

## Where Next for Australia's Defence Force in Space?

By

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The Albanese government's 2024 National Defence Strategy (NDS), and its accompanying Integrated Investment Program (IIP), both [released](#) on April 17, represent the beginning of a biennial process of defense policy development called for in the 2023 [Defence Strategic Review](#) (DSR) and represent official Australian defense policy. All three documents note the importance of the space domain for the Australian Defence Force's (ADF) future capability and strategy, but they represent more continuity than change from previous defense policy documents' statements on space.

They continue similar priorities and themes to the previous coalition government's 2020 [Defence Strategic Update](#) and [Force Structure Plan](#) on the space domain. As with those documents, the 2024 NDS and IIP highlight the importance of space as a critical enabler for terrestrial military operations and an operational domain in a multi-domain approach to a strategy of deterrence by denial.

Furthermore, they identify three broad capability areas for further development. These include (1) the provision of space support, notably through satellite communications to be provided by Australian-owned satellites through project JP9102 in geosynchronous orbit; (2) the establishment of enhanced space domain awareness, with the [establishment](#) of a Deep Space Advanced Radar Capability (DARC) at Exmouth in Western Australia—part of a global network of three such sensors—in collaboration with the US and UK; and (3) the development of space control capabilities.

This last aspect of the NDS and IIP opens some intriguing possibilities for future development that could be announced in subsequent policy documents, with the next NDS and IIP due in 2026. It also raises the possibility that space could start to play a larger role as a priority area in AUKUS Pillar 2. Already, the agreement to establish DARC is seen as part of AUKUS and will extend Australia's ability to undertake space domain awareness out to geosynchronous orbit (GEO) at 36,500 kilometers. That complements the existing C-Band radar and space surveillance telescope already located at Exmouth and will dramatically enhance the ability of Australia to undertake space surveillance under [Operation Dyrurra](#). This is an essential requirement for Australia to undertake the space control mission, so it would make sense to bring this role into AUKUS Pillar 2 as well and see the two missions as integrated.

Just how Australia will undertake space control needs further clarification. There is only the following paragraph in the IIP, which states that space control will include “measures to enhance Defence's space control capability to deny attempts to interfere with, or attack, Australia's use of the space domain. These will help ensure the ADF is able to continue using the space capabilities it needs to support its operations.”

Australia has signed the [ban](#) on undertaking [destructive testing](#) of direct-ascent anti-satellite (ASAT) weapons as part of steps to promote responsible action in space, and it is extremely unlikely that Australia would pursue destructive “kinetic kill” ASATs, either direct-ascent or co-orbital in design. Exactly what Australia could pursue in terms of space control is open to speculation at this stage. Defence has undertaken work toward a space-electronic warfare capability under [Defence Project DEF 9358](#), and this would be consistent with the 2024 IIP's stated approach to space control, as well as the 2020 Force Structure Plan. A “soft kill” capability, which is either ground-based or co-orbital, that could deliver scalable and reversible effects without creating space debris would contribute directly to the need for

space control in a manner that is also consistent with Australian approaches to responsible actions in space. In the same way, other non-kinetic approaches—directed-energy or cyber—might open up opportunities for Australia to develop space control in the future.

The 2022 [Defence Space Strategy](#), released by Defence Space Command, makes clear the importance of assured access to space. This can be achieved in part through resilience of space support, including through defending satellites on-orbit via space control. But it also can be strengthened through enhancing sovereign launch capability. It is in this area where the 2024 NDS and IIP misses a [valuable opportunity to](#) integrate the space needs of defense with the growing commercial space sector.

There is no mention whatsoever of Australia’s vibrant commercial space sector in the 2024 NDS and IIP. It is almost as if the view from Defence is that this growing sector does not exist. Yet, Australia’s space sector is fast emerging as the basis for an end-to-end ecosystem, comprising not only the ground segment, but also satellite design and manufacturing through to sovereign launch capabilities.

Indeed, Australia is truly blessed in geographic terms for sovereign launch, with [launch sites in the north](#) located close to the equator to take full advantage of Earth’s rotational energy for cheaper cost per kilogram into equatorial low-earth orbit, and launch sites along the south of the continent that are well placed to access polar and sun synchronous orbits. Australia’s launch geography is a key factor prompting the [signing](#) of a Technology Safeguards Agreement with the United States on launches and returns.

Defence missed this opportunity to strengthen space resilience through supporting sovereign launch of small satellites that could complement large satellites in GEO, such as those envisaged for JP9102 with proliferated LEO (pLEO) constellations of small satellites for satellite communications and earth observation, to support both civil and defense needs. It missed the clear benefits of sovereign launch to reinforce assured access to space, through rapid augmentation of existing space capabilities in a crisis—or reconstitution of those capabilities in the event of an adversary employing counterspace capabilities against Australian satellites. It missed the opportunity for Australia to take a new step forward to do more to burden share in orbit with allies and strengthen the resilience of space support in the face of counterspace threats from China and Russia.

As the NDS and IIP are biennial documents, the opportunity is still there for Defence to embrace a bolder vision for Australia in space in the next release in 2026, whilst government more fully supports the growth of the commercial space sector. The question is whether Defence and the government will have the vision and determination to do something new. They have begun to think in these terms, given their support for developing space control capabilities, but they can do so much more.

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