





# DEFENCE INNOVATION NETWORK'S PILOT PROJECT GRANTS

Guidelines for applicants 2024-25

www.defenceinnovationnetwork.com

#### 1. Purpose

- 1.1. The DIN Pilot Projects is an annual, competitive program supporting collaboration across research disciplines. The scheme is administered by the Defence Innovation Network and funded by the NSW Government.
- 1.2. The key objective of the DIN Pilot Projects is to conduct a rapid feasibility study on new ideas for Defence, and develop these ideas into concepts or technology that can attract further investment from Government or industry. In addition, Pilot Projects should demonstrate high potential to satisfy an existing or emerging Defence capability need, or a current or emerging defence industry need.
- 1.3. Problem statements, which serve as a basis for a call-out for proposals, are sourced from Defence end users and have been shaped into relevant problem statements for university research.
- 1.4. Applicants are expected to consult with the problem statement's originator to ensure alignment with their identified needs.

#### 2. Support available

- 2.1. DIN will endeavour to fund one project per problem statement but reserves the right to prioritise projects for maximum impact.
- 2.2. Successful proposals can receive up to \$150,000 for projects scoped for 6-12 months.
- 2.3. The project funding must be distributed amongst participating universities to demonstrate genuine collaboration. 15% of the total budget (\$11,250) is considered as minimum funding distribution per participating university.

#### 3. Eligibility criteria

- 3.1. Project proposals must be led by a NSW-based DIN member university with input from at least one other DIN member university.
- 3.2. Australian National University (ANU) may participate in projects and may potentially receive DIN funds in exceptional circumstances where ANU has the specific capability required to fulfil or enhance the likelihood of the project's success or impact.
- 3.3. Projects funded by the DIN Pilot Project program must be defence-relevant and capable of generating additional funding or investment to facilitate progress towards commercialisation.
- 3.4. All proposals must be approved and supported by each university participating in the project. Researchers must connect with the university coordinators listed in section 6.2 to receive support letters for their applications.
- 3.5. A chief investigator can lead a maximum of two projects in four years. There is no limit on how many projects a researcher can participate in.
- 3.6. DIN encourages the participation of diverse project teams in the Pilot Project program. Gender, culture, and career level diversity of project teams are strongly encouraged.
- 3.7. Industry partners may be part of the project team applying for Pilot Project funding, but the DIN funds cannot be used to cover industry partner expenses.
- 3.8. To be eligible, an industry partner must have an Australian Business Number and be registered as a company, entity or individual who will agree to form a company to enter into a grant agreement.
- 3.9. A separate agreement between the industry partner and the Lead university has to be signed where an industry partner is part of a project.

#### 4. Use of funds

- 4.1. Funding from the DIN Pilot Project program will take the form of a cash contribution following the execution of a Multi-institutional Collaborative Agreement between participating universities and the Defence Innovation Network (administered by UTS).
- 4.2. Funds must be used to support the research project described in the application directly and can include the following items:
  - Direct salary costs for employees working on the project, including chief investigators, early career researchers, research assistants etc. Where chief investigator salaries are claimed, this must be specifically justified and is subject to approval. DIN's preference is to use funds for research associates and fellows working directly on the project.
  - On-cost salary expenses up to a maximum of 30% of direct salary costs and consistent with the university policy. On-costs must be itemised in the application and can only include the following items: superannuation, payroll tax, payroll tax on superannuation, worker's compensation, long service leave, and maternity leave. In addition, universities must submit their on-cost salary expenses, itemised by each category, as an attachment to the application form.
  - Equipment, software, material and consumables essential for the project. Funding will not be provided for equipment and consumables considered for broad general use or already held by the university.
  - *Travel costs* essential to the project for the employees working on the project.
  - Stipends for HDR students working on the project.
- 4.3. Budget items that are not supported by the Pilot Project funding and should NOT be requested in the budget include:
  - Infrastructure (overhead) costs related to the general operations of the university shared among projects and functions.
  - Salaries of industry partners working on the project or any other industry partner expenses.
  - Costs not directly related to the project, including but not limited to conference fees and travel, workshop expenses, entertainment costs, professional membership fees, professional development courses, visas, relocation costs, insurance and other indirect costs.
- 4.4. All expenses must be itemised in the budget section of the grant application. Grant funds must be spent in accordance with this budget, and any requests for variations must be made to the Defence Innovation Network Manager and approved in advance.
- 4.5. DIN reserves the right to tailor funding support according to what it believes is required to deliver the project.

