

# NEXT GENERATION TECHNOLOGIES FUND

## FY 2016–17



NGTF Portfolio Element	2016–17 Budget	Partners (current and planned)
<b>Grand Challenges and Defence Cooperative Research Centres (DCRC) (large-scale)</b>	<b>\$5 million</b>	
The first Grand Challenge addressing Counter Improvised Threats is ready to launch with a national call in March 2017	\$2.5 million	<b>Current partners in the Challenge scoping phase only:</b> Teledyne Australia, University of South Australia, Wollongong University, Adelaide University
The first DCRC in Trusted Autonomous Systems (TAS) is strongly engaged nationally with a national call for participation followed by beginning operations in the second half of 2017	\$2.5 million	<b>Current:</b> Initial request for information has been solicited from public funded research agencies and 25 universities across states and territories who participate in Defence Science Partnerships
<b>Strategic Research Projects (mid-scale)</b>	<b>\$9 million</b>	
<b>Medical Countermeasures:</b> Four projects with twelve partners have been collaboratively funded through the Defence Materials Technology Centre (DMTC). Funding contributions have come from the NGTF, CSIRO and Participants in the program. A second national call for projects is underway.	\$2.5 million	<b>Current:</b> Certara Australia, Planet Innovation, Anteo Diagnostics, MiniFab, Trajan Scientific Australia, Hydrix, Deakin University, Monash University, University of Western Australia, CSIRO, University of Würzburg, Defence Science and Technology Laboratory (Dstl) UK
<b>Hypersonics, Directed Energy and Advanced Sensors:</b> The next in a series of new hypersonics flight trials, HiFire4, is in development with national and international collaborators. Launch is planned for June 2017	\$2.2 million	<b>Current:</b> University of Queensland, Boeing Company, Lockheed Martin, and the US Air Force Research Laboratory
<b>Cyber:</b> a Defence-CSIRO (Data61) partnership with co-investment from CSIRO	\$2.5 million	<b>Planned:</b> funding disbursed through CSIRO to: University of South Australia, University of New South Wales, University of Melbourne, Deakin University, University of Sydney, University of Queensland, Australian National University, Swinburne University of Technology
<b>Quantum Technologies:</b> Six research projects with nine national centres of expertise have been scoped and targeted for commencement FY 2016–17 in the areas of computing, communications and quantum sensors	\$500k	<b>Planned:</b> Australian National University, University of Western Australia, Adelaide University, University of Melbourne, University of Queensland, University of New South Wales, Quintessence Labs, ADFA, CQC2T
<b>Multidisciplinary Material Sciences:</b> Nine projects involving 16 partner research institutions are scoped and ready to begin	\$1 million	<b>Planned:</b> Monash University, University of Melbourne, RMIT University, University of Technology Sydney, University of New South Wales, University of Sydney, University of Adelaide, University of Tasmania, Wollongong University, Queensland University of Technology, CSIRO, ANSTO, Siemens Ltd, SES Pty Ltd, ANSTO, BAE Systems
<b>Innovation and Exploration (small-scale)</b>	<b>\$2.8 million</b>	
<b>Defence Research Accelerator:</b> Small-scale investment in pilots (the successful US program Hacking 4 Defense is being piloted in Australia to meet Australian defence purposes). This program will leverage existing accelerators (e.g. CSIRO's ON Prime program) to address Defence requirements	\$210k	<b>Current:</b> BMNT partners
<b>Small Business Innovation Research for Defence (SBIRD):</b> Defence is establishing a pilot program to fund research in small-to-medium enterprises and start-ups from academia, modelled on successful international programs. The pilot will initiate with a national, open call for research proposals in April 2017	\$600k	<b>Planned:</b> The pilot will initiate with a national, open call for research proposals in April 2017
<b>Defence Science Institute (DSI) Networks:</b> Defence will continue to support the DSI in Victoria and leverage the model to establish new state-based university research networks in New South Wales and South Australia	\$550k	<b>Planned:</b> South Australian and New South Wales Universities will start to receive funding in Q2 2017
<b>University Research Networks in Enhanced Human Performance:</b> In the land domain, a research network addressing battlefield casualty survival and recovery is ready to call nationally for Expressions of Interest. In the air domain, a research program in the area of team performance and training is finalising four research agreements for seed funding with two Australian universities. Scoping studies will begin in March 2017	\$600k	<b>Planned:</b> In the land domain, partners will be chosen through a national, open call in March 2017. In the air domain, seed funding is allocated to Deakin University and RMIT University
<b>Technology Foresighting:</b> The next in The Emerging and Disruptive Technology Assessment Symposium series will be held in April–May 2017, addressing 'Information, Knowledge and Digital Disruption in Defence'. Two further events are planned for FY 2017-18, in the field of Advanced Manufacturing and Materials and Advances in Biotechnologies.	\$600k	<b>Current:</b> Noetic Solutions Pty Ltd