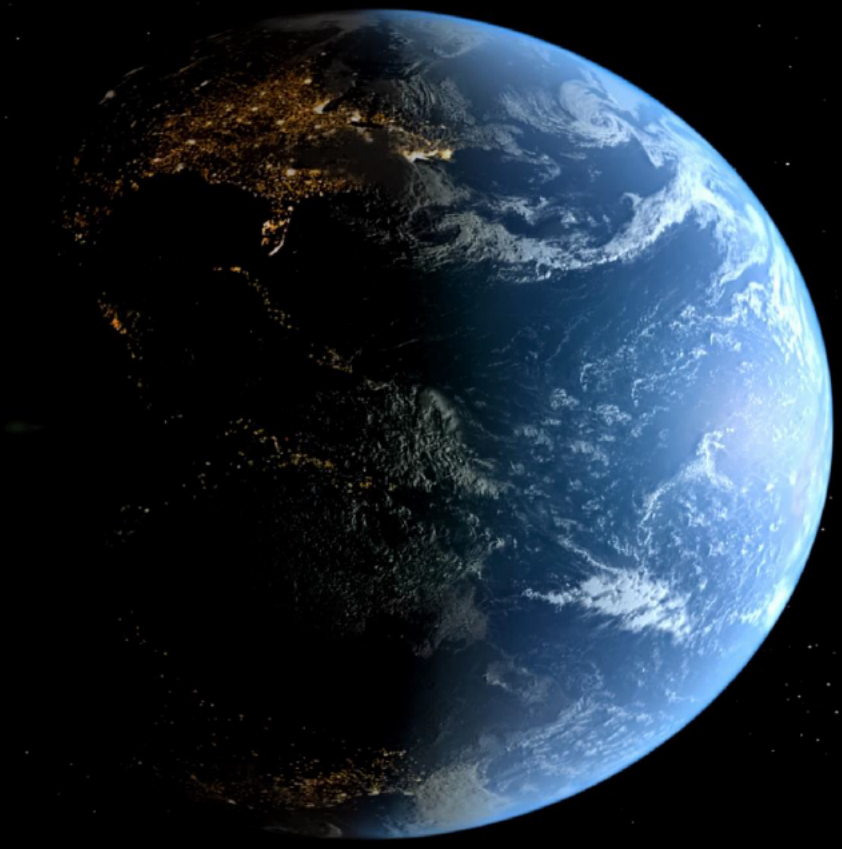
Space Industry
Association
of Australia

Capturing Australia's Space Potential: A Strategic Imperative

2026-2027 Pre-Budget Submission

30 January 2026



Space Industry Association of Australia Limited
Suite 102, Level 1, 13-15 Bridge St
Sydney NSW 2000
ABN: 67 613 961 005

2025-2026 Pre-Budget Submission

EXECUTIVE SUMMARY

The Space Industry Association of Australia (SIAA) is the peak body for the Space sector in Australia. SIAA provides a collective voice on behalf of over 80 domestic and international member organisations with world-class capability across all aspects of Space activities. SIAA membership reflects a breadth and depth of capability, including launch providers, advanced manufacturing, downstream data and AI providers, and enabling capabilities such as law firms. SIAA's diverse membership includes startups, through to small-to-medium sized enterprises ('SMEs'), most of Australia's leading academic institutions and aerospace primes.

Investing in the following proposed initiatives would promote a significant upside for Australia, aligning with the Albanese Labor Government's agenda in many key areas, including economic growth, national resilience, and environmental sustainability. Space-related capability and services are key to modern economies and societies since they increasingly drive and determine not only economic growth, but also foundational elements of resilience, national security and defence and driving innovation and productivity in many sectors from resources to agriculture. The UK government estimates 18% of the UK economy is already fundamentally dependent upon space, meaning that $315bn+ of the Australian economy is likely to be similarly dependent.

There is also extensive evidence of a compelling return on investment from strategic investments in space. The Australian Space Agency reports a 7:1 ROI on its grant programs, Canada and the UK both report consistently high returns on their investments in ESA of 3:1 and 7.5:1 respectively, and the global space industry is one of the fastest growing global markets, forecast to continue to grow at 9%+, creating a global industry worth US$1.8tn/AUD$2.72tn market by 2035[1]. Virtually all of Australia's key allies and potential partners are dramatically increasing their investments in space, recognising the increasing importance of space capability, the consistently healthy return on investment, and substantial concerns with shifting geopolitical considerations including many signs of a key rival outstripping allied space capability.[2]

Given the increasing importance of this capability, and recognising the tight fiscal environment, SIAA recommends a strategic approach in the 2026-27 Budget which provides nuanced and targeted interventions and support to maintain momentum and accelerate the benefits of the sector across the economy. SIAA has considered a full range of different types of government focus and support: signals to industry, investors, states/territories and international partners, strategy, i.e. strategic interventions which identify and harness strategic differentiators, enhanced coordination across the many parts of government which share space-related risks and opportunities, and/or funding which is an essential mechanism to ensure growth of an emerging industry. SIAA therefore recommends prioritisation of the following policy and funding initiatives:

1) **Development of a National Space Strategy/Policy:** Australia currently lacks a clear signal of its interest and ambitions in space. There is no framework which identifies Australia's strategic differentiators and aligns these to capability development, research and relevant government portfolios with interests in space, including Defence, to maximise the multi-dimensional

[1] World Economic Forum (WEF) and McKinsey, April 2024, https://www3.weforum.org/docs/WEF_Space_2024.pdf
[2] See summary of selected increases in submissions below, e.g. the European Space Agency (ESA) recent 31% increase in budget to a 3 year spend of €22.3bn.

Space Industry Association of Australia

benefits of space capability at the most efficient cost. Virtually all of Australia's peers and rivals put in place comprehensive national strategies between 2019-2023 because the transformational changes in the cost of access to space and exponential expansion of the benefits of space required a strategic approach. This includes Canada, the UAE, Italy, France, the USA, the UK, South Korea, China, Israel, New Zealand, Japan, India, Germany and Singapore. The strategy could also build upon the Australian Space Agency's very useful Fact Sheet and establish clear and consistent metrics to track the health of the Australian space ecosystem (as the Fact Sheet necessarily had to draw upon many sources from different times).

2) **Accelerating the European Space Agency (ESA) Cooperation Agreement and an ESA initiative fund:** Government is to be commended for commencing the ESA Cooperation Agreement process as this is a substantial strategic initiative which opens the second largest space market for Australian companies and academic institutions (which are generally locked out of ESA's internal spend model). Canada and the UK both report consistently high returns on investment (3:1 and 7.5:1) from ESA investments, making ESA a compelling business case. Benefit to Australia can be accelerated and maximized through the establishment of a fund to drive initiatives which harness and showcase the collaboration and benefits to Australia.

3) **Investigation of Spaceflight Options for our Australian Astronaut and Future Astronaut Training Opportunities:** Australia's qualified astronaut is one of approximately 100 people in the world qualified for long-duration space activities. A spaceflight for Australia's astronaut will place Australia at the forefront of international space exploration and research, allowing them to undertake research on behalf of Australian research institutes, universities, and organisations. This will directly benefit Australia's research and development activities and strengthen engagement with international partners, including the United States and Europe.

