



QUEENSLAND **DEFENCE INDUSTRIES**

10-Year Roadmap and Action Plan

Edition 2 | Updated October 2022

QUEENSLAND
JOBS FUND



Queensland
Government

Acknowledgement of Country

The Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) acknowledges the Country and people of Queensland's First Nations. We pay our respect to Elders past, present and emerging.

We acknowledge the continuous living culture of First Nations Queenslanders – their diverse languages, customs and traditions, knowledges and systems. We acknowledge the deep relationship, connection and responsibility to land, sea, sky and Country as an integral element of First Nations identity and culture.

This Country is sacred. Everything on the land has meaning and all people are one with it. We acknowledge First Nations peoples' sacred connection as central to culture and being.

We acknowledge the stories, traditions and living cultures of First Nations peoples and commit to shaping our state's future together. DSDILGP recognises the contribution of First Nations peoples and communities to the State of Queensland and how this continues to enrich our society more broadly.

Department of State Development, Infrastructure, Local Government and Planning

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Copies of this publication are available on our website at www.dsdlgp.qld.gov.au and further copies are available upon request to:

Department of State Development, Infrastructure, Local Government and Planning
PO Box 15009, City East, Queensland 4002

Phone: 13QGOV (13 74 68)
Email: info@dsdlgp.qld.gov.au
Web: www.dsdlgp.qld.gov.au

Foreword

The Queensland Government is supporting national endeavours to build Australia’s defence and sovereign capability. By driving the capability and growth of our local defence industries and supply chains we can capture opportunities to generate high-skilled jobs for Queenslanders and help secure our economic future. ▶

As we recover from the economic impact of COVID-19, we are continuing to stimulate priority sectors with global growth potential. With the Australian Government investing a planned \$270 billion over the next decade in defence capability and building international alliances such as AUKUS and the QUAD, our challenge is to buy less from overseas and build more of it here in Queensland.

We’re working in partnership with industry and collaborating across government agencies to set up our future generations with a high-skilled, high wage economy, creating ecosystems that support sustainable thriving businesses and communities for long-term prosperity. We’re also supporting the development of locally made renewable fuel and energy, providing certainty to manufacturers to set up, expand and decarbonise their operations here.

Queensland’s proximity to the Indo-Pacific region, together with the more than 40 per cent of Australian Army personnel based here and the country’s largest RAAF base, ensures we already play a strategic and critical role in our national defence. Significant ADF training facilities such as the Shoalwater Bay Military Training Area, which hosts international partners as part of the Australia-Singapore Military Training Initiative along with other tri-lateral exercises, further demonstrate the important role the state plays in supporting Australia’s interests in the Indo and Asia Pacific regions.

In 2019, the Queensland Government hosted the South Pacific Defence and Industry Forum in Cairns, gathering defence leaders from across the Pacific. In 2021, Cairns TAFE Queensland was awarded the contract to train the

Pacific Island peoples to crew Guardian Patrol Boats. We are the launching point for Australia’s security and disaster relief missions in our region. In 2022, funding has been committed to construct the Cairns Marine Precinct (CMP) common user facility to support defence and commercial maritime growth.

Queensland is Australia’s front line for defence industries whether it be building combat reconnaissance vehicles, sustaining naval vessels in Far North Queensland, or designing next generation autonomous aircraft. International defence primes have set up operations here including Boeing, Northrop Gunman, Airbus, Rheinmetall, BAE Systems and Raytheon. Rheinmetall’s Military Vehicle Centre of Excellence facility in Ipswich was delivered in partnership with the Queensland Government, bringing a new international defence prime contractor to our state, demonstrating how partnerships between government and industry create jobs and prosperity.

Experience has shown us that when one company wins a major defence contract, diverse and profitable opportunities open up for businesses across the supply chain. The *Queensland Defence Industries 10-Year Roadmap and Action Plan* outlines how we will build on our impressive achievements going forward and leverage our already strong defence presence.

The Roadmap complements the *Aerospace 10-Year Roadmap and Action Plan*, *Queensland Space Industry Strategy* and the *Queensland Defence, Maritime, Aerospace and Space Industry Skills Plan*. Under the \$3.34b Queensland Jobs Fund we are implementing these plans together with industry to generate long term industry growth.

We have the skills, infrastructure, innovation, capability, experience, and employee-attracting Queensland lifestyle for businesses to compete nationally and internationally. Together with a strong and committed government we are strengthening Queensland’s position on the world’s defence industry map.



The Honourable Steven Miles MP
Deputy Premier

Minister for State Development, Infrastructure, Local Government and Planning and Minister Assisting the Premier on Olympics Infrastructure



Queensland Defence Industries achievements timeline

2018 Rheinmetall Defence Australia – Australia-New Zealand Headquarters

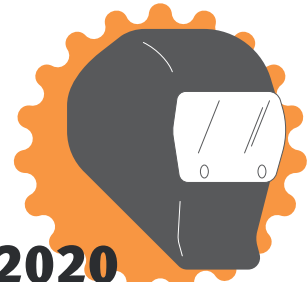
\$170 million Military Vehicle Centre of Excellence established
 LAND 400 biggest and most expensive capability acquisition project in the history of the Australian Army

\$5.2 billion LAND 400 Phase 2 project will deliver 211 combat reconnaissance vehicles (CRVs) and 12 additional modules



2020

Partnered with TAFE Queensland to deliver 15 augmented reality welding training simulators to upskill 135 welders to address a capability gap



2019

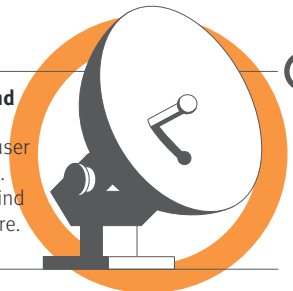
Defence Industry Hubs established in Townsville and Ipswich



2020

\$14.5 million Queensland Flight Test Range

1st commercial common user drone flight testing centre. The largest facility of its kind in the southern hemisphere.



2019

Trusted Autonomous Systems Defence Cooperative Research Centre in Brisbane



2019

Partnered with the National Shipbuilding College to commence scoping of suitable support packages that aim to address the Maritime industry skill shortages

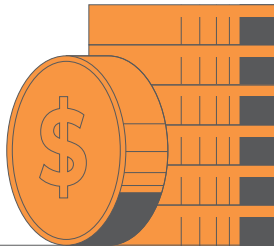
- Placement of 22 x 3rd-year QUT Engineering students within Defence industry in QLD
- Industry awareness campaigns
- High school and industry engagement
- Promotion of the NSC Job Portal – NSC Workforce Register to SMEs

2019

South Pacific Defence and Industry Forum, Cairns

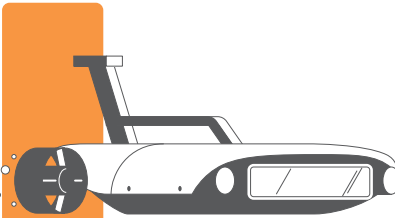


2020



Introduced the Defence and Aerospace Industry Development Fund that supported 63 business

2021



Australian Institute of Marine Science's ReefWorks established in Townsville

2021

Rheinmetall Nioa Munitions shell forging plant in Maryborough



2021

Boeing announced assembly of its Airpower Teaming System – uncrewed aircraft, the MQ-28A Ghost Bat, to take place at the Wellcamp Aerospace and Defence Precinct subject to market orders



2021

Australia-Singapore Military Training Initiative (ASMTI) SGD \$2.25 billion

14,000 Singapore Armed Force personnel to conduct unilateral training up to 2 x 9 week training windows per year for 25 years

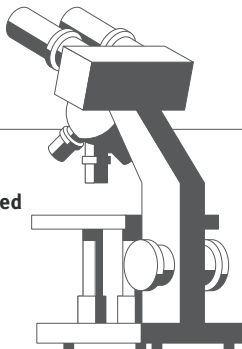
Expansion of Shoal Water Bay to support land combat and amphibious warfare capabilities

Greenvale Training Area established



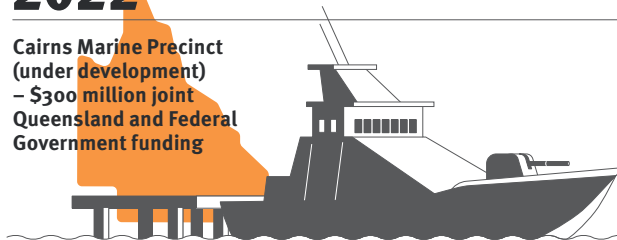
2021

Queensland Defence Science Alliance established



2022

Cairns Marine Precinct (under development) – \$300 million joint Queensland and Federal Government funding





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Executive summary



Executive summary

Vision

By 2028, Queensland will be Australia's front line for defence industry by increasing the revenue contribution to the Queensland economy to \$7 billion and creating a 10,000-strong, highly skilled workforce that is renowned for its agility, innovation and depth of capability in supporting the Australian Defence Force and its allies. ▶

Defence capability and growth drivers

The Australian Government’s Defence Strategic Review will examine force structure, posture, and preparedness in alignment with future investment priorities to optimise Defence capability and posture. Australia’s growing strategic challenges will further influence the strengthening of an industrial capability base that is sovereign, resilient and sustainable to deliver future capabilities critical to Defence. Renewable energy and fuels will be integral to building the future sovereign and sustainable manufacturing base.