#### 5. Selection criteria

- 5.1. The DIN Technical Review Panel, appointed by the DIN Steering Committee, will evaluate applications against information and evidence provided concerning the selection criteria:
  - Identified need in Defence
  - Potential for impact and implementation pathway
  - Novelty and potential to become world-leading
  - Technical/ scientific merits, scientific and technical risk, best collaborative team

5.2. The DIN Technical Review Panel will make the final decision regarding funding allocations to projects and submit this decision to the DIN Steering Committee for noting.

#### 6. Application process

- 6.1. Applicants must submit an electronic copy of the application by the due date to info@defenceinnovationnetwork.com
- 6.2. All applicants must communicate with their university coordinator to ensure that they have optimum visibility of the progress of intended submissions.
  - Australian National University /Julieanne Dougherty/
  - Charles Sturt University / Ganna Pogrebna/
  - Macquarie University /<u>Matt van Breugel</u>/
  - University of New South Wales /<u>Joshua Sherman</u>, <u>Matt Hand</u>/
  - University of Newcastle /<u>PVC Research</u>/
  - University of Sydney /<u>Adeline Williams</u> /
  - University of Wollongong /<u>Robert Beretov</u>/
  - University of Technology Sydney /<u>Murray Dickson</u>/
  - Western Sydney University /<u>Andre Urfer</u>
- 6.3. Applicants are expected to correspond with the originator of the problem during the proposal drafting stage to ensure clarity of the problem's objectives and alignment with the end-user requirements. Forming teams are expected to connect with the problem originator by contacting DIN at <u>info@defenceinnovationnetwork.com</u>. Successful teams will also be expected to communicate with the problem owner for the duration of the project.
- 6.4. Problem owners can become contracting partners in the project. Where the problem owner is an industry partner, DIN encourages universities to offer the problem owner the first right to commercialisation IP.
- 6.5. Applicants should identify in their application (including attachments) any information that needs to be treated as confidential.

#### 7. Selection Process

- 7.1. DIN will collect applications and conduct an initial completeness review of them. Advice regarding eligibility will be provided to the DIN Technical Review Panel.
- 7.2. The DIN Technical Review Panel will assess each application on a competitive basis relative to the criteria and other applications.
- 7.3. The DIN Technical Review Panel will seek further advice and request additional assessment from subject matter experts. Experts may include DSTG scientists, problem originators, and academics.
- 7.4. All applicants will be informed of the outcome and the decision on their applications, whether or not they are successful.
- 7.5. The indicative timeline of the selection process is as follows. DIN reserves the right to amend timelines as required.

08- Apr-24	Call for Proposals
17-May-24	Applications due
21-Jun-24	Technical Review Panel Assessment
24-Jun-24	Result announcement
Jul-Sep-24	Contracting
01-Oct-24	Project Start

#### 8. Funding Agreements, Reporting Requirements & Acknowledgement

- 8.1. All applicants who accept a grant will be required to enter into a formal Multi-institutional Agreement. The Agreement will specify the obligations and accountabilities of the recipients.
- 8.2. Where an industry partner is part of the project, a separate agreement between the industry partner and the Lead university has to be signed before the project work can start.
- 8.3. Projects must not start until agreements are fully executed.
- 8.4. The lead organisation will be required to provide a final report to the DIN (Administered by the University of Technology Sydney) within two months of the project's end date.
- 8.5. The final report consists of a Technical Report and Financial acquittal. The Lead organisation submits Financial acquittal for the project as a whole, including Collaborating organisations' Financial acquittal.
- 8.6. All expenditures must be in accordance with the project description and broad structure of the proposed project costs detailed in the proposal. In addition, the Lead organisation must retain evidence of the expenditure.
- 8.7. All changes to the project cost or roll-over of the funds must be justified and approved by the DIN (administered by UTS).
- 8.8. Any material or research findings published related to a DIN Pilot Project-funded activity must include acknowledgement of DIN Pilot Project funding and the NSW Government in a form: "We thank the Defence Innovation Network and NSW State Government for financial support of this project through a DIN Pilot Project grant."

#### ANNEXURE A: DIN SECURITY POLICY

Based on security governance, the DIN reserves the right to cease funding for DIN projects.

In the context of national Defence, security refers to an organisation's capability to assure the Australian Government that information and assets sensitive to national interests are safeguarded.

Good security governance includes documented policies and procedures that translate into practical outcomes, including personnel training, cybersecurity and safeguarding data networks and intellectual property, and enhancing the physical security of properties, such as access to buildings and facilities.

