

Quantum Strategy

Lead: Anthony Murfett, Head of Division – Technology and Digital

Purpose: Australia's quantum opportunity

- Investment in our critical and emerging technologies will strengthen our long-term economic prosperity and create a pipeline of high paying Australian jobs into the future.
- CSIRO estimates quantum technology in Australia could be a near \$6 billion industry, creating over 19,000 jobs by 2045. Additional modelling shows if technologies mature and are adopted faster than these conservative predictions, quantum technologies could add over \$9 billion to GDP and create over 52,000 total jobs by 2045.

Program: National Quantum Strategy

- The National Quantum Strategy (the Strategy) was released on 3 May 2023.
- The Strategy outlines a vision for the growth of the sector to 2030 and commits to action across five themes:
 1. Creating thriving research and development, investment in and use of quantum technologies.
 2. Securing access to essential quantum infrastructure and materials.
 3. Building a skilled and growing quantum workforce.
 4. Ensuring our standards and frameworks support national interests.
 5. Building a trusted, ethical, and inclusive quantum ecosystem.
- We have started to implement the Strategy.

Quantum Funding

- Over the past 20 years, Australia has invested over \$600 million public and private funding in quantum technologies.
- The Government has committed \$64.6m for Budget initiatives to support the National Quantum Strategy:
 - **\$40.2 million Critical Technologies Challenge Program**, funding research and industry collaborative projects aimed at solving challenges of national significance using critical technologies. Two funding rounds delivered over four years. The first round will prioritise quantum technologies and is expected to open in early 2024.
 - **\$19.8 million Australian Centre for Quantum Growth** to provide industry growth support to the sector. One funding round delivered over four years; applications expected to open in late 2023.
 - **\$4.6 million for supporting Australian Quantum Researchers:**

- **\$3.6 million Australian Quantum Graduate Program** awarded to CSIRO to fund up to 20 PhDs in quantum technology. The grant agreement with CSIRO was executed on 26 May 2023. The program opened for universities to participate on 12 September 2023.
- **\$1 million National Quantum Collaboration Initiative** awarded to Sydney Quantum Academy (SQA) to help grow Australia's quantum industry capability through education and research.

The agreement with SQA was executed on 26 April 2023.

Consultancies

- Economic modelling to inform the strategy:
 - CSIRO update to 2020 roadmap modelling (CON005821): 28 July – 26 September 2022, total contract price \$39,655.00 (GST incl). This report revised the modelling assumptions behind the CSIRO 2020 Quantum Technology roadmap and extended modelling of the growth of the sector to 2045.
 - Centre for International Economics report on economic analysis and forecasting for the quantum technology sector (CON0006129): 07 October–21 December 2022, total contract price \$169,680.50 (GST incl). This report provided an estimate of the current size of the quantum technology sector and modelled scenarios for its growth to 2045.
- Ongoing monitoring of the quantum industry:
 - Accenture economic analysis and modelling of future economic opportunities and impacts of quantum technology in the Australian economy (CON006951): 15 June – 20 December 2023, total contract price \$407,704.00 (GST incl). This report includes analysis of global market share and analysis of investment sentiment.

Program: Silicon Quantum Computing (SQC)

- The Australian Government (through DISR) holds about 30 per cent of shares in SQC, an Australian company developing world-leading quantum computing technology. (Refer Attachment A: SQC Investment Timeline for details).
 - The Australian Government invested **\$25 million** when SQC was created in **2017**.
 - A further investment of **\$15 million** was made on **28 July 2023**, in SQC's Series A capital raising round.
- Under its shareholder rights, the Australian Government may appoint a **Director to the SQC Board**. The position has been vacant since 5 April 2021, when the DISR Deputy Secretary previously filling the role retired. (Refer Attachment A: SQC Director Appointment Timeline for details of briefing.)
 - No decisions or announcements have been made regarding the Australian Government's Board appointment. Whether and when to appoint a director to the SQC board are matters for government.
 - To **ensure appropriate oversight** of the Australian Government's investment, a senior department official has observed Board meetings as the Australian Government Shareholder representative. This official has also participated in Shareholder meetings and received financial and other reports from the company.

National Quantum Strategy Timeline

Milestone Date	Description
December 2021	Funding allocated to develop a National Quantum Strategy in MYEFO 2021-22 as part of the Digital Economy Strategy funding
6 April – 3 June 2022	First round of public consultation via an issues paper ○ 39 written responses received
23 September 2022	National Quantum Advisory Committee established
5 September – 5 October 2022	Second round of public consultation via release of a proposed strategy framework for feedback ○ Quantum Advisory Committee - All 15 members contributed ○ Australian quantum companies - 19 approached to contribute, 11 submitted responses and/or participated in consultation events ○ Six virtual town hall meetings open to the public ○ 56 written responses received
16 December 2022	The Chief Scientist, Dr Foley, presented a draft National Quantum Strategy to Minister Husic for consideration
3 May 2023	Release of the National Quantum Strategy
Ongoing to 2030	Implementation of the National Quantum Strategy

Quantum funding comparison – offset vs new spending

	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	Total
Quantum Commercialisation Hub Offsets provided (quantum only) - \$m											
Quantum Commercialisation Hub (Administered)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	70.0
2022-23 Budget new programs - \$m											
Supporting Australian Quantum Researchers	2.1	1.0	1.0	0.50							4.6
2023-24 Budget new programs - \$m											
Australian Centre for Quantum Growth (Administered)		4.0	5.0	5.5	4.0						18.5
Critical Technologies Challenge Program (Administered)			10.5	18	7.424						35.924
Total new programs 2023 – 24 Budget		4.0	15.5	23.5	11.424						54.424

Silicon Quantum Computing (SQC) Investment Timeline

Milestone Date	Description
May 2017	SQC launched with over \$83 million of capital funding from <u>five</u> investors: • Australian Government (\$25m), • UNSW (\$25m), • Commonwealth Bank of Australia (\$14m), • Telstra (\$10m), and • NSW Government (\$8.7m).
14 June 2022	SQC launched a Series A capital raising to seek venture capital investment.
21 July 2023	DISR executed the SQC Subscription Agreement on behalf of the Australian Government.
25 July 2023	Silicon Quantum Computing media release Silicon Quantum Computing raises \$50.4 million, stated: “The investors in this round comprise the Commonwealth Government and some of Australia’s most prominent institutions, including the Commonwealth Bank of Australia (CBA), Telstra and the University of New South Wales (UNSW).” The media release states that SQC closed their Series A capital raising at \$50.4 million, but it does not say how much was raised from each investor. This was not published on the DISR website and the Minister did not make an announcement.
28 July 2023	SQC’s Series A Capital raise was completed raising \$50.4 million of capital funding from <u>four</u> investors: • Australian Government; • UNSW; • Commonwealth Bank of Australia; and • Telstra. The NSW Government did not reinvest.