Industry challenges

Local industry faces challenges in capturing the economic growth opportunities in delivering for Defence and international defence markets. We must continue to build Queensland’s workforce skills and capabilities that industry needs to grow, allowing the creation of highly skilled, high-wage economy for Queenslanders.

Queensland’s strengths

Queensland has a strong defence presence and a well-established defence industry sector with advanced industry capabilities, a skilled workforce, world-class research organisations, significant infrastructure and facilities, and geographical advantages. Recent successful partnerships between industry and government demonstrates the possibilities in Queensland.

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Support and enabling framework

The Queensland Government is working to attract prime contractors and support SMEs to access national and global defence supply chains. We’re building defence and industry networks, collaborating across government, and enabling the growth of Queensland’s defence industries.

Priority actions

This refreshed Roadmap is part of Queensland Government’s broader approach to industry development. Queensland Government’s Defence Jobs Queensland unit recognises that the changing global influences are creating new challenges while presenting new opportunities to sustain and expand Queensland’s defence industries. Defence Jobs Queensland will build on its achievements to form strategic alliances and to attract private sector investment to deliver the vision through the key strategies:



Grow defence industry capability



Significantly increase Queensland’s contribution to national and global defence markets



Promote Queensland’s defence capabilities





Defence capability

Image courtesy of
Department of Defence



and growth drivers

Defence capability and growth drivers

Global defence spending has increased over recent years, with a focus on equipment modernisation, capability revitalisation and R&D to develop the next generation and game-changing technologies. High defence spending is expected to drive global growth in areas including robotics, autonomous systems, artificial intelligence and precision guided munitions. ▶

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The Department of Defence's 2020 Defence Strategic Update built on the legacy of the 2016 Defence White Paper to map Australia's shifting strategic posture within the geopolitical environment. The update noted challenges to the stability of the rules-based global order and the strategic competition between major powers was becoming more assertive and could undermine stability in the Indo-Pacific.

Changes to Australia's strategic circumstances are accelerating faster than anticipated. These challenges have triggered the Australian Government to conduct the Defence Strategic Review to examine force structure, posture, and preparedness in alignment with future investment priorities to optimise Defence capability and posture to meet Australia's growing strategic challenges in coming years.



Strategic alliances

Australia's network of strategic partnerships, alliances and dialogues such as the QUAD and AUKUS, together with other treaty partners and initiatives such as the Pacific Patrol Boat Program, aim to enhance the region's security. AUKUS will deepen diplomatic, security and defence cooperation between Australia, the United Kingdom and the United States with a focus on joint capabilities and interoperability - initially focusing on cyber capabilities, artificial intelligence, quantum technologies and additional undersea capabilities. The first major initiative under AUKUS is a trilateral program to support Australia to acquire nuclear-powered submarines for operation by the Royal Australian Navy. In addition, the increased interest in defence collaborations

and applications of Queensland's defence products and expertise is broader than Australia's alliance partners and may in future include other countries.

Through the Australia-Singapore Military Training Initiative (ASMTI), Singapore is investing up to SGD\$2.25 billion to develop and enhance Australia's military training areas in central and northern Queensland. Australia and Singapore's Comprehensive Strategic Partnership supports the future needs of the ADF and increases the current cap of Singapore military personnel training in Queensland. ASMTI is an example of increased and ongoing economic opportunities for Queensland's defence industries as well as businesses in regional areas near military training areas.

Australia's record investment

As Defence pivots in response to a rapidly evolving security environment, the Australian Government's focus on strengthening Australia's sovereign defence industry capability will see defence investment increasing to \$270 billion over the decade to 2029-30. It is recognised that building a robust, resilient and internationally competitive defence industrial base to deliver defence capability, skills and self-reliance is a national endeavour.

The Australian Government also aims to support the broader economy by maximising local industry participation in major defence projects through the Australian Industry Capability Program. Defence has identified a list of 14 sovereign industrial capability priorities (SICPs) as

critical. These include capabilities which are synergistic with Queensland's industrial strengths and are essential in maintaining the ADF's competitive edge. Capitalising on technology transfer, innovation, collaboration, and research and development will develop an enduring industrial base capable of supporting SICPs. To increase Australian industry involvement, industry needs to be competitive and deliver cost-effective support and solutions.

The consequences of COVID-19 has shifted industry focus towards transforming supply chains into more resilient and dynamic networks, by using strategies such as onshoring, sovereign capability development, vertical integration, and increased cyber defences.

Defence industries

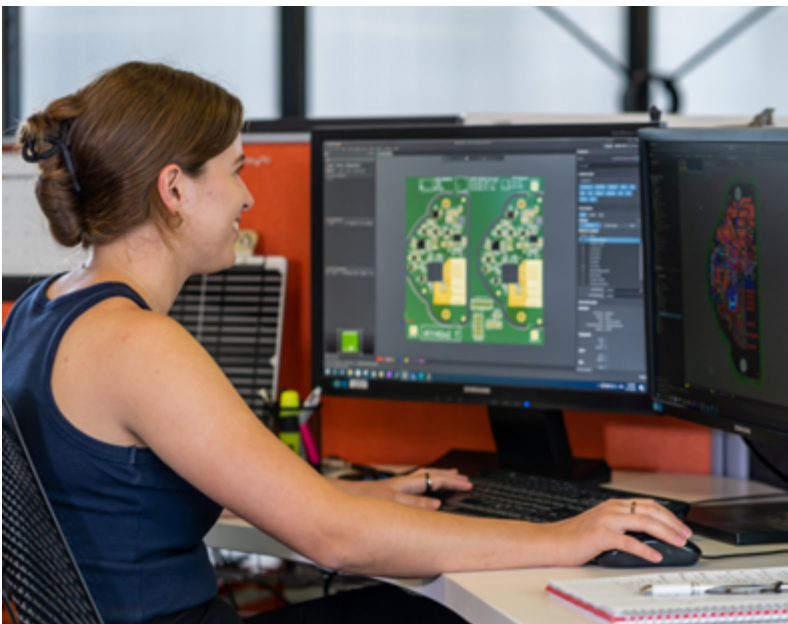
Australian defence industry consists of businesses that are providing or have the capacity to provide defence-specific or dual-use goods or services in a supply chain that leads to the Australian Department of Defence or an international defence force.

Australia's defence industry provides diverse capabilities including expertise in research and development, production of platforms and components, systems integration, and sustainment of existing capabilities across the air, land, sea, space, and cyber domains.

Australia's defence industry is cross sectoral, because it operates in both the horizontal and vertical industry markets. Defence advanced manufacturers are part of the horizontal market, operating across

many different market sectors, thus having the potential to impact the economy on a broad scale. Space industries are part of the vertical industry market, as they are highly specialised, operating in niche market sectors, and have the potential for rapid growth.

Australia's defence supply chain includes several large domestic and multinational companies, known as prime contractors, with well-established systems essential to delivering high-risk and complex defence projects. These prime contractors regularly outsource work to subcontractors, with niche capabilities, overlaying their quality management systems. In addition, many smaller defence contracts are awarded directly to SMEs.



Growth opportunities

The 2020 Force Structure Plan identifies emerging opportunities for existing Queensland industry and international companies locating new operations in Queensland, including major defence contracts in the following areas.



Maritime

- › Ararufura-class offshore patrol vessel (OPV) refit and maintenance
- › Guardian Class Patrol Boat refit and maintenance
- › Cape-class refit and maintenance
- › Mine warfare vessel refit and maintenance
- › Hydrographic survey vessels refit and maintenance
- › Development, test and evaluation of new optionally crewed and autonomous systems



Air

- › Joint battle management system
- › Medium range ground-based air and missile defence
- › Surveillance systems
- › Mobile threat and target emitter system
- › Airborne early warning control upgrade
- › Air combat weapons capability
- › High speed long-range strike, including hypersonic research
- › Deployable ballistic and high-speed missile defence



Land

- › Armoured combat vehicle manufacturing and sustainment
- › Main battle tank upgrade
- › Integrated Soldier Systems
- › Range simulation and instrumentation
- › Riverine patrol craft
- › Deployable force infrastructure
- › Future Autonomous Vehicles
- › Tactical UAV
- › Deployable Bulk Fuel Distribution



Defence Enterprise programs

- › Sovereign Guided Weapons and Explosive Ordnance production
- › Improved fuel resilience
- › Sovereign weapons manufacturing
- › Increased airbase resilience
- › Satellite Imagery Capability (Access)
- › Sovereign Satellite Imagery Capability



Key defence estate investments

- › Australian Port Infrastructure upgrades
- › Enabling facilities and support for Air Force workforce growth
- › Enabling facilities and support for Army workforce growth
- › Northern Air Base Resilience
- › New Army Watercraft Base
- › Northern Australia EO Rail Link
- › Increased Fuel Storage Capacity



Space

- › Satellite communications system
- › Space situational awareness
- › Enhanced satellite ISR capability



B2





Industry challenges



Industry challenges

To capture the many opportunities in the defence market, collaboration and partnerships can assist in overcoming a range of challenges. ▶



Accessing defence supply chains

While a majority of Queensland defence industries report strong supply chains, challenges exist in securing local contractors and suppliers with appropriate quality assurance programs, security, and certifications and accreditations.