4) **Efficiencies through audit and coordination of space-related procurement across government:** There are many parts of government which are reliant upon space-related data and capability and who must make regular complex judgments as to whether to buy or build space capability. However there does not appear to be coordinated tracking of the level and trajectory of spend across government. A coordinated pooling of data across government would establish the true cost and likely increasing trajectory of spend associated with Australia's current preference for "buy" in the build/buy equation and establish a robust and independent basis to test build/buy alternatives going forward.

5) **An Indo-Pacific Acceleration Fund:** There are many Indo-Pacific partners who are substantially increasing their investments in space (such as the $6.7bn Japanese and actively seeking the robust and reliable partnerships which Australia provides. IAC 2025 also successfully established Australia as a substantial focal point in the Indo-Pacific. This would enable Australian industry and academia to leverage the substantial and increasing funding for space capability across the Indo-Pacific, securing matching funding which effectively subsidises the development of Australian capability and assets.

6) **Acceleration of Australia's Microgravity Opportunity:** Microgravity processing is one of the few entirely novel industrial economies which has rapidly moved from theory to research to commercialisation and is already transforming the pharmaceuticals industry with additional applications in semi-conductor, fibre optics and solar cell production. Australia has a strategic differentiator in returns from space due to our large land area, low population density and clear skies (which has enabled Australia to secure pole position with world-first returns to a commercial spaceport and a substantial pipeline of returns). Australia has a research and industrial ecosystem which is well-placed to capture a disproportionate share of this new economy, and has an opportunity to drive research and industrial capability in important space-enabled industries not least pharmaceuticals.

Space Industry Association of Australia

7) **Ongoing funding stability for the Australian Space Agency for operations and grant funding.** The Australian Space Agency has demonstrated expertise in determining the best frameworks for industry funding and has indicated a 7:1 return on investments to date. It is critical to ensure ongoing funding not only to ensure that regulatory functions can keep pace with rapid industry growth (especially a pipeline of approvals which enables rather than restricts industry growth), but also to ensure that the Space Agency can provide important seed and grant funding to continue to drive Australian capability.

8) **Leveraging and complementing the Australasian Space Innovation Institute (ASII):** Government support for the establishment of ASII has been critical and appreciated by industry since SmartSAT CRC has established important momentum and partnerships and there are substantial benefits in continuing and expanding impact more broadly across Australasia. Consideration should be given to additional initiatives including funding which leverage and complement this important initiative. This is distinct from the Indo-Pacific fund since the fund would be administered by government purely for Indo-Pacific partnerships whereas ASII drives broader initiatives such as end user engagement, and research to commercialisation.

9) **Ongoing Investment in Defence Space Capabilities and coordination across civil and defence requirements/objectives:** Investment in Defence space capabilities support Australia's national security and underpins industrial capability. SIAA supports a clearer framework for the integration of Australian capability and ongoing investment in support of engagement with our allies and partners. Particular consideration needs to be given in the transition to the Defence Delivery Agency as well as careful consideration of the potential to drive substantially higher benefits across both Defence and Civil industrial capacity through clearer coordination of objectives and procurement/funding models for the many "dual-use" space technologies which have applications in both civil and Defence contexts.

Proposed Initiative Funding Breakdown:

INITIATIVE	PROPOSED FUNDING
1) National Space Strategy/Policy	$2m over 1 year
2) ESA Cooperation Agreement Fund	$20m over 2 years
3) Human Spaceflight Options for our Australian Astronaut	TBC depending upon ESA negotiations.
4) Cross-government audit of procurement of space-related data and capability	$1m over 1 year
5) Indo-pacific Acceleration Fund	$50-100m over 2 years
6) Microgravity research/ commercialisation	TBC depending on focus areas/implementation model.
7) Funding stability for the Australian Space Agency	• Continuation of core/regulatory funding (at a similar level to the $34.2m over 3 years announced in 2023-4). • An additional +$xm/year (determined through detailed costings) for increased regulatory throughput to ensure approvals do not bottleneck industry growth. • +$100m over 3 years to enable the Agency to maintain momentum in building industry through grant programs.
8) Leveraging/complementing ASII	TBC
9) Defence Space Capabilities & Coordination of dual-use across Civil and Defence	TBC

Space Industry Association of Australia

The following submission sets out:

- A Summary of the Importance of Space: Risks and Opportunities across Economic Growth, Resilience, National Security and Defence;
- The Thematic Principles guiding SIAA's proposals (e.g. long-term policy and investment stability, acceleration of sovereign capability, resilience and supply chain risk management);
- A "Taxonomy" of the significance of different types of Government support: signals, strategy, coordination and funding;
- A detailed outline of the proposed initiatives; and
- Broader/additional policy submissions.

Space Industry Association of Australia Limited
Suite 102, Level 1, 13-15 Bridge St
Sydney NSW 2000
ABN: 67 613 961 005

SUMMARY OF PROPOSALS

1. **Development of a National Space Strategy/Policy**

A national space strategy/policy would offer a framework which identifies Australia's strategic differentiators in our space industry and space research and aligns these with relevant government portfolios with interests in space. This will maximise the multi-dimensional benefits of space capability at the most efficient cost.

2. Accelerating the European Space Agency (ESA) Cooperation Agreement and an ESA Initiative Fund

An Australia-ESA Cooperation Agreement is a substantial strategic initiative which opens the second largest space market to Australian companies and academic institutions. Benefit to Australia can be maximized through the acceleration of the agreement and establishment of a fund to drive initiatives which harness and showcase the collaboration and benefits to Australia;

3. Investigation of Spaceflight Options for our Australian Astronaut and Future Astronaut Training Opportunities

A spaceflight for Australia's astronaut will place Australia at the forefront of international space exploration and research, allowing them to undertake research on behalf of Australian research institutes, universities, and organisations. This will directly benefit Australia's research and development activities and strengthen engagement with international partners, including the United States and Europe.

4. Efficiencies through audit and coordination of space-related procurement across government

There are many parts of government which are reliant upon space-related data and capability and who must make regular complex judgments as to whether to buy or build space capability. However, there does not appear to be coordinated tracking of the level and trajectory of spend across government. A coordinated pooling of data across government would establish the true cost and likely increasing trajectory of spend associated with Australia's current preference for "buy" in the build/buy equation and establish a robust and independent basis to test build/buy alternatives going forward;

5. An Indo-Pacific Acceleration Fund

There are many Indo-Pacific partners who are substantially increasing their investments in space (such as the $6.7bn Japanese and actively seeking the robust and reliable partnerships which Australia provides. IAC 2025 also successfully established Australia as a substantial focal point in the Indo-Pacific. This would enable Australian industry and academia to leverage the substantial and increasing funding for space capability across the Indo-Pacific, securing matching funding which effectively subsidises the development of Australian capability and assets;

Space Industry Association of Australia

6. Acceleration of Australia's Microgravity Opportunity

Microgravity processing has rapidly moved from theory to research to commercialisation. Australia has a strategic differentiator in returns from space due to our large land area, low population density and clear skies (which has enabled Australia to secure pole position with world-first returns to a commercial spaceport and a substantial pipeline of returns). Australia has a research and industrial ecosystem which is well-placed to capture a disproportionate share of this new economy, and has an opportunity to drive research and industrial capability in important space-enabled industries not least pharmaceuticals;

7. Ongoing funding stability for the Space Agency for operations and grant funding.

The Australian Space Agency has demonstrated expertise in determining the best frameworks for industry funding and has indicated a 7:1 return on investments to date. It is critical to ensure ongoing funding not only to ensure that regulatory functions can keep pace with rapid industry growth (especially a pipeline of approvals which enables rather than restricts industry growth), but also to ensure that the Space Agency can provide important seed and grant funding to continue to drive Australian capability.