Silicon Quantum Computing (SQC) Director Appointment Timeline

Milestone Date	Description
05 April 2021	DISR Deputy Secretary Mike Lawson retired and resigned from SQC Board Director role, creating a vacancy.
October 2021	DISR contracted Watermark International to help appoint a new director to the SQC Board.
Early 2022	DISR shared shortlist of potential SQC Board candidates with the office of the former Minister for Science and Technology.
April-May 2022	2022 election caretaker period.

7 October 2022	MS22-001410 sent seeking agreement to progress work to appoint an independent Director.
28 October 2022	MS22-001728 sent to provide further information to support the Minister's decision on MS22-001410.
3 November 2022	Department received a request for further advice to the Minister around the relationship between an independent Director and the Commonwealth and the risks this might pose to the Commonwealth's interests as a shareholder.
8 February 2023	MS22-002161 submitted outlining the three options to fill the vacancy, which included: • Appoint an independent director (recommended), • Appoint a non-independent director, • Not appoint a director.
28 July 2023	MS23-000689 was submitted providing the department's recommended ranked list of candidates.
29 August 2023	Minister signed MS23-000689, outlining his preferred list of candidates.
12 September 2023	Minister's revised candidate ranking preferences were provided to the department.
12 October 2023	MS23-001358 appointment brief with letter for Prime Minister provided.

Australian Centre for Quantum Growth (ACQG) Timeline

Date	Milestone
Early July 2023	Stakeholder consultation commenced
Late 2023	Applications open
Activity commences	Early 2024

Critical Technologies Challenge Program (ACQG) Timeline

Date	Milestone
August 2023	Stakeholder consultation commenced
Early 2024	Applications for round one feasibility grants open
Late 2025	Successful technology demonstrator projects commence

** Indicative dates – will be refined further as program is developed.*

National Quantum Collaboration Initiative (NQCI) Timeline

Date	Milestone
26 April 2023	Grant Agreement executed
26 May 2023	Milestone 1 – ad hoc report (diversity management principles, risk assessment, identified stakeholders)
3 July 2023	Milestone 2 – project establishment (recruitment of relevant staff, development of scope, oversight processes and engagement of consultancy)
4 September 2023	Milestone 3 - project scoping (capability mapping, consultation plan, project segmentation, planning of consultation processes)
16 October 2023	Milestone 4 – draft report
6 February 2024	Milestone 5 – finalisation of consultation with key stakeholders
29 March 2024	Milestone 6 - final report

Next Generation Quantum Graduates Program Timeline

Date	Milestone
12 September 2023	University course provider applications opened
9 October 2023	University course provider applications closed
Early 2024	Students commence studies

National Quantum Strategy implementation activities

Following the launch of the National Quantum Strategy on 03 May 2023, we have started to implement the Strategy under 4 key lines of effort.

Delivering programs announced under the Strategy

The department is delivering the following programs announced in the Budget 2022-23 and 2023-24 context to support the Strategy:

- Australian Centre for Quantum Growth (ACQG)
- Critical Technologies Challenge Program (CTCP)
- National Quantum Collaboration Initiative
- Next Generation Quantum Graduates Program.

Building the evidence base to inform future decisions by government

Work has begun on key policy development projects aimed at building the evidence base for decisions on potential future activities and investments under the Strategy.

Three priority projects have been established:

- a national infrastructure audit to provide an overview of the current state of the Australian quantum research enabling infrastructure, identify quantum research and research-related infrastructure needs and propose measures to address gaps.
- regular supply chain monitoring to provide a regular update on Australia's quantum supply chain, with recommended actions to address issues or improve ease and security of access as required.
- a workforce report to assess Australia's current, emerging and future quantum skills needs and consider how Australia can close any skills gaps and grow the quantum pipeline.

Building consensus and coordinating action on quantum

Ongoing engagement activities include:

- collaboration across the Australian Government to build consensus on cross-cutting issues facing the quantum sector
- continued engagement with the State and Territory Working Group, to progress action across all Strategy themes and to support engagement across other critical technology activities (such as on robotics and AI)
- international engagement with the largest quantum markets for Australia's quantum companies, priority partners and multilateral forums
- engagement with the quantum industry and community to continue to understand the challenges impacting the sector, inform policy and program development and receive feedback (incl. engagement with National Quantum Advisory Committee).

Defining and measuring the impact of action under the Strategy

Monitoring and evaluation activities for the Strategy over the next seven years, including:

- monitoring and evaluation of measures of success
- ongoing market intelligence monitoring
- annual updates on the progress of the Strategy.

QUANTUM STRATEGY

Lead: Helen Wilson, Deputy Secretary, Science and Technology

Purpose: Realising Australia's quantum opportunity

- Investment in quantum technologies will strengthen our long-term economic prosperity, create a pipeline of high paying jobs and drive innovations in sectors like healthcare, green technology and defence.
- CSIRO estimates that quantum technology in Australia could be a near \$6 billion industry, creating over 19,000 jobs by 2045.

Program: National Quantum Strategy

- The National Quantum Strategy (the Strategy) was released on 3 May 2023 and implementation is underway.
- The Strategy outlines a vision for the growth of the sector to 2030 and commits to action across five themes:
 1. Creating thriving research and development, investment in and use of quantum technologies.
 2. Securing access to essential quantum infrastructure and materials.
 3. Building a skilled and growing quantum workforce.
 4. Ensuring our standards and frameworks support national interests.
 5. Building a trusted, ethical, and inclusive quantum ecosystem.
- Australia has invested \$893 million in public funding in quantum technologies over the last 20 years.
- The Government has announced \$64.6 million in 2022-23 and 2023-24 Budget initiatives supporting the National Quantum Strategy:
 - **\$40.2 million Critical Technologies Challenge Program (CTCP)**, funding research and industry collaborative projects aimed at solving challenges of national significance using critical technologies. Two funding rounds prioritising quantum technologies, delivered over four years. Round one anticipated to open Q2 2024.
 - **\$19.8 million Australian Centre for Quantum Growth** to provide industry growth support to the sector. One funding round, delivered over four years. Applications opened 4 December 2023 and closed 24 January 2024. Assessment underway.
 - **\$4.6 million for supporting Australian Quantum Researchers:**

