

White Paper

Building the foundations for a dynamic defence innovation ecosystem

September 2026



A COLLABORATIVE PARTNERSHIP BETWEEN





Problem Statement

Are we missing an opportunity to equip the ADF with the most effective technologies to deliver real asymmetric advantage?

Defence is a complex and challenging market for new entrants. If the barriers to entry are too high, the most talented innovators will choose to focus on other sectors, and we will miss opportunities to equip ADF personnel with the most effective technologies to achieve real and sustained advantage.

Abstract

In collaboration with defence industry, academic and government partners, Defence Trailblazer (DTB) was established to strengthen Australia's defence capabilities with cutting edge technologies and solutions, while equipping the next generation of innovators and early-stage companies with the specialised knowledge and skills to meet the needs of defence.

Over the last 4 years DTB has delivered a curated program supporting innovators to progress the most promising innovations and streamline their commercialisation journey into the defence market. The DINAMIC Program is an important part of the work that DTB has undertaken to achieve its mission. It has exceeded its targets and has facilitated the development of 100+ early-stage companies, with over a dozen securing defence market entry or undergoing trials with the ADF.

This paper distils the learnings from the evolution of DINAMIC to identify the essential ingredients needed to nurture innovation and build an effective pipeline of defence-ready innovation that can support and protect our ADF personnel. Such a pipeline will enhance the quality of products, services and technologies that are presented to the ADF, its innovation agencies and the Australian defence industry.

Chief of Army Lieutenant General Susan May Coyle, AM, CSC, DSM, with Emily Pyke, Founder of UndaTech and a participant in the DINAMIC Program since 2024, at Defence Trailblazer's DTECH26 event at Parliament House, showcasing Australian defence innovation.





Discussion

There are many reasons that defence is unlike any other market:

- The market is conservative (risk-averse) and therefore slow to adopt breakthrough technology
- The market is highly regulated and, in many ways, opaque
- Procurement processes are lengthy, laborious, expensive and particularly demanding on suppliers
- Procurement decisions are shaped by multiple stakeholders within Defence who may be looking at the opportunity through very different lenses – *the desired value proposition may look quite different at the tactical, operational and strategic levels*
- In order to manage risk, the technical and commercial maturity of suppliers to defence are seen as critical considerations
- Testing and evaluation processes are highly demanding and are often geared towards ‘bullet proof/gold plated’ solutions
- There are constraints on the nationality of those involved in developing and commercialising technology
- There are constraints on the provenance of companies and their suppliers – the ownership and sources of funding that will be acceptable to Defence
- The level of physical and cyber security required is demanding for early-stage companies.

These things make Defence much more challenging than other sectors – consequently the “ticket to play” for Defence is much harder to get. The most agile and capable innovators are typically early-stage companies, and they are at a significant disadvantage in this market.

The DINAMIC Program was established to help early-stage companies navigate through this process as they build the technologies that can energise the defence innovation ecosystem.





The Need

The procurement, deployment and sustainment processes that have evolved over time were designed to ensure that the equipment and systems that our service men and women depended on would not fail them.

There is a growing realisation that the changing nature of conflict and the speed with which new tactics and capability are being deployed requires a more agile and flexible system. This requires us to embrace innovation in new and urgent ways.

Sovereign capability is now recognised as a non-negotiable imperative:

- Need for less dependence on non-aligned economies
- The supply chain vulnerability given Australia's geographic isolation
- The changing nature of conflict requires much greater flexibility and agility in the adoption of technology.

We need our most inventive problem solvers focussed on defence priorities. If we are to achieve sustained capability advantage, we need to open commercialisation pathways to support them.

Requirements

Building a sustainable innovation engine for asymmetric advantage requires:

- Alignment of R&D effort with defence priorities
- Incentives for research and commercialisation aimed at defence use cases
- Opportunity for defence personnel and veterans, who have deep understanding of a particular problem, to access innovation and commercialisation pathways
- Curation and maintenance of a complete ecosystem of support for innovators and early-stage companies to become both mature and sustainable
- Measures of Readiness

Mature and Sustainable Early-Stage Company

- ✓ Defence Readiness
- ✓ Technology Readiness
- ✓ Commercial Readiness
- ✓ Investment Readiness
- ✓ Export Readiness



What Has Been Achieved

In the short time since its launch in 2023, DINAMIC has supported innovators and early-stage companies to progress their technology and commercial credentials.