8. Leveraging and complementing the Australasian Space Innovation Institute (ASII)

Government support for the establishment of ASII has been critical and appreciated by industry as SmartSAT CRC has established important momentum and partnerships and there are substantial benefits in continuing and expanding impact more broadly across Australasia. Consideration should be given to additional initiatives including funding which leverage and complement this important initiative.

9. Ongoing Investment in Defence Space Capabilities

Investment in Defence space capabilities support Australia's national security and bolsters our space industry capability. SIAA supports the integration of Australian capability into defence space capabilities and ongoing investment in support of engagement with our allies and partners.

Space Industry Association of Australia Limited
Suite 102, Level 1, 13-15 Bridge St
Sydney NSW 2000
ABN: 67 613 961 005

SUMMARY OF THE IMPORTANCE OF SPACE: RISKS AND OPPORTUNITIES ACROSS ECONOMIC GROWTH, RESILIENCE, NATIONAL SECURITY AND DEFENCE

The criticality of the space industry to economic growth, resilience, national security and defence is clear and increasing, invariably leading Australia's peers and rivals to significantly increase their focus and support. The UK Government estimates that space-related assets and services already directly underpin 18% of the UK economy[3], the equivalent of A$315bn in annual value for Australia's economy when adjusted for relative GDP.

SIAA estimates that Australia's dependence is actually likely to be even higher due to Australia's comparatively large land mass and consequent reliance not only upon satellite-based GPS and atomic timing (which underpins energy, communications and financial services) but also far greater reliance on satellite connectivity/Internet of things for agriculture, emergency management, rural, remote and First Nations communities and more. Since there is greater dependence on satellite connectivity, many Australians are fundamentally dependent upon space for access to government services, education, health and many other essential services.

There is substantial evidence that the Space Industry can generate substantial returns with a strategic approach. The global industry is growing rapidly and on track for 9% yoy growth, leading to a US$1.8tn/AUD$2.72tn market by 2035[4] (approximately the same size as the entire Australian economy today).

There are many concrete indicators that strategic support for space industry can generate high returns and benefits across the economy. In the past four years, government investment in the Australian space sector has yielded a minimum return of 7:1 on investment[5], highlighting the tangible impact of investment in our space sector on the Australian economy. Canada reports a 3:1 return and the UK reports a 7.5:1 return on its investments in the European Space Agency (ESA).[6]

In 2025 the Australian Government reported that the Australian space sector generates $4.6 billion in annual turnover, across 620 organisations, and employs 17,000 FTE. Australia's space sector is a growing, future-focused industry with space capability critical to a range of key national industries. Nationally, space services contribute to improved economic productivity through satellite-enabled services, data-driven decision-making, and connectivity, delivering annual benefits to agriculture of $1.5 billion and mining of $115 million.[7]

Australia has established significant general funding schemes which are delivering valuable funding and investment including for Australian space companies. Government is to be commended in particular for the establishment and acceleration of the National Reconstruction Fund which has made three significant investments in Australian space companies: Myriota, to support their global bespoke internet of things satellite network, Hypersonix, to support the commercialisation of advanced hypersonics capabilities, and most recently, one of the NRF's largest investments into Gilmour Space to enable their commercialisation of Australian rocket and satellite capabilities.

[3] Major-General Paul Tedman, Commander, UK Space Command, Speech to UK DSEI, 11 September 2025, https://www.gov.uk/government/speeches/commander-of-uk-space-commands-dsei-2025-keynote-speech-on-defence-in-space
[4] World Economic Forum (WEF) and McKinsey, April 2024, https://www3.weforum.org/docs/WEF_Space_2024.pdf
[5] Australian Space Agency Fact Sheet, 29 July 2025.
[6] https://www.gov.uk/government/news/growth-and-security-at-the-forefront-in-uk-funding-boost-for-european-space-agency
[7] Australian Space Agency Fact Sheet, 29 July 2025.

Space Industry Association of Australia

The Industry Growth Fund, ASCA and other general funding mechanisms also play a key role for the development of Australia's space industry. However, these general funding mechanisms are invariably over0subscribed, do not provide a consistent pipeline of support, and most importantly do not provide important signals, strategy and coordination of initiatives across government which are required to maximise development of a complex and incipient industry. Consideration of space-specific initiatives is therefore required.

As a result of the increasing space-related dependencies and opportunities, most of Australia's peers and rivals are significantly increasing their level of focus and support for the space industry:

- Canada announced a 10x increase in its contributions to the European Space Agency (ESA) [8]
- ESA recently announced the largest increase in funding in its history with increases of inflation plus 3.5% each year until 2028, leading to a 31% increase in total funding over the next 3-year period to €22.3bn;[9]
- Japan recently established a $6.7bn Space Strategy Fund including for collaboration with international partners (provided they establish a Japanese office)[10],
- the UK Government announced an 8% increase in the UK Space Agency's Core Civil Budget and an additional £2.8bn investment in ESA[11],
- the German Government announced an additional €35bn to be spent by 2030 on space capability which delivers both Defence priorities and sovereign capability across key areas: hardening against data disruptions and attacks, improved space situational awareness, redundancy through several networked satellite constellations, secure, diverse, and on-demand launch capabilities, and a dedicated satellite operations centre.

Investment in Australia's space sector is critical to developing sovereign capability and uplifting national capacity across the entire value chain. Currently, Australia relies heavily on international partners for space assets, which limits priority access, results in solutions that are not optimised for Australia's unique needs and increasingly places Australia at risk from global supply chain disruptions which would be far more problematic than COVID as they would likely affect foundational services such as GPS.