- **\$3.6 million Next-Generation Quantum Graduate Program** awarded to CSIRO to fund up to 20 PhDs in quantum technology. Grant executed on 26 May 2023. Universities selected and actively recruiting students.
- **\$1 million National Quantum Collaboration Initiative** awarded to Sydney Quantum Academy to help grow Australia's quantum industry capability through education and research. Agreement executed 26 April 2023.
- In addition to delivering these programs, we are working to better understand infrastructure and workforce needs, supply chain challenges and opportunities, international engagement opportunities and how best to measure success. We expect to deliver a 'State of Quantum' report in 2024.
- Stakeholder engagement mechanisms include:
 - 'Quantum Meets [Industry]' series of workshops – facilitated by Dr Foley and CSIRO
 - National Quantum Advisory Committee
 - State and Territory Working Group on Quantum
 - Multilateral Dialogue on Quantum (comprising 13 likeminded countries)
 - Whole-of-government working group on quantum (Commonwealth agencies)
- Minister Husic signed a Joint Statement of Cooperation on Quantum with the United Kingdom in November 2023.

Consultancies in last 12 months

- Ongoing monitoring of the quantum industry:
 - Accenture economic analysis and modelling of future economic opportunities and impacts of quantum technology in the Australian economy (CON006951): 15 June – 20 December 2023, total contract price \$407,704.00 (GST incl). Report includes analysis of Australia's competitive advantage and investment sentiment.
- Communications campaign to ensure efficacy of CTCP:
 - RD Consulting have been engaged to undertake a communications campaign to support promotion of CTCP and drive quality applications - total contract price \$179,850 (GST incl) for 2023-24.

Program: Silicon Quantum Computing (SQC)

- The Australian Government (through DISR) holds about 30 per cent of shares in SQC, an Australian company developing world-leading quantum computing technology. The government invested:
 - **\$25 million** when SQC was created in **2017**.

- Further **\$15 million** on **28 July 2023**, in SQC's Series A capital raising round.
- The Australian Government may appoint a **Director to the SQC Board**.
 - Position vacant since 5 April 2021, when DISR Deputy Secretary retired.
 - Whether and when to appoint a director to the SQC board as an Australian government appointed director is a matter for government.
 - To ensure appropriate oversight of the Australian Government's investment, a senior DISR official has observed Board meetings as the Australian Government Shareholder representative. This official has also participated in Shareholder meetings and received financial and other reports from the company.

QUANTUM

Lead: Anthony McGregor, Head of Science Division

National Quantum Strategy

- The National Quantum Strategy (the Strategy) was released on 3 May 2023 and implementation is underway.
- The Strategy outlines a vision for the growth of the sector to 2030 and commits to action across five themes:
 1. Creating thriving research and development, investment in and use of quantum technologies.
 2. Securing access to essential quantum infrastructure and materials.
 3. Building a skilled and growing quantum workforce.
 4. Ensuring our standards and frameworks support national interests.
 5. Building a trusted, ethical, and inclusive quantum ecosystem.
- The Strategy sets out a long-term vision to unlock the immense potential of quantum technologies and includes an ambition to build the world's first error-corrected quantum computer in Australia.

Australian Government Investment in Quantum

- Australia's position as a global leader in quantum technology is the result of over 20 years of investment, establishing strong scientific and technical foundations.
- The Australian Government has announced over \$1.3 billion in funding supporting the quantum technologies sector since 2002, including the recent \$466 million investment in PsiQuantum.
- The Government allocated \$64.6 million to quantum initiatives in the 2022-23 and 2023-24 Budgets, to support the National Quantum Strategy:
 - **\$40.2 million Critical Technologies Challenge Program (CTCP)**, funding research and industry collaborative projects aimed at solving challenges of national significance using critical technologies. Two funding rounds will be delivered over four years.

Each Round will have two stages; a feasibility stage and a demonstrator stage. Round 1, Stage 1 Feasibility was launched on 22 May 2024, and applications closed on 2 July 2024. As at 1 November 2024, outcomes of Round 1 are being finalised, following assessment of the applications by the CTCP Assessment Committee.

- The CTCP Assessment Committee was chaired by an independent, external Chairperson, and comprised both officials and non-government members.
 - The Committee Chairperson was experienced in chairing grant assessment committees and has experience relevant to several the challenge themes.
 - The balance of the Committee members had experience across each of the challenge themes, and in commercialisation and industry growth. The Committee also included several members with quantum technical expertise.
 - The DISR Business Grants Hub ensured a thorough process of conflict of interest management was undertaken for each Committee member.
 - Applications were assessed against criteria set out in the Grant Opportunity Guidelines. The Assessment Committee makes recommendations for funding to the Program Delegate who then makes the final decision on which projects to approve, taking into account the recommendations of the Committee and the availability of grant funds.
- **\$19.8 million Australian Centre for Quantum Growth** to catalyse industry growth, support collaborative research and strengthen Australia's position as a global quantum leader. The University of Sydney has been awarded \$18.4 million to establish the Centre, which they have named *Quantum Australia*.
 - **\$4.6 million for supporting Australian Quantum Researchers:**
 - **\$3.6 million Next-Generation Quantum Graduate Program** awarded to CSIRO to fund up to 20 PhDs in quantum technology. Grant executed on 26 May 2023. The four successful institutions – Deakin University, Sydney Quantum Academy, Swinburne University of Technology and ARC Centre of Excellence in Quantum Biotechnology have been selected for participation and are actively recruiting students.
 - **\$1 million National Quantum Collaboration Initiative** awarded to Sydney Quantum Academy to help grow Australia's quantum industry capability through education and research. The Grant Agreement was executed 26 April 2023, and the activity concluded on 30 June 2024. The department is now considering the final report.

