



Stuart Ayres
Minister for Jobs, Investment, Tourism
and Western Sydney

MEDIA RELEASE

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\$1.5 MILLION FOR WORLD FIRST QUANTUM SCIENCE AND TECHNOLOGY RESEARCH PROJECTS

Two cutting-edge research projects in the field of quantum science and technology will share in \$1.5 million of funding through the Defence Industry Quantum Research Consortium, an initiative of the NSW Defence Innovation Network (DIN).

The collaborative projects will be led by teams drawn from the DIN member universities along with multidisciplinary teams from industry and other NSW universities. Member universities are Macquarie University, The University of Newcastle, The University of Sydney, University of Wollongong, University of New South Wales, University of Technology Sydney and Western Sydney University.

The NSW Government, through the Office of the NSW Chief Scientist & Engineer, has committed \$1 million of the funding and the Commonwealth Government's Defence Science and Technology (DST) Group has committed \$500,000.

Minister for Jobs, Investment, Tourism and Western Sydney Stuart Ayres said: "These projects will lead to greater opportunities through increased collaboration between NSW defence industry and academia to commercialise defence-applicable technologies and create jobs for the people of NSW."

NSW Defence Advocate, Air Marshal (Ret) John Harvey AM PhD said: "The Defence Industry Quantum Research Consortium is another great opportunity to connect Defence and industry with the strengths and capabilities of NSW universities, and aligns directly with the *NSW Government's Defence and Industry Strategy: Strong, Smart and Connected*."

"These projects are tasked with developing two game-changing prototypes with encapsulated quantum devices within a 24-month timeframe," said NSW Chief Scientist & Engineer, Professor Hugh Durrant-Whyte.

"This will enable the creation of partnerships with the defence industry and drive further investment in NSW defence R&D."

"DST is excited to be supporting this Defence Innovation Network initiative in quantum technologies," said DST's Cyber & Electronic Warfare Division spokesman Dr David Bird.

"One of the successful proposals closely aligns with Defence's focus area of developing quantum technologies to provide navigation and timing capabilities when GPS is unavailable – DST Group's STaR Shot of Quantum Assured Positioning Navigation and

Timing (PNT).”

The second project is investigating the development of secure communications through the use of bright source single photon emitters with applications in distributed quantum keys.

Both world first prototypes will have TRL 4-6 (technology readiness level) and clear commercial application.

NSW maintains distinct international leadership in the field of quantum science and technologies and the DIN’s objective with the NSW Defence Industry Quantum Research Consortium is to strengthen this leadership position.

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