Customer acquisition takes time and effort

'Untested' SMEs looking for new business must demonstrate not just capability but also reliability in order to reduce the risk to prime contractors and the defence customer.

Long procurement lead times

The complexity of many defence projects means they are characterised by long procurement lead times. It can take years to determine what new or enhanced capability best meets strategic goals through to project implementation and delivery.

Skilled workforce and capability

Increased competition for skilled employees in all skillsets and across all industries impacts companies as they aim to develop their long-term capabilities, particularly for employees with science, technology, engineering and mathematics (STEM) qualifications.

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Promoting capability

Queensland boasts world-leading capabilities in a number of disciplines, but it can be difficult to highlight these against competing global defence companies. Confidentiality provisions often accompany defence contracts and can restrict a company's ability to openly promote its defence capability.

Security and cyber

Malicious cyber activity is escalating, becoming more sophisticated and harder to detect. Cyber security is critical for defence industry to prevent widespread damage throughout the supply chain. SMEs face multiple barriers when implementing cyber security practices due to the size of their business and the speed at which sophisticated cyber threats are being developed.

Resilient, secure supply chains

The COVID-19 pandemic disrupted defence supply chains, impacting industry's ability to respond to customer demands. Building resilient and secure supply chains is critical to delivering future defence capability. Optimising supply chain efficiency and agility is crucial for SMEs who form part of the defence supply chain ecosystem.





| **Queensland's
strengths**

Queensland's strengths

Queensland's well-established defence sector is characterised by the largest concentrations of defence people, assets, bases, ports, training ranges and support sites in Australia. We have strengths in innovative thinking and technology development as well as a reliable, highly skilled workforce. ▶

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Queensland's proximity to the Indo-Pacific region is strategically significant for Defence to build a secure, prosperous, and inclusive Indo-Pacific of independent, stable and resilient states. HMAS Cairns is the most northern naval base on

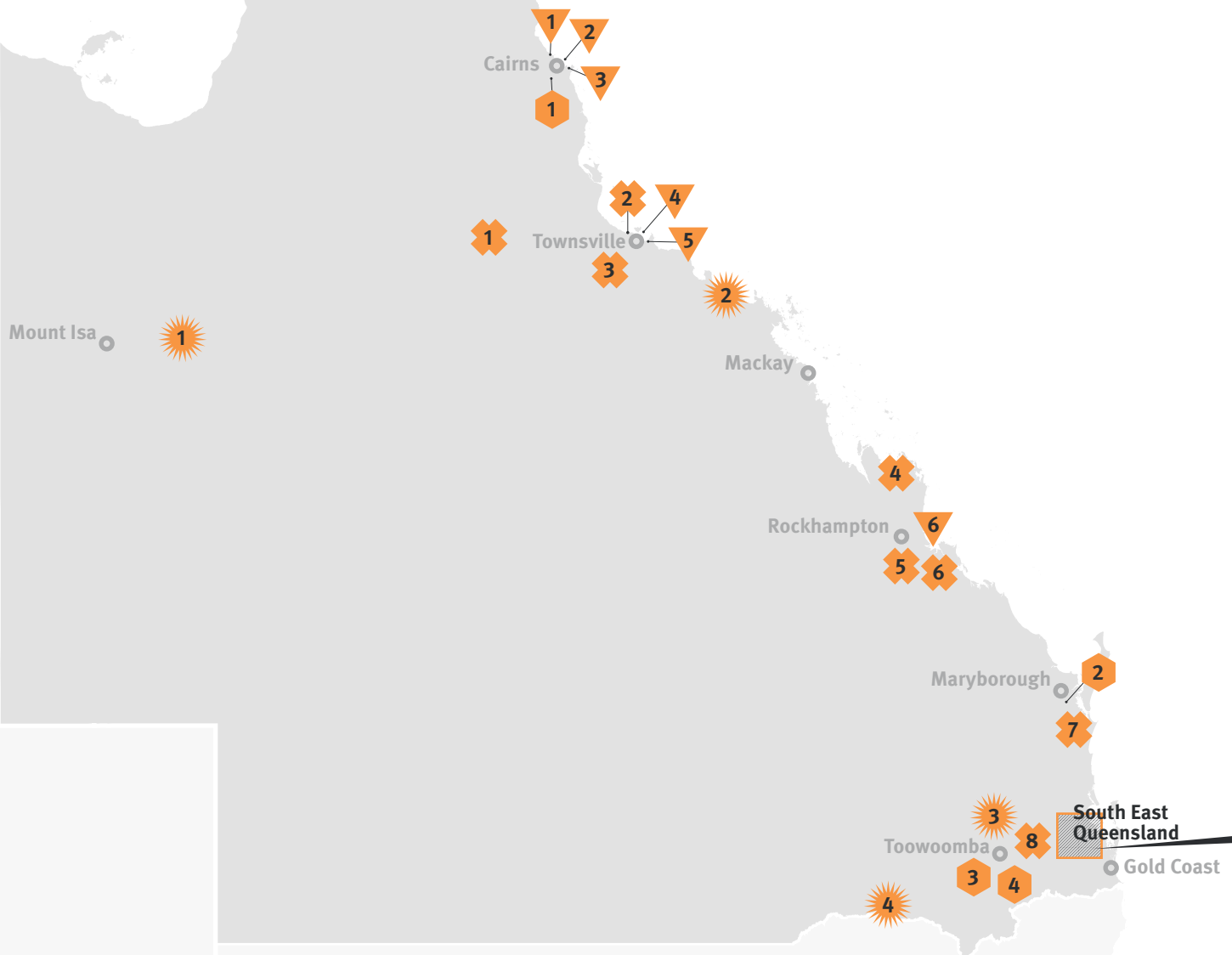
the eastern seaboard, with Cairns and Townsville playing a key role as the gateway to the Pacific, supporting the implementation of Australia's Pacific step-change with Pacific Island countries.

No other state has as many large regional centres. Cairns, Townsville, Rockhampton, Gladstone, Bundaberg and Toowoomba all support a significant ADF presence nearby or provide port and freight access for

Defence. Outside of Darwin, these are the only communities located north of Brisbane which can adequately provide the economic and social services that are needed to support the ADF and its families. The strength of Queensland's regional industry capability, existing infrastructure, and strategic location within the Indo-Pacific means it will continue to be a strategic priority for the ADF.

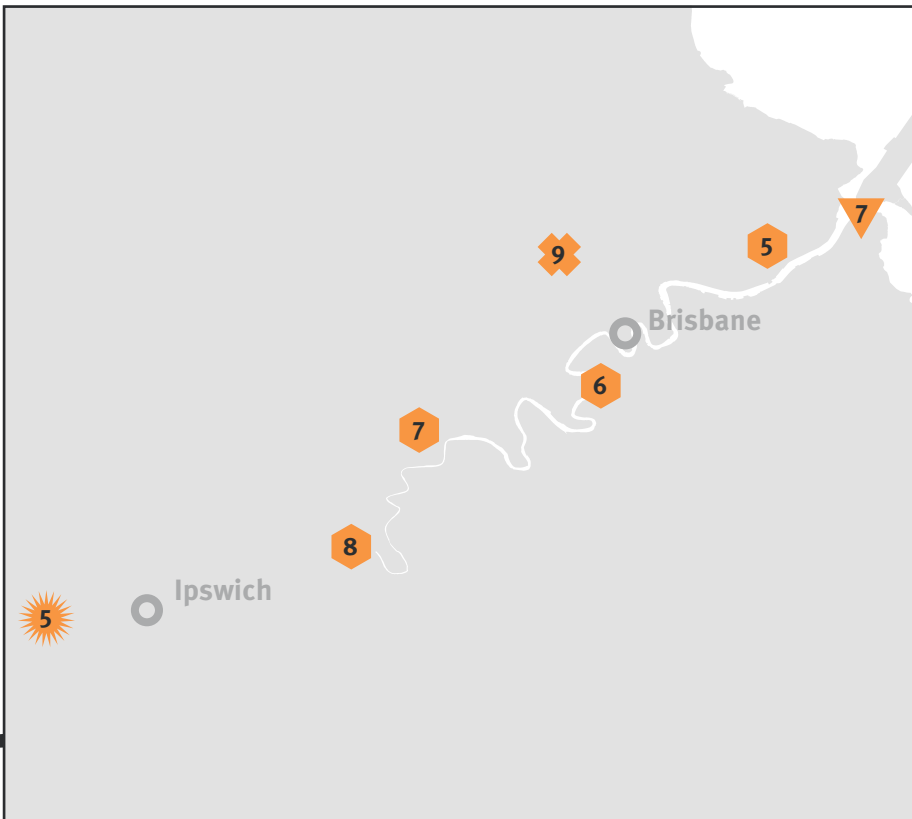


Queensland's key defence facilities and industry capabilities





Queensland's Indo-Pacific Location



South East Queensland

Legend

Training areas and reserves

- 1 Greenvale Training Area
- 2 Lavarack Barracks
- 3 High Range Training Area
- 4 Shoalwater Bay Training Area
- 5 Bajool Explosives Reserve
- 6 Port Alma Explosives Reserve
- 7 Wide Bay Training Area
- 8 Helidon Explosives Reserve
- 9 Gallipoli Barracks