Despite many headwinds including the cancellation of multiple major government initiatives across both civil and Defence, the Australian space industry and Australian government have delivered many landmark achievements over the last 12 months which provide strong evidence of the level of ambition and maturing capability of Australian industry including:

- World first returns to a commercial spaceport with the successful return of microgravity processed pharmaceuticals followed by the announcement of a pipeline of 22 returns and additional return customers, meaning that the Australian industry has achieved a near 100% market share for returns from space;
- Gilmour Space's successful orbital launch test, demonstrating the maturity of Gilmour's manufacturing and operational systems including successful flight termination;
- The successful lifting of Australia's profile in space with the hosting of the International Astronautical Congress (IAC 2025) in Sydney, with nearly 8,000 registered delegates from 99 countries and a record-breaking 19,000+ ordinary Australians engaged in the open days

[8] https://www.canada.ca/en/space-agency/news/2025/11/canada-deepens-space-ties-with-europe-through-historic-investment.html

[9] https://www.esa.int/About_Us/Corporate_news/ESA_Member_States_commit_to_largest_contributions_at_Ministerial

[10] https://fund.jaxa.jp/content/uploads/Overview_of_The_SpaceStrategy_Fund.pdf

[11] https://www.gov.uk/government/news/growth-and-security-at-the-forefront-in-uk-funding-boost-for-european-space-agency

Space Industry Association of Australia

across the ICC Sydney and Parramatta;
- Substantial investments from the National Reconstruction Fund in space companies including Hypersonix and Gilmour Space;
- The selection of Australia's astronaut Katherine Bennell-Pegg as Australian of the Year following her successful completion of astronaut training with ESA, making Australia one of only a handful of countries in the world with astronauts qualified to crew the ISS;
- The completion of the US/NASA Framework Agreement and announcement of the Australian Space Agency's mandate to negotiate a Cooperation Agreement with ESA;
- Progress towards the completion of Roo-ver, Australia's lunar rover supported by Australian Space Agency grants;
- The announcement of the establishment of the Australasian Space Innovation Institute (ASII);
- The successful implementation of iLAuNCH Trailblazer across 3 regional universities with 20+ industry partners, total investments of $180m and projected economic benefit of $3.6bn; and
- Optus's announcement of the Project Swift LEOSat collaboration with Inovor, iLAuNCH and DSTG.

These initiatives demonstrate the progress and potential of the industry, and the success which can result from structured partnerships across industry, government and academia. It also highlights significant momentum in key areas such as economic complexity, advanced manufacturing and robotics which are foundational capabilities not only for space, but broad areas of industrial production. Government should be acutely aware of the evolution of the industry and looking for mechanisms to ensure that consistent and appropriate support is put in place, especially to ensure that capability continues to grow rather than re-start as government programmes run their course and new but often disconnected initiatives are put in place.

THEMATIC PRINCIPLES

SIAA's submission is built around the following thematic principles:

- **Securing long-term policy and investment stability:** high-tech sectors such as space industry have long R&D and investment cycles, requiring a consistent runway to build and accelerate IP and industrial capability and train and develop a highly-specialised workforce. The Australian industry has experienced significant policy changes and disruptions over recent years and there is a substantial opportunity to accelerate the industry through a strategic approach which ensures a stable policy and investment path matched to industry dynamics;

- **Accelerating the Future Made in Australia through the development of sovereign capability/resilience/supply chain risk management:** There is a very real opportunity for the space industry to accelerate Australia's high-tech, future-proof sovereign industrial capability. Space industry drives innovation in manufacturing, robotics, advanced materials, additive manufacturing, and the development of highly-skilled specialized and future-proof jobs. Australia also has pole position in the opportunity to develop sovereign capability in entirely new industrial eco-systems such as microgravity processing, but the level of focus and support does not currently allow Australia to capitalize on the potential. Most of Australia's peers and rivals have instituted policies, processes and rules which prioritise and accelerate the development of sovereign capability, leaving Australian industry exposed to an uneven playing field.

- **Strengthening workforce and innovation ecosystems:** Australia's target of 1.2m high tech jobs recognizes the substantial workforce challenges Australia faces. The space industry

Space Industry Association of Australia

already employs more than 17,000[12] people in highly-skilled future-proof jobs with broad application across high-tech industry and defence. The tasks of accelerating workforce development and effective innovation ecosystems are so important to the Future Made in Australia and Australia's future economic growth, resilience, national security and defence, and the challenges in terms of Australia's high-cost environment are so significant and it does not appear that market forces alone are delivering the results Australia needs.

- **International supply chain integration:** Australia's industries including space often excel in providing niche inputs, components and capability rather than complete vertically integrated systems. This means that a large proportion of opportunities for Australian industry are more complex international export/collaboration initiatives. Significant initiatives have built basic platforms including the US Technology Safeguards Agreement and the UK Space Bridge, however there are still substantial barriers especially for the startups and SMEs which comprise the bulk of the Australian ecosystem. It is often insufficient to merely conclude the formal agreements and there are great benefits from ensuring a holistic approach which enables Australian industry to surmount these complex barriers, through e.g. complementary programs such as the ISI Grants.

- **Data to drive procurement synergies:** At least 27 different parts of Federal Government and at least 170 government programs rely upon and currently procure space-related data and capability.[13] The breadth of dependencies and opportunities across government means that there are likely to be significant procurement synergies/cost efficiencies from a coordinated approach across government. Many different parts of government are needing to make constant complex "build/buy" decisions in relation to space-derived data and capability, yet there does not appear to be a clear view of spend and trajectory of spend across government. This is foundational data which would provide a robust basis for important cost/benefit decisions.

TAXONOMY OF GOVERNMENT SUPPORT

SIAA also advocates a strategic approach which considers and leverages the full range of support which government should consider for a high-tech high-potential industry with broad risks, dependencies and opportunities across industry and government. It is especially important to consider the full range of support mechanisms in a tight fiscal environment. While a consistent pipeline of funding is critical for an emerging industry with significant up-front costs for R&D and establishing and commercializing capability, several other forms of government support can also be very significant. SIAA is focused on 4 different types of government support: Signals, strategy, coordination and funding:

- **Signals** of government interest, ambition and support for emerging industries are not to be under-estimated as they provide important signals across government, to industry, investors, and international partners. General funding initiatives such as the Industry Growth Program and National Reconstruction Fund are extremely useful and important initiatives but do not provide clear public signals. Australia's peers and rivals have invariably put in place national strategies/policies and appointed a named space portfolio in part precisely because these send clear and unambiguous signals. While New Zealand has very clear statements of focus and

[12] ABS BLADE modelling for 2017–2021, includes industry, academia and government organisations, Australian Space Agency Fact Sheet 29 July 2025.
[13] Earth Observation Australia, 2024. *Continuity of Earth Observation for Australia Risk Reports Released*

Space Industry Association of Australia

ambition in its national space policy[14], the closest Australia has to a public statement of interest and support in recent years appears to be Assistant Minister Dr Charlton MP's comments at SIAA's recent Strategy & Policy Forum[15];

- **Strategy** plays a very significant role in dynamic and rapidly evolving industries such as space. Most of Australia's peers and rivals have sought to identify national strategic differentiators and strategies to optimize industry and government to leverage those. For example New Zealand publicly identified launch as a major opportunity in 2022, put in place a regulatory and broader policy framework to support the growth of launch and by 2024 had accelerated to be 4th in world in launch, behind only the most established space nations (USA, Russia and China);

- **Coordination** is critical when dependencies and opportunities are spread so broadly across federal government portfolios, departments and agencies, as well as state and local government entities and industry. Coordination can be especially important to identify procurement synergies/cost savings across government as well as synergies in future procurement of capability;

- **Funding** is critical for any emerging industry with high fixed costs, long R&D and commercialization cycles and dynamic and innovative markets. The benefits and outputs of funding will be maximized when they are aligned with the signals, strategy and coordination measures outlined above. SIAA's approach to funding proposals has been to identify targeted opportunities where funding can accelerate and optimize existing initiatives and Australia's strategic differentiators (such as the ESA Cooperation Agreement, Indo-Pacific leadership, collaboration and opportunities to secure exponential funding from the many peers across the Indo-Pacific who are substantially increasing their focus and investments in space.