Implementation of the National Quantum Strategy

- Implementation of the Strategy is well underway, through delivery of initiatives funded in the 2022-23 and 2023-24 Budgets; research and analysis to inform further policy development; and stakeholder coordination and engagement.
- The Department is working to better understand infrastructure and workforce needs, supply chain challenges and opportunities, international engagement opportunities, and how best to measure the success of the Strategy.
- We expect to deliver the 'State of Australian Quantum' report in late 2024. The Report will highlight the achievements of our quantum community since the launch of the National Quantum Strategy in May 2023.
 - This report celebrates the accomplishments of Australian quantum researchers and businesses. It also explores the priority areas where there is further work to grow Australia's robust quantum industry.
- Work to understand infrastructure needs includes undertaking an audit of Australia's quantum infrastructure.
 - Through this process, stakeholders have identified a need for testing and evaluation facilities and capabilities to further support the Australian quantum sector.
 - The department is conducting further consultation across the sector to better understand these needs and how they might be addressed.
- The Department coordinates across other relevant government entities, and engages with a range of stakeholders, through several mechanisms:
 - A State and Territory Quantum Working Group – meets bi-monthly;
 - A Whole-of-Government Quantum Network (Commonwealth agencies) – meets quarterly;
 - The National Quantum Advisory Committee, comprising quantum experts from government, industry, and academia – meets twice yearly;
 - Bilateral and multilateral international arrangements – including bilateral agreements with both the United States and the United Kingdom, and participation

in two key multilateral cooperation forums, the “Multilateral Dialogue on Quantum” and the “Quantum Development Group”;

- “Quantum Meets...” events, led by Australia’s Chief Scientist, Dr Cathy Foley, bringing together quantum researchers and start-ups with end-user industry representatives – Since late 2023, seven Quantum Meets workshops have been held with different industry sectors: Sport; Resources; Space; Energy; Public Service; Finance; and Health and Medical.

Silicon Quantum Computing (SQC) investment

- The Australian Government (through DISR) holds about 30 per cent of shares in SQC, an Australian company developing world-leading quantum computing technology. The Government invested:
 - **\$25 million** when SQC was created in **2017**.
 - Further **\$15 million on 28 July 2023**, in SQC’s Series A capital raising round.
- The Australian Government has appointed an independent Director to the SQC Board.
 - On 12 February 2024, Ms Fiona Pak-Poy was appointed to the SQC Board as the Australian Government’s nominee, independent Board Director.
 - Ms Pak-Poy’s expertise in commercialising Australian-generated, innovative technology and in scaling businesses will help support SQC as it continues to develop innovative quantum computing technologies.
 - By the SQC Constitution and Shareholders’ Agreement, the Commonwealth is responsible for remunerating its nominee Board Director. Ms Pak-Poy agreed to an annual remuneration rate of \$55,000, which was determined by the department by comparing Remuneration Tribunal determinations for similar roles. Superannuation and travel expenses are paid on top of this base rate.
 - The funding is drawn from the Silicon Quantum Computing Support Program, which provides financial support to the Commonwealth’s nominee Board Director for matters that facilitate their duties as an SQC Director.

National Quantum Advisory Committee

- The department established the National Quantum Advisory Committee (the NQAC) in September 2022 to provide expert strategic advice on the development of the National Quantum Strategy (the Strategy).
- Following the release of the Strategy in May 2023, the NQAC continued to provide advice on its implementation, and development of other products designed to support the growth of a globally competitive quantum ecosystem.
- The role of NQAC members is to provide expert advice without the interference of private interests. NQAC members must comply with the Department's Conflicts of Interest Policy and sign a Conflict of Interest Declaration.

Microsoft decision to end University of Sydney partnership

- In July 2024, Microsoft announced the closure of its quantum computing research facility in Australia, ending the company's seven-year partnership with the University of Sydney.
- Microsoft offered its employees based at the University of Sydney the opportunity to work at the company's facilities in either Redmond, United States or Denmark.
- Most of the Microsoft Quantum Sydney team decided to remain in Australia and continue to innovate onshore.
- This outcome is an indicator the quantum research community sees real opportunity in Australia as a quantum leader with a vibrant and growing ecosystem.

NATIONAL QUANTUM STRATEGY

Lead: Simon Writer, Head of Technology and Digital Policy Division

- The Government released the National Quantum Strategy (the Strategy) on 3 May 2023 and implementation is underway.
 - The Strategy outlines a vision for the growth of the sector to 2030 and commits to action across five themes:
 1. Creating thriving research and development, investment in and use of quantum technologies
 2. Securing access to essential quantum infrastructure and materials
 3. Building a skilled and growing quantum workforce
 4. Ensuring our standards and frameworks support national interests
 5. Building a trusted, ethical, and inclusive quantum ecosystem.
- The Strategy sets out a long-term vision to unlock the immense potential of quantum technologies and includes an ambition to build the world's first error-corrected quantum computer in Australia.

Australian Government investment in Quantum

- Australia's position as a global leader in quantum technology is the result of over 20 years of investment by government, industry and research organisations, establishing strong scientific and technical foundations.
- The Australian Government has announced **over \$700 million in funding** supporting the quantum technologies sector since the release of the National Quantum Strategy.
 - This includes the \$463.3 million investment in PsiQuantum, as well investment and support provided through initiatives such as the Advanced Strategic Capabilities Accelerator, the National Reconstruction Fund and the Australian Research Council.
- The Government allocated a total of \$64.6 million to quantum initiatives in the 2022-23 and 2023-24 Budgets, to support the National Quantum Strategy.

Critical Technologies Challenge Program (CTCP)

- The CTCP provides **\$40.2 million** funding research and industry collaborative projects aimed at solving challenges of national significance using critical technologies.
 - Two funding rounds will be delivered over four years. Each Round will have two stages: a feasibility stage and a demonstrator stage.
 - Round 1, Stage 1 Feasibility was launched on 22 May 2024, and applications closed on 2 July 2024.
 - Round 1 of the CTCP called for applicants to use quantum technologies to solve challenges related to energy networks, medical imaging and sensors, resource extraction and communication with autonomous systems.
- On 13 November 2024, the Minister announced that **\$5.2 million in funding had been awarded to 14 consortiums for feasibility projects**. The grantees were selected following assessment of the applications by the CTCP Assessment Committee.
 - The CTCP Assessment Committee was chaired by an independent, external Chairperson, and comprised both officials and non-government members.
 - The Committee Chairperson was experienced in chairing grant assessment committees and has experience relevant to several of the challenge themes.
 - The balance of the Committee members had experience across each of the challenge themes, and in commercialisation and industry growth. The Committee also included several members with quantum technical expertise.
 - The DISR Business Grants Hub ensured a thorough process of conflict of interest management was undertaken for each Committee member.
 - Applications were assessed against criteria set out in the Grant Opportunity Guidelines. The Assessment Committee makes recommendations for funding to the Program Delegate who then makes the final decision on which projects to approve, taking into

account the recommendations of the Committee and the availability of grant funds.