520+

innovators supported



100+

early-stage companies supported

SHORT & MEDIUM-TERM IMPACTS



01

50

Early-stage companies selected for DINAMIC's 18-month pathway

DTB supported dual-use innovations, veteran-led companies and university spin-outs



02

12

Trusted equity partners

DTB DINAMIC companies are being backed as they scale in an emerging defence innovation ecosystem



03

43

DINAMIC companies have secured sales or Defence trials

DTB empowered innovators to develop deployable prototypes



04

26

DINAMIC companies are engaging with Australia's allies

DTB facilitated dual-use and international market opportunities



05

~1/3

Veteran entrepreneurs

~33% of Entrepreneurial Foundations for Defence participants have been veterans or currently serving ADF members



06

\$45.8M

Private capital unlocked

External funding facilitated by DTB for DINAMIC early-stage companies

Case studies of successful DINAMIC participants can be viewed on the Defence Trailblazer website dtb.solutions/innovation/



Successful DINAMIC participants

Some examples of successful DINAMIC participants include:

COMPANY	TECHNOLOGY	COMMERCIAL TRACTION	HIGHLIGHTS
Advent Atum	Intelligent firing control systems	Ukraine and German sales	Aboriginal ownership
Breaker Industries	Voice controlling teams of autonomous systems	US office and US partnerships. \$6m seed round investment	Scaling rapidly
DefenSight	CBRN detection technology	Established US partnership	University spinout, female founder
Ghostfire Systems	Electronic battlefield simulators	Partnering US company on proposals to US DoW	Veteran founded
Nautic Technologies	Automated buoyancy control for divers	UK sale	Veteran founded
Praetorian Aeronautics	Autonomous aerial systems (UAS) and AI-enhanced control systems	Seed raise. Actively promoting its tech in US and Europe	Scaling rapidly
Seitec	Passive seismic sensing for detection & tracking	\$700k US trial and VC funding of \$4m	Veteran founded
UndaTech	PPE base layers and undergarments	EU sale	Veteran founded, female founder



The 2024 (top), 2025 (bottom left) and 2026 (bottom right) Entrepreneurial Foundations for Defence cohorts, representing three years of emerging defence innovators and entrepreneurs.



Key Learnings

What working with over 100 emerging companies has taught us about supporting defence innovation.

- A traditional entrepreneurship accelerator is insufficient to achieve the uplift required
- A successful program will benefit from:
 - Leveraging expertise from within and beyond the ADF and defence industry
 - Providing access to diverse perspectives, mentoring and coaching from experienced practitioners across the defence commercialisation landscape
 - Facilitating a culture of customer centric, iterative product development
 - Encouraging a mature and disciplined approach to product development
 - Reinforcing the key requirements for success from Day 1 - putting in place the key elements of defence readiness early in the journey
 - Preparing both founders and technology leaders for the evolution of their leadership journey - managing a potentially high growth venture and high-performing technology function
 - Giving visibility regarding the progress of individual early-stage companies to trusted investors that will be asked to fund growth
 - Ensuring that founders develop the skills and confidence to manage negotiations with much larger stakeholders (potential partners, prime contractors, venture capital firms etc).
- Curating the experience to ensure that there is the opportunity for founders to support one another on the journey. The extent to which this has happened throughout the DINAMIC Program implementation has been a key ingredient in its success
- Being a not-for-profit program run as a partnership between two universities, we have had the benefit of being able to draw upon a generous community of contributors that are strongly aligned with the DTB mission. This has dramatically amplified the impact of the program beyond what the limited funding could otherwise have achieved. This network of experienced and well-connected specialists is an incredible asset
- We view this as an essential **ecosystem** that has enabled a very cost effective, defence focussed, economic development outcome. It takes a village to raise a successful new entrant into Australia's defence industry - so important to achieving success with our Defence Industry Development Strategy.



The Opportunity

With the aim of preserving the ecosystem — the network, the knowledge and methodologies that have been so successful — a proposal has been developed to continue to run the DINAMIC Program within a new not-for-profit company to be known as the Australian Defence Industry Incubator (AUSDII).

DINAMIC participants and delivery partners have indicated strong support for AUSDII and we are now seeking interest from government, industry and academia to contribute to the further development of this defence innovation ecosystem.

The dividends to the Department of Defence, defence industry and investors will be substantial:

1. Access to a pipeline of novel technologies and capability built with defence use cases in mind
2. Working with early-stage companies that have a level of maturity and defence readiness that makes them attractive as suppliers and partners
3. Knowing that innovators have received AUSDII validation will save time and instil confidence
4. Access to unique technologies offering capability advantage that can be exported to aligned countries.

A dynamic ecosystem of support for early-stage defence innovation is essential for the continued security of Australia's interests.



At the DTECH26 Capability Showcase, 22 DINAMIC participants along with 30 other Defence Trailblazer industry partners demonstrated their innovative capabilities to senior parliamentary, Defence and industry leaders.

Help Build Australia's Defence Innovation Future

DINAMIC has demonstrated what is possible when innovators, industry, Defence and academia work together with a shared purpose.

As Defence Trailblazer concludes, the opportunity remains to preserve and grow this proven innovation ecosystem through the Australian Defence Industry Incubator (AUSDII).

Partner with us to accelerate the next generation of sovereign defence capability.

Contact

To get involved visit dtb.solutions/AUSDII or contact:

Dr Sanjay Mazumdar
Executive Director, Defence Trailblazer
info@ausdii.org.au

For further information or to discuss the ideas outlined in this paper, please contact:

Paul Daly
Entrepreneurship Program Manager
paul.daly@adelaide.edu.au



A COLLABORATIVE PARTNERSHIP BETWEEN



SUPPORTED BY



Australian Government
Department of Education