Education and industry

- 1 Great Barrier Reef Marine College
- 2 Shell forging facility
- 3 University of Southern Queensland
- 4 Wellcamp Aerospace and Defence Precinct
- 5 Defence Science and Technology Group
- 6 University of Queensland
- 7 EPE's Military Test, Evaluation, Certification and Systems Assurance facility
- 8 MILVEHCOE

Maritime

- 1 HMAS Cairns
- 2 Port of Cairns
- 3 Cairns Marine Precinct
- 4 Port of Townsville
- 5 Reefworks Marine Test Range
- 6 Port Alma
- 7 Port of Brisbane

Space and aerospace

- 1 Queensland Flight Test Range
- 2 Orbital launch site (planned)
- 3 Static rocket testing site
- 4 Suborbital launch site
- 5 RAAF Base Amberley



Our natural geographical advantages complement the development, testing and evaluation of critical Defence capabilities. These advantages include:

- › multiple locations reflecting ADF operating environments including tropical, sub-tropical, marine, desert, and littoral zones, including a range of coastal and littoral training environments to enhance the ADF's amphibious capabilities
- › geographical aspects that align perfectly with the needs of trusted autonomous systems testing and capability demonstration across vast open land, coastline, and sea accessibility
- › 21 ports that offer Defence unique access to deep water and/or natural harbours
- › proximity to the equator, and our position on Australia's east coast makes Queensland perfect for launch for geostationary and inclined orbits, and hosting ground stations
- › an attractive lifestyle and climate, world-class health and education, and a strong pool of skilled workers to support the ADF and industry.



Image courtesy of Insitu Pacific

Strong defence presence

Queensland is a Defence state with a proud and enduring association with the ADF and host to:

- › more than a quarter of all ADF personnel – over 24,000 uniformed and civilian positions, and close to 70 per cent of the Army's fighting force along with its vehicle fleets
- › 15 significant defence facilities
- › the largest amphibious Army operations and training capabilities in the country
- › three significant training facilities in regional Queensland including Shoalwater Bay Training Area near Rockhampton, Greenvale Training Area northwest of Townsville (under construction), and the High Range Training Area west of Townsville.

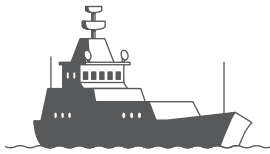
The Royal Australian Air Force (RAAF) base at Amberley plays a significant role in strengthening Defence's mobility, strike-force and heavy-lift capacity plus key elements of the RAAF Intelligence, Surveillance and Reconnaissance (ISR) capability, Airborne Early Warning and Control (AEWC) and uncrewed aerial systems (UAS).

The Royal Australian Navy (RAN) Armidale and Cape Class Patrol Boat presence in Cairns, and the strength of the Cairns marine industry capability in maintenance, repair and overhaul (MRO) of the vessels locally, play an essential role in protecting Australia's northern maritime borders.



Advanced industry capabilities

Queensland's established manufacturing and industrial base offers a diverse range of well-established defence industry capabilities. Home to more than 30 of the nation's top defence suppliers, supported by a group of mature small to medium enterprises (SMEs) providing world-class technological and manufactured goods and services into defence global supply chains. Queensland has the workforce expertise, infrastructure, technologies, research and development capability and the industrial ecosystem to support even more defence projects in Queensland. ▶



Queensland's maritime sector is world class, delivering quality maintenance, repair and overhaul capabilities to sustain ADF naval and Australian Border Force platforms, as well as the Pacific Island Guardian-class patrol boats. The Regional Maintenance Centre north east, in Cairns, provides supply chain support and maintenance services for Defence vessels based in and visiting the region.

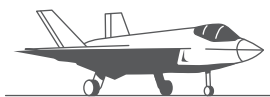
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Queensland is home to Australia's largest industrial base, traditionally centred on the manufacture and sustainment of heavy vehicles, including land combat and protected vehicles. Underpinning the state's heavy vehicle production is an extensive and innovative supply chain delivering interdependent capabilities, including communications, electronics and systems integration.



Queensland's growing industry capability in the missile-adjacent sectors of hypersonics, space and munitions is widely acknowledged. These are critical capabilities for Defence as they deliver the new sovereign capability in Guided Weapons and Explosive Ordnance and acquire advanced strike capabilities with potential hypersonic weapons.¹



Queensland's aerospace industry is in a great position to take advantage of the increase in defence spending. There continues to be rapid technology advancement across many related domains such as autonomous and remotely piloted systems as exemplified by the Boeing Airpower Teaming System program (also known as MQ-28A Ghost Bat).

Image courtesy of Boeing Australia



Queensland is at the forefront of Australia’s autonomous systems developments.

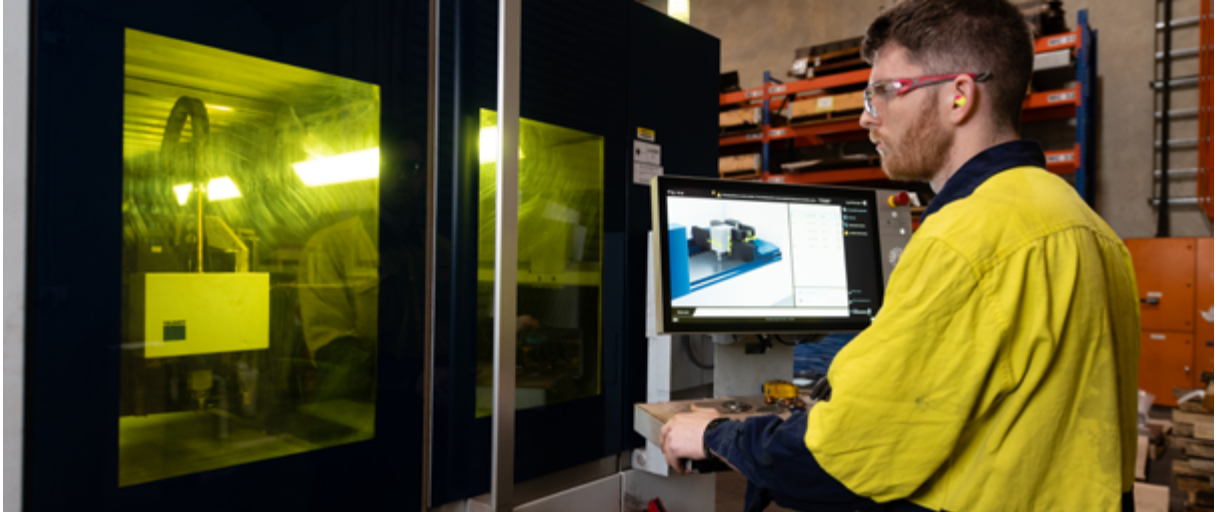
The state is home to the Trusted Autonomous Systems Defence Cooperative Research Centre (TAS DCRC) that is delivering collaborative programs to rapidly transition new technology into leading-edge capability across the maritime, land and aerospace domains. Developments such as these are being supported through strategic investments in critical infrastructure by both government and industry. The Queensland Government’s \$14.5 million Queensland Flight Test Range (QFTR) in Northwest Queensland supports Australia’s drone businesses undertake test, trial and evaluation of new systems in a controlled environment. The QFTR is the largest facility of its kind in the southern hemisphere. The government has also partnered with the Australian Institute of Marine Science to establish ReefWorks near Townsville, offering a range of secure test and evaluation facilities catering for uncrewed and autonomous systems operating both on or beneath the water’s surface. In addition, leading defence solutions provider EPE has partnered with the CSIRO to establish the Military Test, Evaluation, Certifications and Systems Assurance (MILTECS) facility which operates across two locations in South East Queensland.



The Defence Space Division headquarters will seek to improve how space capabilities are managed, acquired, and operated.

Australia’s most advanced space launch vehicle developers and a large percentage of their supply chain are based in Queensland. The state’s Earth observation industry sub-sector is the largest in the country and has created a unique cluster through long-term investment in research.