- The Grant Opportunity Guidelines for Round 2 of the CTCP were released on 12 December 2024. The application portal officially opened 15 January 2025, and closed on Wednesday 26 February 2025.
 - Round 2 of the program focused on solving challenges related to First Nations health, energy networks, biosecurity and supply chain logistics.
 - On 17 July 2025, the Minister announced that **\$5.74 million in funding had been awarded to 14 consortia for feasibility projects under Round 2**. The grantees were selected following assessment of the applications by the CTCP Assessment Committee.
 - On 2 July 2025 Round 1, Stage 2 of the CTCP opened, allowing for Stage 1 applicants to apply for an additional \$5 million in funding for a demonstrator project. The demonstrator project funding follows from the 6-month feasibility project in Stage 1. These applications are currently under review by the CTCP Assessment Committee.

Australian Centre for Quantum Growth

- **\$19.8 million Australian Centre for Quantum Growth** to catalyse industry growth, support collaborative research and strengthen Australia's position as a global quantum leader.
- On 27 April 2024, the Minister announced a consortium led by the University of Sydney had been awarded \$18.4 million to establish the Centre, which it has named *Quantum Australia*.
 - Quantum Australia has been established, and is delivering three streams of work to uplift the Australian sector including programs for Ecosystem Development, Partnerships and New Ventures. It is also preparing to host the Quantum Australia Conference 'Quantum for Impact' in April 2026.
 - Key achievements to date include:
 - : On 25 – 27 March 2025, Quantum Australia hosted the 2025 Quantum Australia Conference in Brisbane.

- : On 1 May 2025, Petra Andrén formally started her role as Chief Executive Officer, Quantum Australia. Petra was formerly the CEO of Cicada Innovations and brings extensive experience in deep tech commercialisation and innovation ecosystem development.
- : Ecosystem Development programs and networking events for industry, R&D and talent. Progress in 2025 includes:
 - development of a public facing national quantum ecosystem map, and
 - the launch of the Elevating Quantum Women's Voices program.
- : Partnership programs delivered through state nodes to connect Australia's quantum capabilities with end-users for real world outcomes. Progress in 2025 includes:
 - development of a national use case program to identify and progress sector specific use cases for quantum technologies, and
 - launch of the quantum partnerships community of practice to support research and emerging ventures by connecting them with structured support, shared resources and commercial know-how.
- : New Ventures program delivered through state nodes to cultivate Australia's quantum entrepreneurs and IP and nurture new ventures from conception to investment. Progress in 2025 includes:
 - establishing the program and recruiting mentors and experts to support new Australian quantum ventures, and
 - opening applications for first cohort of the Discovery Stage Pre-Accelerator program for emerging quantum startups.

Quantum researchers

- \$4.6 million for supporting Australian Quantum Researchers, including:
 - **\$3.6 million Next-Generation Quantum Graduate Program** awarded to CSIRO to fund up to 20 PhDs in quantum technology. Grant executed on 26 May 2023. The four successful institutions – Deakin University, Sydney Quantum Academy, Swinburne University of Technology and ARC Centre of Excellence in Quantum Biotechnology have been selected for participation and are actively recruiting students.

- **\$1 million National Quantum Collaboration Initiative** awarded to Sydney Quantum Academy to help grow Australia’s quantum industry capability through education and research. The Grant Agreement was executed 26 April 2023, and the activity concluded on 30 June 2024. The department is considering the final report.

Implementation of the National Quantum Strategy

- Implementation of the Strategy is well underway, through delivery of initiatives funded in the 2022-23; 2023-24 and 2024-25 Budgets; research and analysis to inform further policy development; and stakeholder coordination and engagement.
- The department is working to better understand infrastructure and workforce needs, supply chain challenges and opportunities, international engagement opportunities, and how best to measure the success of the Strategy.
- The department published the *State of Australian Quantum* report on 13 November 2024. The Report highlights the achievements of our quantum community since the launch of the National Quantum Strategy in May 2023 and explores priority areas where there is further work needed to grow Australia’s quantum industry.
- The Department coordinates across other relevant government entities, and engages with a range of stakeholders, through several mechanisms:
 - A **State and Territory Quantum Working Group** – meets bi-monthly;
 - A **Whole-of-Government Quantum Network** (Commonwealth agencies) – meets quarterly; and
 - **Bilateral and multilateral international arrangements** – including bilateral agreements with both the United States and the United Kingdom, and participation in two key multilateral cooperation forums, the **Multilateral Dialogue on Quantum** and the **Quantum Development Group**.

MS23-001953

To: Minister for Industry and Science (For Decision)

UPDATE ON NATIONAL QUANTUM STRATEGY IMPLEMENTATION AND JOINT STATEMENT ON QUANTUM COOPERATION WITH THE UNITED KINGDOM

Timing: Routine

Recommendations: That you

1. **Provide feedback** on the activities underway to implement the National Quantum Strategy (see Attachment A).

Feedback provided / Please discuss

2. **Provide feedback** on potential future quantum investment opportunities, including proposed activities under the Joint Statement of the United Kingdom and Australia on Cooperation in Quantum Technologies.

Feedback provided / Please discuss**Minister:**

Date:

Comments:

Clearing Officer:	Michele Graham	General Manager, Quantum Branch	Mob: s22
Contact Officer:	s22	Manager (a/g), Quantum Policy	Mob: s22
For Parliamentary Services' use only. Date Submitted to the Minister's office in PDMS:			12/1/2024

Key Points:

1. This brief outlines progress against the National Quantum Strategy (the Strategy) Implementation Plan (**MS23-001315** refers) and sets out upcoming decisions, actions, next steps and potential future investments for your consideration. On the advice of your office, this brief was deferred until January 2024 to assist with the prioritisation of activities towards the end of 2023.

Update on National Quantum Strategy Implementation:

2. The Department is delivering a range of activities to implement the Strategy. Detailed updates on policy and program activities, including upcoming decisions and actions for you, are at Attachment A.

