Tier 3 Priority: Space Capability

The space domain is becoming increasingly contested with threats to the current generation of space systems. At the same time new space commercial developments are revolutionising cost, capability and ability to rapidly deliver space systems. The ADF increasingly needs access to more capable and timely space services to prevail in future war fighting operations.

Australia has insufficient space research and industry capacity for the assured access and sovereign space aspirations of the Defence White Paper 2016 and subsequent 2020 Defence Strategic Update.

The Space Capabilities theme will lift the nation’s capacity in the research, development and demonstration of innovative and resilient space constellation technologies across communications, Position, Navigation and Timing (PNT) and Intelligence, Surveillance and Reconnaissance (ISR) for Defence and National Security. There is a particular emphasis on assured, trusted and agile space services for deployed forces with a focus on technologies that improve resilience, support the end user (automation) and reduce the cost of ownership (autonomy).

The initial research and development focus is on:

* Resilient communications using non-geostationary systems;
* Advanced payloads for persistent Maritime Domain Awareness;
* Space-based space domain awareness sensors;
* Autonomous constellation technologies that can underpin the Defence S&T Strategy goal of Resilient Affordable Multi-Mission Space Systems.