Universities are open academic communities, but as businesses and public entities, they routinely employ a range of security measures to ensure student safety and protect intellectual property. These measures include – but are not limited to – access controls, information network firewalls, asset management and tracking. It is a standard practice among DIN member universities to manage security classifications up to COMMERCIAL-IN-CONFIDENCE, with higher security measures implemented on an individual basis as required.

While the core DIN team is responsible for managing information confidentiality associated with the Defence Innovation Network's day-to-day running, security governance for defence research – including that funded by the DIN through Pilot Projects – is the responsibility of the DIN member universities. Universities can develop and demonstrate their security governance through membership in the <u>Defence Industry Security Program</u>.

DIN will consult with Defence experts on sensitivities associated with proposed research and collaborations to assess the level of security required at various project stages. The consultation will refer to the DISP Decision Matrix, which is available <u>online</u>. Security recommendations will be passed to university research offices through DIN university coordinators.

#### ANNEXURE B: GUIDELINES FOR TECHNICAL PANEL REVIEWERS

Reviewers will be asked to agree to confidentiality terms. Reviewers must not correspond with applicants or interested parties regarding the proposal during, or after, the review process.

DIN attempts to select reviewers with no conflict of interest. Where a reviewer believes they have a conflict of interest, no review is required, but an explanation of the conflict of interest is requested. In such cases, the DIN will source an alternate reviewer. Conflicts of interest may be:

- Direct; i.e. you are an interested party in a proposal;
- Indirect; i.e. you have an association with one or more of the institutions involved in the proposal;
- Involvement in a competing proposal or business; i.e. you have direct or indirect involvement with a competing bid or business activity.

Reviewers are asked to apply judgment when assessing science excellence and impact relative to the research stage and the area of impact. In principle, the DIN will co-fund research at any TRL, which can be thought of as generating new ideas, developing emerging concepts, and leveraging proven ideas.

Reviewers should assess the proposal against the supplied criteria and are expected to objectively appraise it against these criteria, i.e., undertake their assessments following the direction in these guidelines. An assessment template is provided, and reviewers are asked to assess only against the specific criteria identified for their institutional type (DIN, DSTG or University). Reviewers should use the information contained in the application and the supplied supporting documentation and may, in addition, employ any other information of relevance to make the assessment. If additional information is used in the assessment process, reviewers should keep a record of this information and its origin, and disclose it as evidence to the Technical Review Panel.

Reviewers should provide explanatory text to support their assessment, including references to supporting key evidence, such as scientific publications, strategic guidance documentation, patent information, etc. It is vital that their comments support your score, reflect the assessment, and are accurate, professional, and honest.

#### ANNEXURE C: ASSESSMENT CRITERIA

For Pilot Projects, the following criteria will apply, falling into IMPACT and EXCELLENCE.

- Identified need in Defence (technology or capability)
- Potential for impact and implementation pathway
- Novelty and potential to become world-leading
- Technical / scientific merits, scientific and technical risk, best collaborative team

## NOVELTY AND POTENTIAL TO BECOME WORLD-LEADING; TECHNICAL FEASIBILITY AND RISK; BEST COLLABORATIVE TEAM (EXPERT REVIEWERS)

What is the quality of the proposed research, science, technology, or related activities?

You may wish to consider particularly:

- a. **The novelty and originality of the proposal**. The idea itself does not have to be novel, but the sum of the concept and the application must be distinctive. We are looking for 'fresh thinking' rather than an obvious extension of existing research. If you are aware of similar work, please provide a reference. Similar work will not necessarily disgualify a proposal.
- b. **The scientific credibility of the idea and its logic**. Is the scientific basis for the idea established well in the proposal?
- c. **The quality of the science, description of critical steps** (including go/no-go steps), and methodology. Is the proposed research fit for the proposed outcome and impact sought?
- d. **The degree of scientific rigour**, e.g., the accuracy of the approach and hypothesis. Please advise how either might be improved.
- e. **The scientific risks and uncertainties identified in the proposal.** Any omissions and how they are managed. Are the timescales realistic? Is the size of the risk and plans to mitigate that risk consistent with the stage of research?
- f. **Team composition.** Does the team represent a collaborative effort between DIN member universities? Do the team members possess the necessary expertise that is consistent with the needs of the project? Does the team possess other useful expertise, like previous experience or engagement with Defence or industry partners? Does the team have the necessary skills and track record to deal with the project?