3. Since you launched the Australian Centre for Quantum Growth grant opportunity on 4 December 2023, seven applications have been commenced by potential applicants. We look forward to briefing you on the assessment process in late March so you can announce the outcome prior to Budget.
4. We are on-track to deliver the Critical Technologies Challenge Program (CTCP) and working towards obtaining your approval of the Round 1 Stage 1 grant guidelines and challenges in late February 2024. Ahead of this, we will seek your feedback on the proposed design of the program and the long-list of potential challenges.
 - a. Dr Cathy Foley and CSIRO will facilitate a series of 'Quantum Meets' workshops throughout 2024, bringing quantum researchers and start-ups together with industry sectors, to help ensure quantum technology development is driven by industry demand. The department will support delivery of these workshops, which will greatly boost interest in the CTCP.
 - i. These workshops follow the successful pilot conducted with the Australian Institute of Sport in August 2023, which has already led to several collaborations and a \$3 million commitment from the Queensland Government for a quantum project in the 2032 Brisbane Olympic and Paralympic Games.
 - b. Under the Joint Statement of Cooperation on Quantum you signed with the UK in November 2023, we will work with UK counterparts to actively promote collaboration between Australian and UK researchers and quantum tech companies through the CTCP. While we envisage foreign entities won't be able to apply to lead a project under the CTCP, they will be able to be part of a consortium led by an Australian entity.
5. Last year we procured a report from Accenture on Australia's competitive advantages in quantum technology and the investment environment to support implementation of the Strategy (Australia's Quantum Technology Opportunity).
 - a. The report estimates the scale of investment required to meet the industry growth projections in the National Quantum Strategy, identifies segments of the quantum technology industry where Australia has a competitive advantage and provides high-level policy options to capture key opportunities.
 - b. It will form part of the evidence for future investments and initiatives under the strategy. It can also inform the development of the National Reconstruction Fund Enabling Technologies Co-investment Plan.
6. This year, the Quantum Australia conference will be held on 20-22 February 2024. We will work with your office to explore potential public engagement opportunities such as an op ed and your keynote speech.
7. In collaboration with the National Quantum Advisory Committee, we are developing a 'State of Quantum' report, highlighting progress on delivering the ambitions of the National Strategy, for your review and feedback in May 2024.

Options for future investment:

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Data referenced:

10. Accenture, 2023, Australia's Quantum Technology Opportunity.

Consultation: YES

11. The Evaluation Unit, Sovereign Capability and Supply Chains Division, Business Grants Hub, Technology Investment Task Force, Questacon, the Chief Scientist and Office of the Chief Scientist were consulted on this brief.

Attachment:

A: National Quantum Strategy implementation update summary and next steps

FOR ACTION – Quantum sector next steps s22

TO: Minister for Industry and Innovation; Minister for Science**CC:** Assistant Minister for Science, Technology and the Digital Economy**TIMING**

Routine: To inform consideration of government's approach to the quantum sector and funding requests**Recommendations**

- That you **note** measures from the 2023 National Quantum Strategy are near conclusion, and the quantum industry is seeking government's position on next steps. s22

Noted / Please discuss

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Signature

Date: / /2026

KEY POINTS

- Quantum technologies are a priority sector which have enormous strategic and economic implications. New computing capabilities will make it possible to solve problems that have until now been intractable, transforming fields across cryptography, sensing, materials science and drug discovery.
 - Quantum is identified as a priority technology in the Government's List of Critical Technologies and other key initiatives, including the National Defence Strategy.
 - Quantum is also a priority of our key partners. Supporting growth and protection of quantum technologies is a key part of Australia's international technology collaborations, including under AUKUS ^{s33(a)}
- Government's support for the quantum sector is at an inflection point. Programs from the 2023 Quantum Strategy have concluded, or will soon. Funding for 3 major government initiatives dedicated to quantum technologies will conclude at the end of financial year 2026-27 (see Attachment A for details).
 - Government continues to support domestic quantum capability through broader initiatives (see Attachment B).
- Government is facing increased expectation from industry to articulate its plans for quantum technologies and the sector in Australia. In particular, industry seeks assurance that government intends to maintain support for the quantum sector over the long-term given international competition, and the long timelines and risks that can deter private sector investment.
 - Government support addresses unique challenges faced by the sector including high research and development (R&D) costs, skilled workforce growth, long development timelines, and high technical risks that make private capital hesitant to commit to long-term development.

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Clearance Officer

Jessica Foote
A/g Head of Division
Technology and Digital Policy Division
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Clearance Date: 18 May 2026

Contact Officer

David Charlton
A/g General Manager
Critical Technologies Branch, Technology and
Digital Policy Division
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ATTACHMENTS

s22 A: Quantum Programs Concluding in 2026–27

Attachment A

Quantum Programs Due to Expire in 2026–27Quantum Australia

- Quantum Australia was established under the \$19.8 million Australian Centre for Quantum Growth measure announced in the 2023–24 Budget. This grant is due to expire in March 2027.
 - On 27 April 2024, then Minister Ed Husic announced a consortium led by the University of Sydney had been selected to establish the Centre, which it has named Quantum Australia.
- Quantum Australia champions the Australian quantum industry by creating a pipeline of new ventures, diverse talent, real-world use cases and partnerships. It supports and promotes Australia's quantum interests on the global stage with a unified voice for the entire ecosystem.
 - Quantum Australia is delivering three streams of work to uplift the Australian sector, including programs for Ecosystem Development, Partnerships and New Ventures.
- Quantum Australia is currently developing plans for operations after Commonwealth funding ends in March 2027. s47G
 - s47G
- s33(a)(iii)
 - (d)
 - s33(a)(iii)
 - s47G

Critical Technologies Challenge Program

- The Critical Technologies Challenge Program (CTCP) provides \$35.9 million in funding to support research and industry collaborative projects aimed at solving challenges of national significance using critical technologies. This funding was announced in the 2022–23 Budget, and funded projects are expected to finish in early 2028.

- The CTCP accelerates the path to commercialisation for quantum technologies from early-stage when private capital is hard to secure and drives greater awareness and uptake of quantum technologies in Australia.
- The CTCP is aligned with broader government priorities, fostering the development of critical technology capabilities to address areas of national importance. This includes Closing the Gap and Net Zero, while also providing a pathway into the National Reconstruction Fund.

