Australian Government

DEFENCE INDUSTRY & INNOVATION

NEXT GENERATION TECHNOLOGIES FUND

Research. Invest. Partner.

This forward looking program will focus on research and development in emerging and future technologies and develop early ideas into innovation concepts that could be further explored and matured through the Defence Innovation Hub. The program will include technologies that are expected to deliver on a time horizon that may be greater than ten years.

With an investment of around $730 million over the decade in the next generation technologies, there will be potential to deliver game-changing capabilities, for the 'future force after next'. The Next Generation Technologies Fund is an entirely new program, which Defence Science Technology Group will be progressively delivering over the next few years. Initial funding for innovation proposals in next generation technologies will be limited but will grow over time.

How to apply for funding

The Defence Innovation Portal is used to apply for Defence Innovation funding. When you submit an innovative proposal online, Defence will assess whether it is better suited to the Defence Innovation Hub or the Next Generation Technologies Fund.

How will my application be assessed?

Subject matter experts within Defence Science Technology Group (or externally if required) will assess your application. They will look for its potential to deliver game-changing military capability.

This program will give Defence the 'smarts' to meet the challenges of the future.

FACTSHEET

DPS: SEP028-17

Next Generation Technologies Fund—Priority Innovation Needs

Integrated intelligence surveillance and reconnaissance

Effective enterprise intelligence, surveillance, reconnaissance integration and interoperability with our allies will provide a capability edge through superior battlespace awareness.

Space capabilities

De-risking Defence's dependence on space based systems through technical expertise and enhanced capability agility. Enhanced human performance, including enhancing soldiers' resilience and ability to interpret and use data in the battlefield.

Medical countermeasure products

Establishing and coordinating a national infrastructure for the rapid development of medical countermeasure products to provide effective protection of Defence personnel from a range of chemical, biological and radiological threats, pandemics and emerging infectious diseases.

Multidisciplinary material sciences

Investigating technological advances to reduce detection of ADF platforms and improve ballistic and shock protection. Exploring materials and processes that support advanced manufacturing.

Quantum technologies

Increasing the security of military and government communications and computing through strengthened encryption and exploring new types of sensors based on quantum systems.

Trusted autonomous systems

Researching developments in trusted autonomous systems that may have the potential to support ADF capability in the future, such as the use of autonomous vehicles for resupply.

Cyber

Establishing a research and development capability to address the threats presented by information and communications technology dependencies and vulnerabilities within military systems.

Hypersonics

Understanding the science behind hypersonic flight, including propulsion, flight dynamics, control surfaces and materials that support flight systems.

Directed energy capabilities

Conducting research to explore novel technologies and the basic sciences of devices to better understand and develop building blocks for future directed-energy capabilities.