Skilled workforce

Queensland's skilled workforce offers a diverse range of well established, cost effective and game-changing defence industry capabilities that include, but are not limited to:

- › cyber, electronics, systems engineering and integration, and satellite communications
- › advanced data analytics, coding, robotics, and artificial intelligence including computer vision and machine learning
- › precision and advanced engineering
- › production design, fabrication and welding
- › advanced manufacturing including composite, additive and niche manufacturing
- › heavy vehicle and equipment manufacturing
- › assembly, test and maintenance of advanced military and civil air assets
- › high-value maintenance, repair, overhaul and sustainment of sea, land, and air assets
- › program and asset management and logistics.

The Queensland Government is backing new, emerging and traditional industries to increase their footprint in the global defence market by investing in training, to attract and retain the state's next generation workforce.

The Queensland Defence, Maritime, Aerospace and Space Skills Plan focuses on the challenges to engage, attract, train and retain a highly skilled, STEM proficient workforce that is responsive to market needs expanding and refocusing operations in line with demand. Many members of our veteran community have the desirable skills and expertise that are readily transferable to our defence industries. The Queensland Government has partnered with TAFE Queensland to deliver the 'Defence to Civilian Success Training Program' to provide TAFE training and apprenticeships for transitioning veterans. Addressing the skilling challenges for tomorrow's workforce is reliant on ongoing collaboration between employers, industry, vocational and tertiary institutions, peak bodies and government.

Innovation, science and technology

Queensland's defence industry is known for its technical innovation and capability for high-quality, low-volume defence product development to global standards. The 2020 Defence Force Structure Plan identifies around \$3 billion of capability investment for Defence innovation, science and technology. These areas include integrated intelligence, surveillance and reconnaissance, trusted autonomous systems, quantum technologies, advanced sensors, hypersonic aerodynamics, directed energy capabilities, multidisciplinary material sciences and cyber security. Queensland is on track to become a world leader for innovation, science and technology and is internationally recognised as a defence, aerospace and space industry and research hub for the Indo-Pacific region.

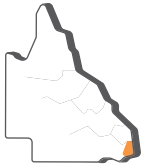
Queensland boasts a reputation for excellence, hosting a network of over 25 institutes, facilities and precincts state-wide which are working in partnership with Defence and industry to deliver robust contemporary solutions to meet sovereign capability needs now and for the future. The Queensland Defence Science Alliance (QDSA) brings together seven leading Queensland universities, with industry partners, government and Defence to focus on sovereign innovation to accelerate Defence's capability edge. Queensland's capabilities in the innovation sector include, but are not limited to:

-  **automated systems development including onboard sensor systems**
-  **hypersonics**
-  **surveillance technologies, including non-cooperative facial recognition**
-  **materials development including unique composite structures and nanotechnology**
-  **robotics**
-  **microwave and radio frequency communication technologies**
-  **data security**
-  **geospatial technology including geographic information systems (GIS) development**
-  **visualisation and simulation technologies**
-  **space technologies, including earth observation data analytics, launch, ground systems, systems component manufacturing, robotics and automation**
-  **leading advanced manufacturing and design capabilities**



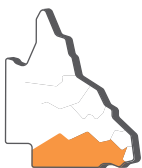
Strategic enabling infrastructure

Queensland has a strong defence industrial base and world-class supply chain capabilities. These are supported by a network of road, rail, port and airport infrastructure. Both the government and industry are actively developing capability and investing in infrastructure to grow Queensland's contribution to the sovereign industrial capability ecosystem. Queensland offers many opportunities to invest in defence research, development and manufacturing across the state. Examples of investments to date include:



South East Queensland

- › Rheinmetall Defence Australia's Military Vehicle Centre of Excellence (MILVEHCOE)
- › CSIRO's Data 61 Robotics Innovation Centre
- › Artificial Intelligence (AI) Hub
- › Advanced Robotics for Manufacturing (ARM) Hub
- › Immersive Technologies (XR) Hub
- › Australian Program Office for Advanced Hypersonics (APOAH) (UQ) and hypersonic wind tunnel/tubes
- › Queensland's Earth Observation Hub
- › Boeing Defence Australia's Assembly and Testing facility
- › Northrop Grumman's Maintenance and Modification Centre
- › Raytheon's Air Combat Electronic Attack Sustainment Program
- › Defence Science and Technology Group's Australian Hypersonics Research Precinct
- › Sunshine Coast International Broadband Submarine Cable
- › EPE's Military Test, Evaluation, Certification and Systems Assurance facility (Pullenvale)
- › Trusted Autonomous Systems Defence Cooperative Research Centre



Darling Downs and Southwest Queensland

- › EPE's Military Test, Evaluation, Certification and Systems Assurance facility (Helidon)
- › Helidon Explosives Reserve
- › Rocket Technologies International Helidon Rocket Testing Site
- › Beyond the Blue Aerospace Suborbital Launch Facility
- › University of Southern Queensland's supersonic-to-hypersonic wind tunnel/tube
- › Wellcamp Aerospace and Defence Precinct



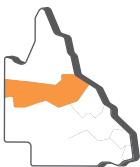
Wide Bay-Burnett

- › Rheinmetall NIOA Munitions Shell Forging Plant



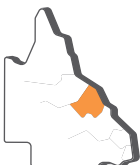
Central Queensland

- › Bajool Explosives Reserve
- › Port Alma Explosives Reserve



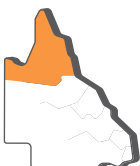
Northwest Queensland

- › Queensland Government’s Queensland Flight Test Range (QFTR)



North Queensland

- › Australian Institute of Marine Science (ReefWorks tropical marine technology test range)
- › Brookhill Explosives Reserve
- › Bowen Orbital Space Port (planned)
- › NQ SPARK (planned)



Far North Queensland

- › Cairns Marine Precinct
- › Great Barrier Reef Marine College
- › Queerah Explosives Reserve



Rheinmetall

When Rheinmetall Defence Australia was selected by the Australian Government in March 2018 for the \$5.2 billion LAND 400 Phase 2 project, it was not just a win for the global defence company, it was also a win for Queensland. The announcement marked the culmination of a lengthy and active campaign by the Queensland Government to secure a partnership with Rheinmetall. ▶

Fast forward four years and RDA's new Australia-New Zealand Headquarters, the Military Vehicle Centre of Excellence (MILVEHCOE), has been established in Ipswich and the facility is delivering Boxer combat reconnaissance vehicles (CRVs) under LAND 400 Phase 2. The MILVEHCOE will also manage the continued development and sustainment of the Boxer CRVs and accommodate RDA's other defence projects including sustainment of 3500 logistics trucks delivered under the LAND 121 Ph 3B/5B project.

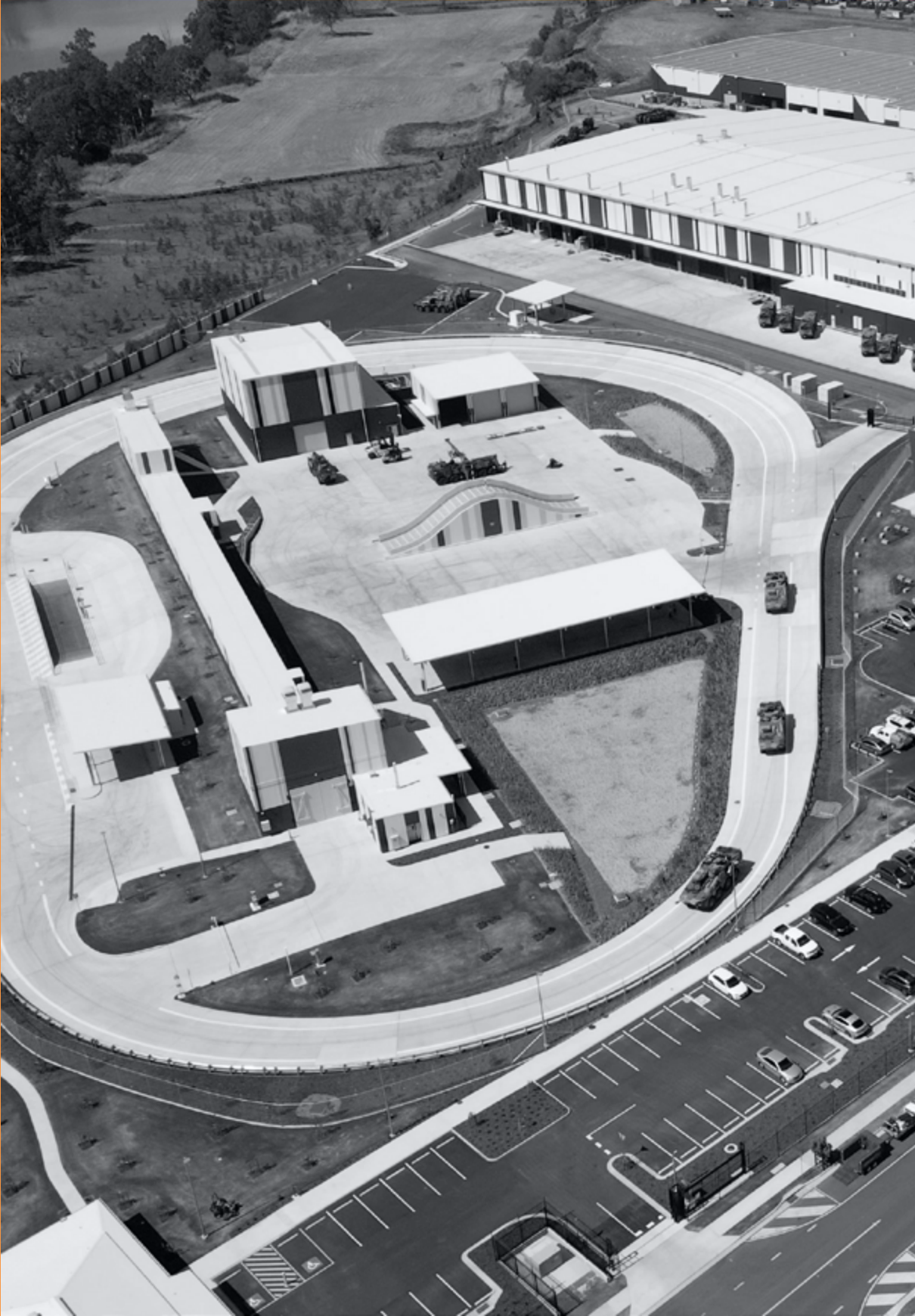
The MILVEHCOE is positioned in the heart of Australia's largest heavy vehicle manufacturing and sustainment precinct and is Australia's most advanced military vehicle manufacturing facility. The 11-hectare campus is Rheinmetall's largest presence outside Germany and features some of the best technologies from across the company's entire defence business including electronics, electro-optics, armour, turrets, vehicles and simulators.