Next-Generation Quantum Graduates Program

- The Next-Generation Quantum Graduates Program (NGQGP) awarded \$3.6 million to CSIRO to fund up to 20 PhDs in quantum technology. The grant was executed on 26 May 2023.
 - The NGQGP aims to solve real industry challenges, while helping grow Australia's emerging quantum skills and capacity. PhD students working out of four institutions (Deakin University, Sydney Quantum Academy, Swinburne University of Technology and the ARC Centre of Excellence in Quantum Biotechnology) use quantum technologies in cutting edge research projects to address real-world challenges brought forward by industry partners.
 - The final cohort of NGQGP students started in early 2026. The final total number of students is 17 PhDs. Graduations are expected across 2029 and 2030.

QUANTUM

Issue

What is the Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

- Australia has been a global pioneer in cutting-edge quantum research for decades.
- The Australian Government is committed to translating that advantage into thriving quantum industries that boost our economic competitiveness and help solve our biggest national challenges.
- Quantum technologies could generate nearly \$6 billion in revenue and over 19,000 jobs in Australia by 2045.
- The government launched the National Quantum Strategy in May 2023.
- The Strategy sets out a plan for growing the Australian quantum ecosystem over the next seven years.
- It identifies the actions government will take to make Australia a global technology leader and ensure that investment and leadership in quantum technologies contributes to a prosperous, fair and inclusive Australia.
- Work is well underway to deliver the Strategy.
- To begin delivering the strategy, \$60 million was provided in the 2023-24 Budget to grow the quantum sector:
 - The \$40.2 million Critical Technologies Challenge Program (CTCP) will drive greater awareness and uptake of quantum technologies in Australia by putting quantum technologies to work solving national challenges.

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- The \$19.8 million Australian Centre for Quantum Growth (ACQG) will support the growth of a quantum technology industry in Australia, catalysing demand for quantum technologies and helping Australian companies capture a share of the emerging global quantum technologies market.
- Several key projects identified in the strategy have also commenced including an infrastructure audit, supply chain monitoring and a quantum workforce report.
- The Technology Investment Taskforce is providing advice to government on emerging technologies that would benefit from coordinated effort and investment.
 - It is working across government and with industry.
 - This reflects the Government’s focus on critical and emerging technologies, that can solve national challenges, deliver secure well-paid jobs, strengthen international partnerships and support our national interest.
- The Taskforce is:
 - assessing the domestic landscape for opportunities with broad economic and strategic benefits, in line with the Government’s priorities;
 - working across the Commonwealth, the states and with industry to align effort and potential investments;
 - looking across sectors and along supply chains to support joined up approaches that deliver broader ecosystem benefits.

Background

Related measures

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- In addition to the 2023-24 Budget measures, the Australian Government has funded a range of programs and initiatives that directly and indirectly support the growth of the quantum industry. Strategy implementation
- The National Quantum Strategy (the strategy) commits the Government to 13 actions across five themes to grow the quantum sector. Implementation of the strategy is underway.
- Activities under the National Quantum Collaboration Initiative and Next Generation Quantum Graduates program have commenced.
- Consultations for the ACQG took place in July 2023, attended by 119 stakeholders.
 - Grant applications are expected to open in November 2023 with activity commencing in early 2024.
- Initial consultation for the CTCP took place in late August and early September 2023, attended by 169 stakeholders.
 - Round one feasibility grants are expected to open in early 2024, with projects commencing mid-2024 and successful technology demonstrator projects commencing in late 2025.
 - Consultation will continue until end December 2023.
- The department has commenced work on key policy development activities under the strategy, including an audit of quantum infrastructure, workforce report and supply chain monitoring.

QUANTUM

Issue

What is the Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

- Australia has been a global pioneer in quantum research for decades.
- The Government is committed to translating that advantage into a thriving quantum industry that boosts our economic competitiveness, helps solve our biggest national challenges and strengthens our sovereign capability.
- Quantum has the potential to drive step changes across industries, from finance to logistics, healthcare, pharmaceuticals, resources and defence. This will boost productivity and improve the lives of Australians.
- Conservative estimates from the CSIRO show that quantum technologies could generate nearly \$6 billion in revenue and over 19,000 jobs in Australia by 2045.
- The Government launched the National Quantum Strategy in May 2023. It outlines 13 actions the government will take to grow the Australian quantum ecosystem over seven years.
- Our vision is for Australia to be a global technology leader by 2030 and ensure that investment and leadership in quantum technologies contribute to a prosperous, fair and inclusive Australia.

- Since launching the strategy, our quantum sector has gone from strength to strength, with investments by both private and state-backed funds recognising Australia's significant breadth and strength of quantum talent.
 - Software startup Q-CTRL has announced the expansion of its Series B funding round to US\$113 million.
 - Silicon Quantum Computing closed a \$50 million capital raise.
 - Diraq closed off a capital raise, bringing total funding of its technology to US\$122 million.
 - Nomad Atomics led a pre-Series A round, raising \$10 million in July 2023.
- Australia has strength in other quantum technologies, with Quintessence Labs providing quantum-based cryptographic solutions to 18 countries and QuantX Labs developing precision quantum sensors to enhance communication, navigation, surveillance and defence systems.
- Around the world, countries are accelerating investments in leading quantum technologies.
- In April 2024, the Government announced a \$466.4 million financing package of equity and loans provided by Export Finance Australia, with matched investment from the Queensland Government, to support PsiQuantum, co-founded by Australian quantum leaders Professor Jeremy O'Brien and Professor Terry Rudolph, to build and operate its world-first utility-scale fault-tolerant quantum computer in Australia, and deliver a range of industry and research partnerships.

- This investment shows the Government is serious about delivering a world-leading quantum ecosystem and marks a partnership that will deliver hundreds of direct jobs and billions of dollars in direct investment in Australia.
- The Australian Government also provided \$60 million in the 2023-24 Budget to grow the quantum sector, including:
 - The \$40.2 million Critical Technologies Challenge Program (CTCP), which will drive greater awareness and uptake of quantum technologies in Australia by putting quantum technologies to work solving national challenges.
 - \$19.8 million to catalyse industry growth, support collaborative research and strengthen Australia's position as a global quantum leader under the Australian Centre for Quantum Growth (ACQG) program. The University of Sydney has been awarded \$18.4 million to establish the Centre, which they have named *Quantum Australia*.
- My department has also commenced work on a national audit of quantum infrastructure, monitoring quantum supply chains and a report on quantum workforce needs.
- My department is also working to strengthen Australia's international partnerships in quantum. In July 2024, Australian Government representatives participated in a high-level meeting hosted by the United States, together with representatives from Denmark, Finland, France, Germany, Japan, the Republic of Korea and the United Kingdom.
 - The group discussed developing coordinated approaches to quantum information science and technology, to promote resilient and reliable supply chains, research and development collaboration, and a quantum future in line with shared interests and values.