[14] "*The Government supports the development of New Zealand's space and advanced aviation sectors. I want these sectors to thrive, to lift prosperity and deliver further benefits for New Zealand… I want New Zealand to be a globally competitive hub for space and advanced aviation research and development, testing, launch and data applications.",* New Zealand Space and Advanced Aviation Strategy, 2024-2030.

[15] *"This industry and all of you in this room have shown boldness, energy and resourcefulness – traits that Australians have in spades. We have some very smart people, a stable institutional environment, and we are globally competitive in a number of sectors, like autonomous systems, robotics, biotechnologies. But it takes government backing to support these technologies in a market like Australia and take them forward. And so, too, it will take government backing in space."* https://www.minister.industry.gov.au/ministers/charlton/speeches/keynote-space-industry-association-australia-siaa-space-policy-and-strategy-forum

Space Industry Association of Australia Limited
Suite 102, Level 1, 13-15 Bridge St
Sydney NSW 2000
ABN: 67 613 961 005

PROPOSED INITIATIVES

1. NATIONAL SPACE STRATEGY AS THE MOST STRATEGIC OPPORTUNITY FOR SIGNALS, FOCUS & ACCELERATION

SIAA is concerned that Australia is falling significantly behind the many peers and rivals who have established clear national strategies, policies and plans to accelerate industry. Between 2019-2023, virtually all of Australia's peers and rivals identified the transformational changes which radically decreased the cost of access to space and substantially increased the importance of space-related capability for national priorities. As a result, they invariably put in place a strategic approach which ensured that they were able to identify strategic differentiators and optimize and maximise their position (including to Australia's detriment as a competing provider). Canada, the UAE, Italy, France, the USA, the UK, South Korea, China, Israel, New Zealand, Japan, India and Germany, for example, all put in place national space strategies/policies between 2019-2023 to optimize their position in the dynamic and rapidly growing space economy. Many of these strategies have had clear and profound impacts with New Zealand identifying launch as a priority in 2022, and achieving the 4th highest number of launches globally by 2024 (only behind the most established space nations, the USA, Russia and China).

The Australian Federal Government has put in place a range of important but general initiatives which can and do deliver benefit for the space industry (especially the Industry Growth Program and the National Reconstruction Fund). While these have both delivered support to the space industry, this support has been modest in nature (i.e. the NRF has invested a total of $105m in space-related companies to date), and perhaps more importantly, these forms of funding do not send a clear signal of Federal government interest and ambition, and do not assist in ensuring a strategic approach to a complex industry with widely-distributed risks and opportunities.

There is a time-limited opportunity to capture the wave of transformational opportunities which make direct contributions to high-priority Federal government objectives across Australia's economic growth, resilience, national security and defence. There are few areas (other than AI) which can have such significant benefits across such a wide range of priorities and portfolios – Industry, Science and Resources, Defence, Home Affairs (across all of critical infrastructure, national security and social cohesion), Climate Change and Energy, Emergency Management, Agriculture, and Communications. The space industry offers transformational potential to accelerate and optimise the majority of the most pressing Federal government priorities: housing, energy transition, productivity and social cohesion.

National strategies identify national strategic differentiators and thereby provide key focus areas which offer clear signals to galvanise industry development in line with national aims and requirements from across government. The development of a national space strategy does not need to be a long or resource intensive exercise as the Australian Space Agency, and industry have substantial insights and components. New Zealand and India both have highly-regarded and effective national space strategies/policies and New Zealand's is a mere 9 pages long, while India's is 11 pages. The likely strategic differentiators include Australia's geography for ground segment, launch and return, Australia's highly-educated academic and industry populations,

The powerful focusing and accelerating impact of a national strategy is an essential next step for growth of the Australia space industry. There are a number of strategic differentiators for Australia's space sector that a national space strategy could usefully identify and outline the range of initiatives across industry, government and academia which maximise future growth opportunities. Such focus areas could include ground segment, launch and returns, space situational awareness, and capturing a disproportionate share of the microgravity economy.

Space Industry Association of Australia

SIAA notes that a strategy is not always the answer, but believes that there are powerful dynamics which make it the most appropriate response in the circumstances:

- Australia's space industry is currently in a period of rapid change and realignment to meet changing global industry trends. This opens a substantial and time-limited opportunity for Australia to set the strategic direction of national industry development in alignment with national needs, thereby incentivising industry development driven by global commercial trends and national requirements.
- A National Space Strategy can address and consolidate the cross-government relevance of space, with complex dependencies and opportunities currently distributed widely across government portfolios without an over-arching framework. A strategy would identify strategic differentiators and a range of options to leverage and accelerate them as well as areas where increased communication and collaboration across government can decrease costs and enhance productivity.
- Substantial shifts in the global geopolitical environment require Australia to quickly and regularly consider our dependency on international partners for ongoing access to space capability. A National Space Strategy can consider how Australia can play a more active role in multinational space initiatives especially ESA, thereby securing resilient ongoing access to space capability and opportunities.

For these reasons SIAA recommends:

- Development and delivery of a National Space Strategy that outlines Australia's space ambition and strategic direction across the next decade.
- Led by Australian Space Agency in consultation with relevant government portfolios (including Defence).

2. ACCELERATING NEGOTIATION OF THE AUSTRALIA-ESA COOPERATION AGREEMENT

The announcement that the Australian Space Agency has a mandate to negotiate a Cooperation Agreement with ESA was very well received by industry. This is a highly strategic initiative with a wide breadth and depth of potential. Canada has operated under a highly successful Cooperation Agreement since 1979 and reports a 3:1 return on its ESA investments. ESA have strong policies and principles around "geographic return" to ensure that ESA investments drive local benefit and the development of sustainable sovereign capability. Without an ESA Cooperation Agreement, Australian industry is largely locked out of the second largest space market on the planet.

ESA appears to be very focused on completing the Cooperation Agreement and ensuring that there are meaningful initiatives within and alongside the agreement which show the potential of the collaboration.

In order to maximise the opportunity for the Cooperation Agreement to deliver maximum benefit to further Australia's space science and capability development there is a need for clear identification of strategic areas of cooperation. SIAA suggests the following:

- launch and return;
- space situational awareness;
- space sustainability;
- robotics and automation;
- microgravity research and commercialisation; and
- human spaceflight.

