling of the global and regional navigation satellite systems. The capability to effectively store and analyse 'Big Data' will allow a new level of insight across entire value chains. These new and more efficient technologies will be improved by developments in the telecommunications domain – such as the National Broadband Network (NBN), including terrestrial and satellite based communication systems, mobile technologies and applications (apps), autonomous aircraft and vehicles and a proliferation of sensor systems contributing to the Internet of Things (IoT).

This evolving landscape presents a unique opportunity for the Australian spatial sector to accelerate the growth of the Australian economy and provide far greater benefits to society. Our key task is to ensure the right national coordination of our existing capabilities. This is what the 2026Agenda is all about.

About the 2026Agenda

The 2026 Spatial Industry Transformation and Growth Agenda (2026Agenda) is a whole-of-sector initiative of business, government, research, academia and spatial-user organisations. Work on the 2026Agenda started in July 2016, and has since **engaged more than 400 individuals** through a combination of Leadership Forums across Australia and one-on-one interviews with representatives of priority sectors including agriculture, health, transport and energy amongst others. This initial national consultation has identified the values of the 2026Agenda, and those of the organisations and individuals involved in its implementation:

- **Collaborative:** *working together to leverage our complementary skills, establishing partnerships to maximise impact*
- **Innovative:** *individually and collectively, to be an exemplar in innovation for the nation*
- **User-focussed:** *communicating in the language of current and future users, seeing our users' needs through their eyes*
- **Adaptive:** *foreseeing change and being agile in response, forward looking and ready to embark on new challenges to help foster growth*
- **Rigorous:** *being evidence-based with a strong sense of quality in all that we do*

The 2026Agenda will be developed further over the next 10 years. It forms a component of the *National Innovation and Science Agenda (NISA)*. It has strong linkages to: the *Australian Earth Observation Community Plan (2016)* issued by the Australian Earth Observation Community Coordination Group (AEOCCG), the *Future Growth of the Spatial Industries Position Paper (October 2016)* issued by the Spatial Industries Business Association (SIBA) and the Australian and New Zealand Land Information Council (ANZLIC) *Strategic Plan 2016-2019*. All 2026Agenda activities to date have been coordinated by a working group jointly chaired by representatives of SIBA and the CRC for Spatial Information, and including representatives of ANZLIC, AEOCCG, Data 61 (CSIRO), Landgate, Geoscience Australia, the Queensland Department of Natural Resources, and the Department of Prime Minister and Cabinet.

About this document and the full report

This is a draft for comment and the first iteration of the 2026Agenda Action Plan, presenting the high priority initiatives that will drive the spatial sector's transformation and growth.

This draft will be available for comment until 31 January 2016. Please provide your feedback to:

info@2026agenda.com

The final Action Plan will be released in the first quarter of 2017, along with a comprehensive resources document including 1) detail, rationale and ideas for implementation of the 2026Agenda framework and initiatives, 2) detailed feedback from the national consultation including the barriers to growth, the needs and the many suggestions that have led to the development of the vision and 3) an explanation of technical details and acronyms.

Supporting documents already released



2026Agenda: Insights Report

Summarises interviews with leaders of the spatial sector, and identifies barriers to growth and areas for transformation



2026Agenda: Ideas Paper

National consultation discussion paper. Includes draft vision and needs statements that served as input for the generation of specific ideas and initiatives.

Call for action

The 2026Agenda team is coordinating the implementation of initiatives, which will commence in 2017.

We are seeking participants willing to take a leading role in this next phase.

If you or your organisation want to help drive this transformation:

- Get involved in the implementation of initiatives by contacting us at info@2026agenda.com
- Contribute to the existing ideas on the pipeline, or propose your transformational initiative at: <https://2026agenda.userresponse.com/>
- For more details, and to consult the supporting documentation, please visit the 2026Agenda website: www.2026agenda.com

Acknowledgments

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This document was prepared by the Agenda 2026 Team: Phil Delaney (CRCSI) and Eva Rodriguez (SIBA and CRCSI), in consultation with the 2026Agenda Working Party. For more information please contact info@2026agenda.com, or visit our website at www.2026agenda.com.

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