If asked: Questions relating to Microsoft's exit from quantum computing research in Australia, and the offer to relocate the Sydney University research team to US headquarters.

- I am pleased that the Sydney University team has decided to remain in Australia. This commitment shows that Australia has immense quantum potential and retaining talent like this will ensure we continue to become a quantum leader.

If asked: Questions relating to changes to the text of the National Quantum Strategy during the drafting process

- The department made numerous changes to the text of the Strategy during 2023 to respond to feedback provided through normal Government processes.

If asked: Questions relating to Q-CTRL's recent investment announcement and media commentary

- I am thrilled to see our local quantum talent being recognised globally and competing with the world's best. Today's announcement of Q-CTRL's Series B round growing to \$US113 million demonstrates the strength we have in quantum.
- We will continue to support the growth of the quantum sector through the National Quantum Strategy.

If asked: Questions about changes to the Defence Export Control regime

- Australia's Defence Export Control regime is in place to protect the technologies on the Defence and Strategic Goods List (DSGL). It is a permissive system that has been recently updated to make it easier to apply for, and be granted, a permit.
- These protections are in place to ensure that when Australia makes a quantum breakthrough the valuable IP isn't stolen by our adversaries and Australia maintains our comparative advantage in quantum.

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- This aligns with the long-term vision set out in the National Quantum Strategy.
- Australia's Defence Export Controls do not stifle innovation, but instead protect what we value. Both our system, and that implemented by the US, seek to achieve the same outcomes.

Background

- The Defence Trade Controls Amendment Commencement Proclamation 2024 was signed by the Governor General at the 18 July Executive Council meeting and included the Defence Trade Controls Legislation Amendment Regulations 2024.
 - The Defence Strategic Goods List has been updated to include technologies such as quantum computers and semiconductor technologies that meet certain criteria.
 - The DTC Amendment Act and DTL Amendment Regulations commenced on 1 September 2024.
 - The Department of Defence is engaging with industry to communicate changes to the DTC Act and Regulations.
- Applications for the CTCP round one feasibility grants opened on 22 May 2024, and closed on 2 July 2024. Successful technology demonstrator projects are expected to commence in late 2025.
 - Initial consultation for the CTCP took place in late August and early September 2023, with information sessions attended by 169 stakeholders.
- The ACQG grant to the University of Sydney was announced on 27 April 2024.
 - Applications for the ACQG grant opened 4 December 2023 and closed 24 January 2024.
 - Consultations for the ACQG took place in July 2023, attended by 119 stakeholders.
- In addition to the 2023-24 Budget measures, the Australian Government has funded a range of programs and initiatives that directly and indirectly support the growth of the quantum industry.

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- CSIRO was awarded \$3.6 million over the four years from 2022-23, to fund up to 20 quantum PhDs as part of the Next Generation Quantum Graduates Program.
 - University course provider applications closed 9 October 2023.
 - Successful universities have now commenced student recruitment activities.
- \$1 million National Quantum Collaboration Initiative funding was awarded to Sydney Quantum Academy to help grow Australia's quantum industry capability through education and research.

QUANTUM - POLICY

Issue

What is the Australian Government doing to put Australia at the forefront of quantum technologies?

Key Talking Points

- Australia has been a global pioneer in quantum research for decades.
- The government is committed to translating that advantage into a thriving quantum industry that boosts our economic competitiveness, helps solve our biggest national challenges and strengthens our sovereign capability.
- The government launched the National Quantum Strategy in May 2023. It outlines 13 actions the government will take to grow the Australian quantum ecosystem over seven years.
- Since launching the strategy, our quantum sector has gone from strength to strength, with investments by both private and government-backed funds recognising Australia's significant breadth and strength of quantum talent.
 - Silicon Quantum Computing closed a \$50 million capital raise in July 2023, including \$35 million in private investment.
 - Nomad Atomics led a pre-Series A round, raising \$10 million in July 2023.
 - Diraq closed off a capital raise of US\$22 million in June 2024, bringing total funding of its technology to US\$122 million.
 - In October 2024, software startup Q-CTRL announced the expansion of its Series B funding round to US\$113 million.
 - In December 2024, the National Reconstruction Fund Corporation announced it had invested \$13 million in Quantum Brilliance to create a quantum diamond foundry in Australia, bringing Quantum Brilliance's total Series A capital raise to US\$20 million.

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- Our partnership with PsiQuantum [*QB25-000048 relates*] also shows how serious we are about building a world-leading quantum ecosystem.
 - The government's \$463.3 million investment will deliver multiple generations of quantum computing capability in Brisbane, creating hundreds of direct jobs and billions of dollars in direct investment.
- The Australian Government provided \$60 million in the 2023-24 Budget to grow the quantum sector, including:
 - The \$40.2 million Critical Technologies Challenge Program (CTCP), which will drive greater awareness and uptake of quantum technologies in Australia by putting quantum technologies to work solving national challenges.
 - \$19.8 million to catalyse industry growth, support collaborative research and strengthen Australia's position as a global quantum leader under the Australian Centre for Quantum Growth (ACQG) program.
 - The University of Sydney was awarded \$18.4 million to establish the Centre, which they have named Quantum Australia.

Background

- Critical Technologies Challenge Program (CTCP) round one, stage one closed in July 2024, and grant agreements have been executed.
 - \$5.2 million was awarded for 14 feasibility projects tackling challenges relating to energy, health, autonomous communications and resources.
 - In mid-2025, successfully completed feasibility projects will be invited to apply for up to \$5 million to demonstrate proof of concept.
- CTCP round two, stage one feasibility grants close for application on 26 February 2025.
 - The challenges address biosecurity, energy, logistics and First Nations people's health.
 - The second stage technology demonstrator projects are expected to commence in early 2026.

If asked: Changes to the Defence Export Control regime relating to quantum computers

- The Defence Export Control regime is in place to protect the technologies on the Defence and Strategic Goods List (DSGL).
- The Department of Industry, Science and Resources is working closely with the Department of Defence to ensure Australia's quantum industry and researchers have all the information they need to understand and comply with the Defence Export Control regime.

[Refer any detailed questions on the Export Controls or DSGL, to the Defence Minister]