Space Industry Association of Australia

Australia will receive significant benefits through a Cooperation Agreement, notably the opportunity to work with an established international body with a wealth of expertise and guaranteed funding return on joint projects outlined and executed under the Cooperation Agreement. As such Australia should proactively consider both co-investment and barter opportunities under a cooperation agreement. A number of these opportunities, particularly across microgravity research and human spaceflight are time sensitive. Microgravity is a rapidly growing new economy and one in which Australia already has significant advantages thanks to its suitability as a destination for returns from space.

The International Space Station is also set to deorbit before the end of the decade and low-earth orbit missions to the ISS having long lead times. Australia has an astronaut who is qualified to crew the ISS (making Australia one of only 8 countries with this capability) who can conduct long duration missions aboard the International Space Station or in a cislunar orbit (one of approximately 100 people in the world qualified for such activities). These missions could therefore place Australia at the forefront of international space exploration and research. This would directly benefit Australian research institutes, universities, and organisations who can undertake experiments in microgravity. Australia has an opportunity to act decisively and secure key wins for the Australian space sector across research and innovation, which will be made possible from an initial Cooperation Agreement.

For these reasons SIAA recommends:

- Acceleration of the negotiation of the ESA Cooperation Agreement.
- Exploration of co-investment and barter opportunities to maximize the significance of the Cooperation Agreement as valuable mechanism to advance Australia's space industry.
- Establishment of an ESA initiative fund which enables significant collaborative initiatives to be activated alongside the Cooperation Agreement, ensuring a fast start to capturing the benefits and sending clear signals to investors, industry academia and government as to the potential of this initiative.

3 INVESTIGATION OF SPACEFLIGHT OPTIONS FOR OUR AUSTRALIAN ASTRONAUT AND EXPLORATION OF FUTURE ASTRONAUT TRAINING OPPORTUNITIES

Australia's astronaut is one of approximately 100 people in the world qualified to conduct long duration missions aboard the International Space Station (ISS) or in cislunar orbit. An Australian astronaut in space is more than the journey of one individual, it reflects a national acceleration of research and development, a bolster to international partnerships and an inspiration to future generations. The broad impact of human spaceflight has been witnessed by countries such as the UAE and India, whose human spaceflight missions bolstered domestic industrial growth, STEM participation, and national visibility in global science.

In Australia, public attitudes are favourable to the benefits of human spaceflight, as demonstrated by research undertaken by the United States Studies Centre (USSC), supported by SIAA, to survey public attitudes towards space using a representative sample of 1,500 respondents. One of the highest positive/neutral results in the survey was to the question of whether an astronaut program would be of significant benefit to the nation (87% positive/neutral, 52% positive/32% neutral). A commitment to a human spaceflight mission has the potential to galvanise our society and drive national pride and social cohesion.

An Australian human spaceflight mission offers a unique opportunity for Australia to be at the forefront of international space exploration and research. With an astronaut aboard the ISS, Australia

Space Industry Association of Australia

will be able to undertake experiments on behalf of Australian research institutes, universities, and organisations. This will further Australia's research and development activities across our academic sector, advancing knowledge in materials science, medicine, pharmaceuticals, biotechnology, and manufacturing. This research would contribute to a Future Made in Australia by showcasing and inspiring sovereign R&D capability and industrial resilience.

A commitment to explore spaceflight options for our Australian flagged astronaut would strengthen our engagement with international partners, including the United States and Europe. Commitment to fly an Australian astronaut reflects a demonstrated national commitment to space, which can be achieved with only a modest cost by leveraging well-established barter systems that offer broader value to Australia's space sector. Barter mechanisms can dramatically reduce the cost of human spaceflight by enabling Australia to trade research, data and/or in-kind services rather than significant upfront funding.

An Australian astronaut would inspire a generation of young Australians to prioritise STEM education and pathways. Human spaceflight activities are naturally inspirational and are of great interest to young people. A UK report highlighted that during its human spaceflight mission, 1 in 3 British schools were actively involved in related educational activities, representing millions of young people engaged with STEM in a novel way. A further commitment to explore future astronaut training opportunities would further inspire young people to pursue advanced careers in the STEM fields, which would have a flow on effect to growing the pipeline of Australia's pursuing high-tech future-focussed careers.

4) EFFICIENCIES THROUGH AUDIT AND COORDINATION OF SPACE-RELATED PROCUREMENT ACROSS GOVERNMENT

A strategic approach can deliver significant cost efficiencies and substantial procurement synergies which maximize value for money. Space-related data and capability is at its core a complex build/buy procurement decision. While most of Australia's peers and rivals are increasingly investing in sovereign capability, Australia is instead increasingly choosing procurement of international services (with SkyMuster being decommissioned in favour of a US LEOSat network, NSMEO decommissioned in favour of LandSat Next which is currently on hold due to US government priorities, and "JP9102" which had been established in 2017 to build sovereign secure SatCom capability now indefinitely delayed).

SIAA is concerned that Australia may generally prefer the "buy" side of the build/buy equation because there isn't a clear end-to-end picture of the true costs, cost trajectory and risks associated with the current inherent assumption that Australia should generally "buy" rather than build.

There are many reasons for which Australia's peers and allies are investing in increasing sovereign capability (including ensuring appropriate data which is calibrated to national circumstances – as e.g. international bushfire models are not generally calibrated for eucalypts) but also because of concern with a constantly increasing cost trajectory and risks associated with relying upon purchasing space-related data and capability.

SIAA is concerned that the true level of cost and trajectory of increasing costs may not be fully appreciated. At least 27 Federal Agencies procure space-related data and capability, with many more departments and agencies likely to also have increasing interests. State and local governments are also simultaneously investing in similar data and capability, often sourcing similar data from the same international providers.

Space Industry Association of Australia

SIAA recommends the establishment of a cross-government audit of space-related spend and trajectory of spend across the forward estimates in order to establish a clear baseline against which build/buy decisions can be more rigorously assessed.

5. INDO-PACIFIC ACCELERATION FUND

SIAA is keen to support increased collaboration with Australia's important Indo-Pacific partners including Japan, India, Korea, Singapore, and emerging ASEAN space nations. SIAA believes that there is an opportunity for Australia to play a regional leadership role which cements many of Australia's diplomatic and regional development goals while developing partnerships which effectively subsidise the development of Australian industrial capacity and supply chain resilience.

SIAA ensured that the International Astronautical Congress 2025 attracted a disproportionate share of Indo-Pacific delegates, companies and governments with ~76% of attendees from the Indo-Pacific. Most of Australia's key Indo-Pacific partners are investing significantly more in space capability than Australia, and many have explicitly established funds to drive international collaboration, and all see Australia as a stable and valuable partner with many assets and capabilities to bring to the table.

Building on the success of the ISI India grants, with modest seed funding there is substantial potential to unlock exponential funding from Indo-Pacific partners. Japan's Space Strategy Fund alone has dedicated $6.7bn to space capability including in partnership with international industry and government.