The facility will also act as a regional hub with an expected program of continuous design, manufacture and support for up to 5000 military vehicles across Australia and the Indo-Pacific. The MILVEHCOE and the expertise of its growing Australian workforce are now an integral source of technology and

product development for Rheinmetall's global customer base, and it is already considered the company's centre of excellence for recovery vehicles worldwide.

The presence of RDA in Queensland is an economic game-changer for the state. The MILVEHCOE created more than 450 jobs for Queenslanders and will contribute \$1 billion to the Queensland economy. RDA's activities are boosting the state's local defence industry by driving continued innovation, building skills, attracting further investment and creating increased supply chain opportunities for other businesses. More widely, the MILVEHCOE is growing Australia's sovereign capabilities and supporting Australian-wide manufacturing.

With a facility of national significance, RDA is well positioned to secure further Defence contracts and capitalise on increasing export opportunities to supply the international military markets of allied nations. Attracting investment and capability like Rheinmetall's regional headquarters and the delivery of significant projects like LAND 400 Ph2 are key drivers of job creation. With the Queensland Government's continued support, it is expected the economic benefits of the partnership with RDA will continue to grow for decades to come.



ImmersaView

ImmersaView develops advanced software solutions that support complex immersive displays and scalable video streaming for the defence, simulation, audio visual, education, energy, and emergency service sectors. ▶

Headquartered in Brisbane and founded in 2006, ImmersaView's global success has led to the opening of offices in Sydney, Orlando and London. In 2016 it was acquired by PLEXSYS, a global leader in modelling and simulation software and live, virtual and constructive training. This enabled the company to both expand its existing offices and reach the lucrative US defence market.

A winner of the Richard Joel Award for the Defence Industry at the Queensland Premier's Awards for Export Excellence, ImmersaView's key software solutions include VADAAR 2 and SimVisuals 2. VADAAR 2 is an advanced after-action review software program that allows clients to stream, record and review video, audio and data. With global contracts that include the US Air Force, NATO, RAAF, Australia's Department of Defence and numerous international defence primes such as Boeing and Lockheed Martin, VADAAR 2 supports multi-location simulation and training events

at scale. VADDAR 2 enables ImmersaView to deliver a world-class training system to organisations such as the London Fire Brigade, featuring multiple videos, audio and data streams that capture every aspect of each training session. These recorded sessions are then played back to debrief and educate attendees.

SimVisuals 2 is a geometry, image correction and edge-blending software that provides flawless and advanced imagery. It gives ImmersaView the capacity to support very complex display requirements that enable the user to fully immerse themselves in any scenario via multiple simulation projectors. ImmersaView utilised this platform to support BAE Systems' defence training for the Australian Army at the Advanced Air Defence Simulator, a 12-metre-high projection dome facility. Participating soldiers are immersed in a realistic and cost-effective training environment with a single, seamless display across 27 projectors.



Black Sky Aerospace and Trade and Investment Queensland

Queensland's position as a leading defence manufacturing location is further strengthened by Black Sky Aerospace's presence. It is Australia's only sovereign manufacturer of solid fuel for use in rockets and guided weapons, and a range of cutting-edge launch vehicle and booster technologies. ▶

As a completely sovereign company, Black Sky Aerospace's expertise in the design and manufacturing of propellant, solid rocket motors, launch vehicles and tactical boosters is a boon to Queensland's economy and Australia's defence ecosystem.

The company's commitment to Australia's sovereign capability means it retains every step of the design, manufacturing, and testing process onshore.

The company's growth has been supported by Trade and Investment Queensland (TIQ), which recently resulted in Black Sky Aerospace completing a deal with a major Europe-based defence company. Not only has TIQ's involvement

helped Black Sky Aerospace establish global connections but it has strengthened the relationship with a key defence and trading global partner.

The deal involved Black Sky Aerospace exporting its innovative solid rocket motors to Europe for inclusion in the partner company's products. Black Sky Aerospace is recognised as being at the top of space readiness levels and its product and technical know-how has also elevated its partner's capabilities.

The demand for Black Sky Aerospace's products and services is a great example of Queensland's growing reputation as a world leader in defence, aerospace and space manufacturing.



Image courtesy of Black Sky Aerospace





Image courtesy of
Department of Defence



Research and development

Research and development

Strategic partnerships propelling Queensland's future

Queensland is widely acknowledged for its university expertise and growing industry expertise in the missile-adjacent sectors of hypersonics and space. ▶



The Queensland Government is actively supporting and promoting the research, design and manufacture of systems in these areas. Queensland is playing an integral role in research programs and collaborations in the sciences of hypersonic aerodynamics, guided munitions development, rocket testing, artificial intelligence and robotics, and is widely recognised as a centre of excellence for uncrewed and autonomous systems.



Advanced Robotics and Manufacturing (ARM) Hub

Headquartered in Brisbane, ARM Hub de-risks technology adoption and R&D commercialisation of advanced robotics and AI technologies for the manufacturing industry in Queensland and Australia. ARM Hub is a catalyst and problem solver for SMEs, integrators, and manufacturers by offering a range of services across sectors, including site visit need assessments, technology roadmaps for companies, investment opportunities, project management, technology incubator space, and industry research placements. ARM Hub is a not-for-profit organisation founded by the Queensland Government, Queensland University of Technology, CSIRO, the Innovative Manufacturing CRC, and Urban Arts Projects.

Artificial Intelligence Hub

The Artificial Intelligence (AI) Hub proactively engages and collaborates with diversified stakeholders to grow AI businesses, and connect industry, research and government. This supports AI adoption, advocacy for increased investment in AI, and promotion of AI capabilities to solve industry problems, improve productivity and generate jobs through AI technology adoption and digital transformation.

Australian Hypersonics Research Precinct

DST Group's new \$14 million Australian Hypersonics Research Precinct at Eagle Farm in Brisbane accommodates over 60 staff and provides a collaborative space for Defence, industry, universities and international partners to advance the understanding and use of hypersonic technology through flight test vehicles. Scramjet rocket engine technology developed here is now the basis for hypersonic flight engine development work at Hypersonix.

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Australian Institute of Marine Science

The Queensland Government co-funded the establishment of the foundation phase of ReefWorks, a suite of secure marine technology test and evaluation facilities open to industry, government and academic innovators. ReefWorks is poised to catalyse Australia's innovation in marine robotics, autonomous systems and artificial intelligence (RAS-AI) offering testing at different levels of technology readiness. Based at the Australian Institute of Marine Science (AIMS) Headquarters near Townsville, on the doorstep of the Great Barrier Reef, ReefWorks offers a national testing capability in a tropical marine environment. A key objective of the ReefWorks foundation phase is to develop a collaborative program working with research organisations, industry, governments and Defence to demonstrate Queensland's potential to create sovereign capability in marine technology and marine autonomous systems innovation.



Australian Missile Corporation (AMC)

Queensland defence prime, NIOA, created the Australian Missile Corporation to facilitate guided weapons collaboration between industry partners, academia, state governments and Defence. It was selected by the Australian Government in 2022 as one of its enterprise panel partners for the Sovereign Guided Weapons and Explosive Ordnance (GWEO) enterprise.

Australian Program Office for Advanced Hypersonics

The University of Queensland's Australian Program Office for Advanced Hypersonics (APOAH) aims to assist Defence by accelerating research and the demonstration of hypersonic technologies that can be rapidly translated into capability. With key capabilities including the country's fastest wind tunnel for hypersonic flight, APOAH complements the new purpose-built Australian Hypersonics Research Precinct, led by DST Group.