However, exploring and establishing international funding applications and partnerships is not a straightforward exercise, requiring significant outlays of time and resources to identify and pursue such opportunities. A modest fund would provide a springboard for Australian companies to accelerate research, commercialisation, demonstrations and major initiatives. Australia can leverage this fund to develop space capability that addresses national and regional challenges, including in the area of disaster management and national resilience. This allows Australia to develop sovereign capability at a lower cost, effectively subsidised by international contributions and partnerships, whilst also supporting stability and economic prosperity across our region, complimenting existing government initiatives focussed on our region.

This fund will increase regional cooperation and partnerships, enabling Australia to contribute to and collaborate with regional partners on shared space infrastructure and expertise. Ultimately, sustained investment—guided by these strategic funding areas—is fundamental to safeguarding Australia's economic resilience, technological innovation, and strategic autonomy.

6. ACCELERATION OF AUSTRALIA'S MICROGRAVITY OPPORTUNITY

Australia is at the forefront of the commercialization of microgravity processing, with our large land area, low population density and clear skies establishing a clear national opportunity for returns from space which has been recognized by Australian and international space companies. Australia has a research and industrial ecosystem which is well-placed to capture a disproportionate share of this new economy, and has an opportunity to drive research and industrial capability in important space-enabled industries; specifically pharmaceuticals and advanced manufacturing. Increased investment into microgravity research achieved through diversified investment in research focused across the areas of space, pharmaceutical production and advanced manufacturing would drive innovation, foster scientific discovery, and position Australia as a knowledge leader in this area.

Space Industry Association of Australia

This will directly support research that can uplift Australia's national productivity across multiple key sectors. With global investments in space research surging, Australia risks falling behind if it does not build its own expertise and infrastructure in this critical domain.

7. ONGOING FUNDING FOR THE AUSTRALIAN SPACE AGENCY TO DELIVER KEY STRATEGIC INITIATIVES

While current baseline funding for the Australian Space Agency's base regulatory functions appear to continue into the forward estimates, this does not appear to support the pipeline of regulatory activities which are now clear – especially the large number and high cadence of launch and return activity.

The key operational funding programs which have delivered a 7:1 return to date also both appear to terminate in June 2026 ("Sustainable Stronger Space Agency" and "Growing Australia's Space Industry"). Given the high rate of return and broad benefits generated from these funding streams, SIAA urges consideration of renewed/extended funding of a similar level.

The priority areas for investment should be aligned around a National Space Strategy/Policy in order to accelerate Australia's strategic differentiators as well as the development of sovereign industrial capability and opportunities for international collaboration. This funding can be aligned around key international programs, especially the major programs in which the USA has indicated that it expects and encourages allied support especially the Artemis program.

As such SIAA recommends:

- The core and regulatory funding recommended in the executive summary including an uplift to enable a substantial increase in regulatory throughput to ensure approvals don't risk growth of substantial commercial and industrial opportunities;
- Extension of significant grant funding of strategic projects
- Alignment of strategic initiatives funding in line with our international partners (e.g. JAXA Innovation Fund and ESA key initiatives on space sustainability)

8. LEVERAGING AND COMPLEMENTING THE AUSTRALASIAN SPACE INNOVATION INSTITUTE (ASII)

Government support for the establishment of ASII has been critical and appreciated by industry as SmartSAT CRC has established important momentum and partnerships and there are substantial benefits in continuing and expanding impact more broadly across Australasia. Consideration should be given to additional initiatives including funding which leverage and complement this important initiative.

9. ONGOING INVESTMENT IN AND PRIORITISATION OF DEFENCE SPACE CAPABILITIES

SIAA commends government investment in defence space capabilities and emphasises the importance of ongoing investment to support Australia's national security and uplift our national space sector. A number of Australian companies play a role in uplifting our ADF's space capabilities with great potential for more Australian companies to play an ever-growing role in either leading or support elements of programs. SIAA supports the integration of Australian capability into defence space capabilities, both through direct procurement of Australian capability and through vehicles such as the Global Supply Chain Programme. SIAA supports the expansion of primes in the GSC and recognises the impact of the programme to uplift Australian space capability and

Space Industry Association of Australia

integrate this into large-scale missions and activities.

Ongoing investment in Defence space capabilities further supports engagement with our allies and partners, such as in the areas of Space Domain Awareness and resilience.

Space Industry Association of Australia

BROADER POLICY SUBMISSIONS

In addition to what SIAA views as the central priorities for the Australian space sector above, we are pleased to share our broader advocacy proposals.

1. **Establish an Australian National Space Taskforce to articulate a cohesive direction for Australia's defence and civil space activities**

The Australian Space Agency plays an important information distribution and coordination role, but this is a relatively limited operational rather than strategic role. Australia's space activities at the government level are currently fragmented, with the strategy from a previous government now several years out of date and no clear forum for coordination of interest, investment, and activities across government. By contrast, all peer nations including the "5 Eyes" as well as key regional partners have clear and ambitious space policies including Canada, New Zealand, the UK, the USA, India, and Japan. There are likely to be very substantial (and potentially unpredictable) developments in space policy and activity amongst many of Australia's allies in coming months and years, meaning that an active integrated forum is likely to be as or more important and effective as a refreshed (but static) strategy.

While multiple federal and state government departments and agencies have significant interests in space, there is no over-arching strategic vision which sets outs Australia's level of ambition and particular areas of focus. Australia lacks a cohesive national body to coordinate and articulate a vision for Australia's future space activities across civil and defence space. There are a range of benefits to a more aligned government approach for space activities including: cohesive response to emerging space issues (such as the increasing challenge of space debris); increased positive engagement with allies and partners across space activities; streamlined development of policy and regulation related to increasing national space activity; and greater certainty around government priorities that will attract investment from private capital and industry.

A National Space Taskforce, overseen by a ministerial chair would unite key organisations that develop and engage with space capability across government. The Taskforce would be able to monitor and respond to current developments, supporting greater coordination of Australia's space activities and articulating a structured national approach to space. Key stakeholders that could engage in this Council include: Department of Industry, Science and Resources; Department of Defence; Treasury; Department of Home Affairs; Australian Space Agency; Geoscience Australia; CSIRO; Office of National Intelligence, Department of Foreign Affairs and Trade; Department of Prime Minister and Cabinet; and Office of the Chief Scientist.

2. **Technology Safeguards Agreement (TSA) Activation Fund**

The signing of the US-Australia Technology Safeguards Agreement opens substantial opportunities for Australia to attract inbound Space investment in Australia from US government and industry. A modest activation fund is likely to deliver substantial acceleration of those opportunities, especially during times of a policy and project pivot which is likely to accelerate the US space industry. With the implementation of the US- Australia Technology Safeguards Agreement in July 2024 permitting the launch of US spacecraft and launch vehicles from Australian soil, Australia is likely to see a rapid increase in spaceflight activities (launch

Space Industry Association of Australia

and returns) in the coming years. Spaceflight activities currently attract 29% of all total private investment in the Australian space sector, the most of any one industry segment, as measured by the Australian Space Agency.