Images courtesy of Department of Defence



Immersive technologies

The XR Hub is developing immersive technologies (XR – augmented reality, virtual reality and mixed reality) and talent to support the increased use of XR within Queensland industries. The XR Hub is partnering with the defence sector to explore local XR capabilities and providing a first look at innovative solutions being developed in Queensland.

Queensland Defence Science Alliance

The Queensland Government has partnered with seven leading Queensland universities, industry partners, and the DST Group to establish the Queensland Defence Science Alliance (QDSA). The QDSA aims to foster collaborative research and development opportunities in priority areas for Defence. Through facilitating collaborative partnerships, the alliance will accelerate our sovereign ability to innovate, translate concepts to reality and deliver a capability edge to Defence.



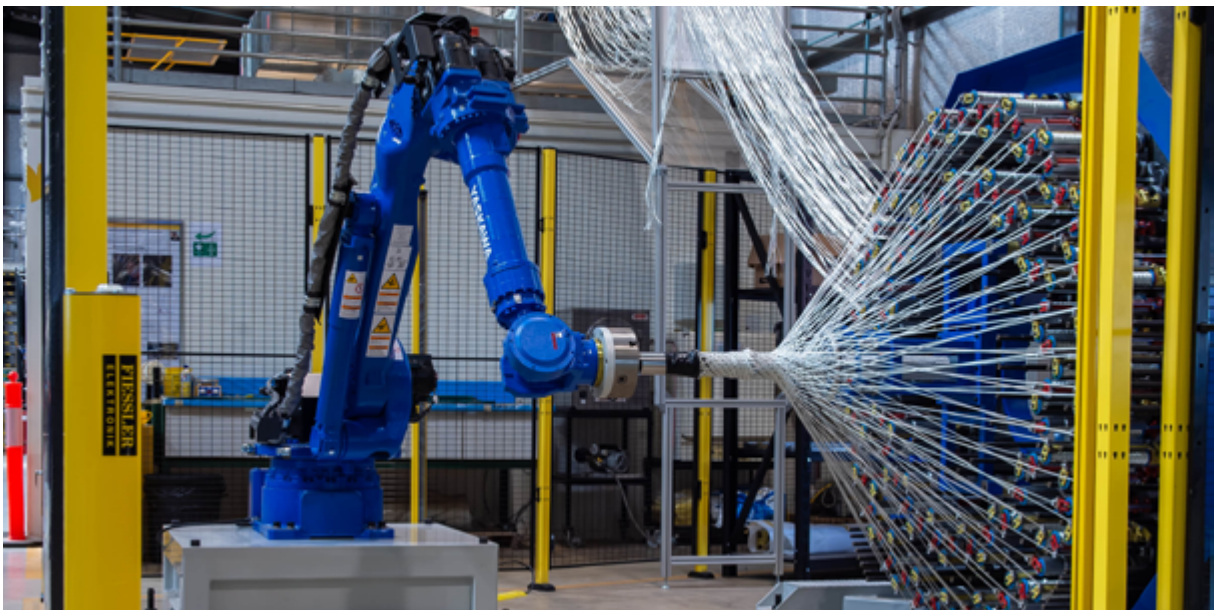
Trusted Autonomous Systems Defence Cooperative Research Centre

In recognition of the state's depth of technological capability, the Trusted Autonomous Systems Defence Cooperative Research Centre (TAS DCRC) is headquartered in Queensland. Underpinned by co-funding from the Australian and Queensland governments, the TAS DCRC works with Defence Science and Technology (DST) Group, research organisations and industry to deliver new defence capabilities. This includes trustworthy smart-machine technologies based on advanced human machine technologies across the Defence maritime, land and aerospace domains. The TAS DCRC is a collaborative program focused on rapidly transitioning research and development into industry and leading-edge capability for the ADF.

TAS DCRC has over \$170 million (cash and in-kind contributions) invested into industry-led projects and supporting common good activities into ethics, law and assurance of autonomy. Through TAS DCRC, Queensland-SMEs Cyborg Dynamics Engineering and Skyborne Technologies partnered with The University of Queensland and DST to undertake the 'Justified Autonomous Unmanned Aerial System (UAS) Effects' project. The outcome of this work - Athena AI - is a vision-based AI system that aims to support UAS operators by providing information in near-real time which is critical to lawful application of effects in the battlespace.

University of Southern Queensland

The University of Southern Queensland's (UniSQ) Institute for Advanced Engineering and Space Sciences, based in Toowoomba, provides a dedicated facility for space and defence research. UniSQ's unique capabilities and facilities include Australia's longest duration hypersonic wind tunnel (>200ms); the only Australian university solid propellant rocket fuel manufacturing laboratory; rocket motor and fuel tank manufacturing with Australia's most advanced industry scale robotic composite material filament winding cell; and Australia's only capability in airborne diagnostics for re-entry observations of Space modules. UniSQ has significant capability in ultra-high temperature ceramic matrix composites for rocket motor components.







Support and enabling network



Image courtesy of
Department of Defence

Support and enabling network

Defence Jobs Queensland (DJQ) is building on past successes to attract prime contractors and support SMEs to access local and global defence supply chains and maximise the ADF's presence in Queensland. Supported by a suite of government initiatives, DJQ helps to create Queensland's smart, connected and efficient defence industry sector. ▶

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With a wealth of combined senior military experience from the Navy, Army, and Air Force, our Strategic Defence Advisors bring to

Queensland strong insights into the world of defence and industry. They provide high-level advice to the Queensland Government, identifying and supporting the attraction of strategic project opportunities to our state.



Defence industry hubs

Defence Industry Hubs based in Ipswich and Townsville help businesses across Queensland become defence ready to access state, national and global defence supply chains. To better prepare for defence and unlock potential market opportunities, the Defence Industry Hubs:

- › assist industry to understand defence readiness (compliance and commercial) requirements and what their pathway into defence industry may involve
- › keep industry informed about current and future defence capability needs, emerging opportunities and sovereign industrial capability priorities
- › explore the alignment of individual business capability and capacity with Defence needs
- › showcase how engaging in research and development can solve Defence capability issues and open business opportunities
- › facilitate meaningful connections between businesses, defence industry primes and major contractors, government organisations and academia including through regular formal and informal networking events and workshops
- › build on existing industry capability through workshops and funding programs such as the Defence and Aerospace Industry Development (DAID) Fund.

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Deputy Premier's Advisory Council on Defence Industry and Jobs

Comprised of senior representatives from defence industry primes, SMEs, our Strategic Defence Advisors and Queensland Government representatives, the Deputy Premier's Advisory Council on Defence Industry and Jobs provides high-level policy and strategic advice on the state's defence industry development and investment attraction priorities, to capitalise on Queensland's competitive advantages and defence industry capabilities.

Regional offices

Queensland is uniquely placed to support Defence through its strong geographically-dispersed regional communities. The State's regional centres of Cairns, Townsville, Rockhampton, Gladstone, Bundaberg, and Toowoomba support a significant ADF presence nearby or provide vital port and freight access for Defence.

Our network of 12 regional offices provides strategic support and regional development services throughout Queensland with a focus on three key objectives: expanding businesses, growing industry and developing our regions. Our regional offices deliver industry capability services and programs, as well as tailored support, to develop growth plans and improve business efficiency. They not only help to increase knowledge, capability and competitiveness of businesses but facilitate connections between businesses and primes so that local businesses understand the requirements of the industry and primes are aware of capable local suppliers they could work with. Our regional offices have strong relationships with key regional stakeholders making them a valuable resource to help major project proponents meet and exceed local purchasing targets or requirements.

Queensland Jobs Fund

The Queensland Jobs Fund brings together the Queensland Government’s current flagship industry development programs to boost the state’s industry footprint, create jobs and strengthen Queensland’s economy. Through the Queensland Jobs Fund, companies with projects that have the potential to deliver ongoing economic benefits can seek government support to overcome barriers and realise opportunities.

Regional manufacturing hubs

The Queensland Government’s regional manufacturing hubs provide manufacturing businesses with expert advice and support to transition to advanced manufacturing. Located in Cairns, Townsville, Mackay, Rockhampton, Gladstone and the Gold Coast, each hub offers access to a wide range of services including business development programs, skills development and training programs, and awareness of advanced manufacturing.

Trade and Investment Queensland

As the Queensland Government’s global business agency, Trade and Investment Queensland showcases Queensland’s export capabilities, promotes Queensland as an investment destination and connects Queensland companies with global businesses to maximise investment and export opportunities. TIQ provides a suite of services to Queensland and international clients to achieve export and investment outcomes for Queensland’s defence sector.

Department of Employment, Small Business and Training (DESBT)

DESBT invests in the delivery of training and skilling infrastructure to help TAFE Queensland deliver the high-quality training that meets the needs of industry. In 2021, DESBT commenced the Equipping TAFE for our Future initiative, a \$100 million Queensland Government commitment over three years to deliver training infrastructure projects that support training and skill development in priority industries. TAFE Queensland also provides a range of services to help support transitioning Australian Defence Force (ADF) members to re-enter the workforce after exiting the Defence Force, thereby leveraging and re-purposing their existing skills.

Queensland’s First Nations businesses

The Queensland Government is committed to supporting First Nations businesses, communities and peoples to participate in the Queensland economy by:

- › driving economic growth and enabling well-planned, inclusive and resilient local communities
- › reframing the relationship with First Nations peoples and the Queensland Government by enshrining the state’s commitment towards the delivery of the Moving Ahead Strategy, Reconciliation Action Plan, Cultural Capability Framework, Cultural Capability Action Plan, Path to Treaty, Closing the Gap commitments and the Queensland Indigenous Procurement Policy.



Enabling industry framework

The enabling industry framework for defence industry includes both enabling (horizontal) industries that have a broad impact on the economy with multiple supply chains and highly specialised (vertical) industries that are inclined to have specialised or single sector supply chains. The enabling industry framework provides both military and commercial opportunities in Queensland. ▶

Advanced manufacturing: The Queensland Advanced Manufacturing 10-Year Roadmap and Action Plan will see traditional manufacturers transition to advanced manufacturing and create innovative world leading businesses.

Aerospace: The Queensland Aerospace 10-Year Roadmap and Action Plan identifies that the global market outlook presents manufacturing and sustainment opportunities for the new joint strike fighter global fleet supply, brazing and heat treatment for avionics and components, maintenance, repair and overhaul (MRO) and new opportunities for composites and advanced materials.

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Space: The Queensland Space Industry Strategy aims to position Queensland as the leading centre in Australasia for launch activities, ground systems, Earth observation, niche manufacturing, robotics and automation for space. These support sovereign capabilities in satellite communication, launch and space-enabled services.

Biomedical: The Queensland Biomedical 10-Year Roadmap and Action Plan sets out a program to support, grow and attract biomedical enterprises. The biomedical sector has a strong role to play in advanced development and manufacture of medical countermeasures (MCM) products, including point-of-care diagnostics, vaccines and therapeutics for protection against emerging infectious diseases and pandemics.

Biofutures: The Queensland Biofutures 10-Year Roadmap and Action Plan articulates the activities that will grow the emerging bioenergy and biomanufacturing industries that have global growth potential. It outlines how Queensland can capitalise on its competitive advantages, realise opportunities for growth and overcome challenges in the development of a leading industrial biotechnology and bioproducts sector.





Image courtesy of
Department of Defence



Priority actions

Priority actions

Strategy 1 **Grow Queensland's defence industry capability** ▶

Priority Action 1.1

We will work with Queensland industry to strengthen its defence business capability by:

- 1.1.1 delivering capability development programs across Queensland and working with key partners to expand and identify other programs critical for industry capability development
- 1.1.2 engaging with Industry to understand future workforce needs and identify solutions and pathways with educational institutions and training providers
- 1.1.3 facilitating industry engagement between other sector advanced manufacturers and research institutions, to encourage wider participation in defence projects and the transfer of skills, technology, and innovation
- 1.1.4 supporting initiatives such as ReefWorks and TAS DCRC and investing in infrastructure such as the QFTR to capitalise on Queensland's strengths in autonomous systems including collaboration between research institutions and industry
- 1.1.5 engaging with industry to profile key capabilities to inform future policy directions and industry strategies.

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Priority Action 1.2

We will progress Queensland's defence industry development and assist them to access defence supply chains by:

- 1.2.1 providing assistance through the Defence and Aerospace Industry Development (DAID) Fund to adopt contemporary manufacturing processes and obtain compliance with internationally recognised industry certifications and accreditations such as ISO 9001
- 1.2.2 promote awareness of funding programs offered by other Queensland Government and Commonwealth Government agencies
- 1.2.3 connecting SMEs with capability development services and programs offered by the Commonwealth and other third-party providers
- 1.2.4 maintaining ongoing engagement with the Australian Defence Organisation and industry peak bodies such as the Australian Industry & Defence Network (QLD) and Australian Industry Group to identify supply chain opportunities
- 1.2.5 identifying critical skills and capability gaps in Queensland's defence industries and supporting innovative and targeted solutions to positively contribute to enhancing the skills base within Queensland.



Strategy 2

Significantly increase Queensland's defence industry contribution to the national and global market ▶

Priority Action 2.1

We will work to secure a greater portion of national and international defence work across Queensland by:

- 2.1.1** maintaining Queensland's competitive position through partnering with key defence stakeholders to attract major defence projects with inter-generational sustainment horizons, such as LAND 400 and the MQ-28 'Ghost Bat', to Queensland
- 2.1.2** co-ordinating project-specific supplier days, business to business engagement and Defence opportunities forums to highlight upcoming procurement projects
- 2.1.3** actively working with industry to identify defence projects that align with Queensland's industry strengths and capabilities to grow the state's economy and jobs
- 2.1.4** supporting the Australia Singapore Military Training Initiative to maximise opportunities for local businesses
- 2.1.5** identifying, promoting and assisting SMEs to access supply chain opportunities in defence equipment projects and capability systems such as armoured vehicles and joint strike fighter
- 2.1.6** connecting Queensland defence companies with global supply chains and attract key global supply chain companies to locate in Queensland.

Priority Action 2.2

We will leverage Queensland's strategic geographical significance and identify supply-chain opportunities for our regions through:

- 2.2.1** the Defence Industry Hubs supporting local businesses to build capability and diversify their business models to access lucrative opportunities in the global defence supply-chain
- 2.2.2** supporting the long-term development of the state's maritime sector including:
 - a) identifying and supporting the development of Queensland's current marine infrastructure to align with future defence and industry requirements
 - b) identifying and supporting Queensland's skills base to align with contemporary and emerging capability requirements
 - c) supporting Defence domestic and foreign naval stopovers in Queensland ports including naval fleet maintenance, repair, and overhaul (MRO)
 - d) collaborating with the manufacturing hubs to support maritime industries across Queensland
- 2.2.3** supporting key regional projects that align with Queensland's defence industry strengths.

**Priority
Action 2.3**

We will work with Defence to maximise opportunities for Queensland industry in planning, developing and sustaining defence capabilities across the state by:

- 2.3.1** facilitating briefings for local suppliers on defence-related projects and opportunities such as the expansion of facilities and ongoing garrison support at Queensland ADF bases
- 2.3.2** ensuring Queensland’s industry needs are recognised through input into the Defence sector skills analysis and work to inform Defence industry policies and sovereign industrial capabilities
- 2.3.3** coordinating Queensland’s response to addressing the needs of the ADF, industry and the community through strategic engagement at defence forums, sub-working groups and ad hoc working groups.

Strategy 3

**Promote Queensland’s
defence industry capabilities** ▶

**Priority
Action 3.1**

We will promote Queensland’s industry capability to national and international defence markets to facilitate exports partnerships and collaborations and to attract investment and international defence companies to Queensland by:

- 3.1.1** showcasing Queensland defence industry capability at relevant national and international trade events
- 3.1.2** working in partnership with Team Defence Australia, TIQ and other Queensland Government agencies to maximise opportunities for our state's defence industry to access new markets
- 3.1.3** maintaining a contemporary and dynamic multi-faceted communication strategy including relevant digital and online presence – such as the Queensland Defence Industries Capability Directory - that highlights Queensland’s defence industry capabilities, innovation and agility.



Glossary

ADF	Australian Defence Force
AEWC	Airborne Early Warning and Control
ASMTI	Australia Singapore Military Training Initiative
AUKUS	Partnership between Australia, United Kingdom and United States
C4ISREW	Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance, Electronic Warfare
CRC	Cooperative Research Centre
CSIRO	Commonwealth Science and Industrial Research Organisation
Defence	Australian Defence Organisation comprising both the military and public service elements
DJQ	Defence Jobs Queensland
DSTG	Defence Science and Technology Group
EO	Explosive Ordnance
ISR	Intelligence, Surveillance and Reconnaissance
MILVEHCOE	Military Vehicle Centre of Excellence (Ipswich)
MRO	Maintenance, repair and overhaul services
QDSA	Queensland Defence Science Alliance
QFTR	Queensland Flight Test Range
QUAD	Security alliance of United States, India, Japan and Australia
R&D	Research and Development
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
RPAS	Remotely piloted aircraft systems
SEQId	South East Queensland
SICP	Sovereign industrial capability priorities
SME	Small and medium-sized enterprises (up to 200 employees)
STEM	Science, technology, engineering and mathematics
TAS DCRC	Trusted Autonomous Systems Defence Cooperative Research Centre
UAS	Uncrewed aerial systems

Notes

- 1 Businesswire (13 December 2021). *Precision Guided Munition Market Global Forecast to 2026: Tactical Missiles Segment Projected to Lead Precision Guided Munition Market from 2021 to 2026 - ResearchAndMarkets.com* available at <https://www.businesswire.com/news/home/20211213005510/en>
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- 4 Department of Defence (2020). *2020 Force Structure Plan*.