This key growth opportunity for Australian space companies can be further bolstered through government commitment to a TSA Activation Fund that can unlock further opportunities to upskill the Australian space supply chain to engage with United States partners on innovative projects. Australia's space companies are uniquely positioned to dynamically fill gaps in the US space supply chain by supplying components and capability across the US space industry. The US industry is likely to see a substantial increase in funding, focus and ambition which the US industry alone may not be able to fulfil, opening substantial opportunities for Australian companies, which the Australian Government can drive through the TSA Activation Fund.

3. Research into the role of space as a key tool for increasing Australia's national productivity across key sectors and critical infrastructure.

There is a pressing need to identify initiatives which would finally accelerate Australia's productivity. Space industry offers a wide range of productivity-enhancing benefits, especially "low hanging fruit" from better pooling and use of space-derived data. The space sector is also one of the earliest and most effective developers/adopters of Artificial Intelligence and quantum technologies, ensuring that investments in the space sector are likely to have profoundly positive ripple effects across the technology supply chain and digital transformation.

There is currently a lack of data on how key sectors and critical infrastructure across Australia utilise space capability and space-derived data, with many in these sectors not understanding the unrealised opportunities that can result from utilising space capability. Research into how Australia's key sectors and critical infrastructure are currently utilising space capability and space derived data would identify current gaps and opportunities to enhance these sectors. By further incorporating space-derived data and capability, key sectors will see an uplift in productivity, and the robustness of Australia's critical infrastructure will be enhanced. This includes the resources sector, which is reliant on space-enabled communications capability to undertake activities in remote location and required to meet strict emissions monitoring criteria, which can be more accurately measured with space-derived data. In the agriculture sector, space-enabled solutions can allow farmers to better manage crops and livestock, including through livestock eartags with satellite connectivity that can provide accurate, real-time reporting on livestock position and health or apps that utilise space derived data to share satellite imagery of farms which integrates historical data points to determine optimal times for crop planting and harvest.

4. Exploration of Australia's next space mission of national significance

Australia is critically reliant on space capability; from weather monitoring, earth observation data, GPS, to satellite communications. All current Australian space infrastructure and services are acquired from overseas, presenting a key challenge for Australia's strategic autonomy and national resilience. At this critical juncture, Australia is seeing allies increase their investment and uplift of national space technology, while we continue to be a consumer of space capability.

Space Industry Association of Australia

In an uncertain geopolitical context, Australia must consider if it can continue to rely on international partners to access critical space infrastructure and consider the impact on Australia's security and resilience should this access be denied. Australia has a clear opportunity to be a contributor to space capability that directly supports and protects the Australian population through an exploration of a space mission of national significance. The mission can address identified challenges unique to Australia and the Indo-Pacific region such as; disaster management; maritime surveillance; and/or communications. Australia's existing space industry is well positioned to meet this challenge, which will be further enhanced through cooperation with large multi-national space companies. The broader technological uplift that will result from the exploration of a space mission of national significance will likely produce a "snowball" effect whereby investments in various components and technology required for the mission can have broader medical, defence, and commercial applications. In developing a sovereign solution that leverages the Australian space supply chain, we can ensure Australia has assured access to space-derived data, ensuring Australia's national resilience. The investigation can be led by the Australian Space Agency and undertaken in consultation with key government partners and the Australian space sector.

5. Strategic review of Australia's non-terrestrial communications strategy and capability

We are witnessing a once-in-a-generation transformation of global communications capability with the proliferation of new capability from non-terrestrial communications networks. Multiple Low Earth Orbit (LEO) satellite constellations are being deployed which offer not only standalone strategic capability, but also an increasing set of options to combine low, mid and geo-stationary orbit systems to provide ubiquitous communications coverage and capability. Australia, with a dispersed population across remote and regional areas, has more to gain from this transformation than virtually any other country. However, Australia is largely a passive observer of these developments, with the National Broadband Network merely tendering for supply of wholesale services from existing international networks.

Non-terrestrial networks, especially LEO constellations, offer a vast range of capability and applications for Australia, including regional, rural, remote, and First Nations communications and digital inclusion, critical inputs for future-proof public safety and emergency/disaster initiatives including Public Safety Mobile Broadband (PSMB) and Cell Broadcast National Messaging System (CBNMS), and secure government and defence communications capabilities. There are likely to be substantial synergies and opportunities in examining these often disparate areas in a coordinated and strategic initiative.

Peer countries such as Canada and the United Kingdom have taken a proactive approach, negotiating direct stakes in the Telesat and OneWeb satellite constellations. This provides them with an influential role in ensuring that the design and deployment of systems are fit for purpose and providing long-term sovereignty and certainty over networks and services. We are not suggesting that Australia should deploy its own satellite constellation, as this is likely to be expensive and take many years, with multiple constellations in various stages of deployment which are likely to offer incremental opportunities. The Federal Government should establish an inter- departmental Task Force including Department of Infrastructure/Communications, Department of Defence and Department of Home Affairs to seriously examine Australia's short,

Space Industry Association of Australia

medium, and long-term needs and the opportunities for Australia to take a more direct and proactive role in ensuring that these transformational capabilities deliver the economic, social and security outcomes Australia needs and deserves.

6. Promote greater coordination across the Australian Government's use of space-derived data across a range of key sectors to enhance national productivity

Australia is critically reliant on space-derived data to provide key insights to the Australian government and commercial users. Currently, over 170 government programs are dependent on Earth observation data.[16] Greater coordination of the Government's use of space-derived data will ensure more cost-effective procurements and streamline information sharing. This can be of great assistance to Australian commercial users, such as during the recent string of Qantas flight delays due to their flight paths being through the potential re-entry area of SpaceX's Starship vehicle. Government and commercial providers of space situational awareness data can offer the government solutions to address this challenge of monitoring the increasing threat of space debris, and these solutions should be used across government. This will only be possible through coordination of the Australian government's use of space derived data.

7. Explore the development of a national Australian disaster prevention/management and/or public safety solution, that leverages the Australian space industry in its supply chain

Australia has an opportunity to investigate the development of an Australian owned and operated satellite capable of providing data to assist with national disaster prevention and management. Currently, Australia does not have sovereign space capability that can deliver space-derived Earth Observation (EO) data, making us reliant on international partners. The risks in this model are obvious and real: during the 2020 Black Summer bushfires Australia asked a close international partner to position its weather-monitoring satellite to monitor the evolving bushfire threats that were devastating Australia's landscape and communities since Australia did not have a sovereign EO capability. A natural disaster of that partner nation then prompted that nation's government to reposition its satellite from monitoring Australia to monitoring their own country, to Australia's detriment. An Australian-owned solution will prevent Australia from losing access to critical data during periods where the country is affected by a natural disaster as we will no longer be entirely reliant on international partners.

The Californian bushfires show the likely rapid increase in global disaster monitoring and management requirements, and call into question whether the current global collaborations can continue in the face of increasingly simultaneous disasters which will draw shared resources away from Australian needs. An Australian solution would further complement large-scale space projects on which Australia cooperates with international partners. International assets and data sources are also often not calibrated to suit Australian conditions (e.g. for the prevalence of eucalypts in fuel load models and data).

[16] Earth Observation Australia, 2024. *Continuity of Earth Observation for Australia Risk Reports Released*