When reading the proposal, it would be valuable if you could consider the following questions in your scoring and commentary:

- Comment on the strengths and highlights of the proposed research.
- Highlight the deficiencies or weaknesses of the proposed research.
- Were there any concerns or issues around the proposed research relating to the technical team, prior events, existing technologies, and existing knowledge/ research?

#### POTENTIAL FOR IMPACT AND IMPLEMENTATION PATHWAY (TECHNICAL REVIEW PANEL)

You may wish to consider:

 Has the applicant clearly articulated how this opportunity can be transformative for Defence or the defence industry/company in the future?

- Is the proposed implementation pathway credible relative to the proposed research stage, bearing in mind the TRL or the research?
- Are the scale and breadth of proposed benefits credible given the impact area, and are these consistent with the proposal's outcomes?

'Implementation pathways' are expected to demonstrate that the proposal has considered specifics or mechanisms by which outputs may eventually become implemented or commercialised.

The credibility of indicative implementation pathway(s) to deliver benefits to Australia will be assessed, and it may not be limited to a single industry partner, or the end user and may be uncertain. A 'credible' implementation pathway analysis will consider the characteristics of the end-use area and is not a generic description.

The information sought is indicative only but should impart confidence that the research team has considered this aspect, even though the information may be tentative and uncertain. It is recognised that early-stage investigations are likely to have less concrete implementation pathways with higher-level information at the generic beneficiary and end-user level, while more advanced (i.e. higher TRL, near-to-market) studies will present a clearer view of a pathway to impact and implementation.

'Impact' will be measured by one or more of the scale, extent, and urgency of Defence need or transformative nature of the outputs (i.e. creating new technologies or solutions altogether).

'Scale' means the size, or how much, the outcomes will benefit Australia and Defence.

'Extent' means how widely the outcomes will benefit Australia or Defence.

For example, a given technology may require only five units in any given Defence Force. Hence, the associated outcomes of this technology will be small (unless it is of very high value). If the technology is of such a nature that it is likely to be taken up by every Defence Force in which it can be implemented, then it will have a vast extent of coverage.

'Urgency of Defence need' can be measured against expressed priority areas, such as in the Defence Strategic Review or via other mechanisms.

A proposal that demonstrates high impact would receive the following type of comment:

The potential benefits are enormous and have impacts that are nationally significant across the whole of a sector or several sectors. The estimates of benefits are credible and clearly described. The proposed implementation pathways are of an extremely high standard and completely credible, and the supporting information is satisfactory in scope.

#### **RANKING SYSTEM**

#### IMPACT

#### **1.** Identified Need in Defence<sup>1</sup>

- [0] None: No apparent relationship to Defence IS&T priorities
- [1] Low: Peripheral connection to Defence IS&T priorities (substantial modification would be required to apply the outputs to a Defence problem)
- [2] Medium: Research is closely related to a Defence problem, or is developing technology of direct relevance to a Defence application. One industry partner is involved.
- [3] High: Working directly on a Defence problem in partnership with Defence. Two or more industry partners are involved.

#### 2. Potential for impact and implementation pathway<sup>2</sup>

- **[0] None:** The proposal demonstrates low impact and/or a poorly articulated implementation pathway.
- [1] Low: The proposal shows some impact and/or a reasonably well-developed implementation plan.
- [2] Good: The impact is likely to be significant, and the implementation plan credible.
- [3] Outstanding: There is likely to be a high impact if successful, and the implementation plan is clear, credible and contains specific and detailed end-use information.

#### EXCELLENCE

#### 3. Novelty and potential to become world-leading

- [0] None: Is routine and presents little or no novelty.
- [1] Low: Displays some novelty, but the outcomes are likely to be incremental.
- [2] Medium: Is differentiated, will lead to notably improved technology.
- [3] High: Distinctive approach that is highly likely to produce leading innovations or capability.

#### 4. Technical/scientific merits; Scientific and technical risk (science component)

- [0] Low: The proposal is uncompetitive and has significant weaknesses or flaws, such as a
  poorly developed or costed plan, no demonstrated ability that the investigators can deliver on
  the proposed research, or a lack of novelty or value. Risks are poorly articulated or are
  unmitigated.
- [1] Moderate: An interesting proposal. Developing expertise amongst investigators. Some concerns about either the resource estimate or the ability of the researchers to deliver based on their understanding of state of the art or their track record. The proposal may lack a compelling element. Risks are partly identified or inadequately mitigated. Risks outweigh the benefits.

<sup>&</sup>lt;sup>1</sup> Assessed by Defence experts

<sup>&</sup>lt;sup>2</sup> Assessed by Technical Review Panel

- [2] Good: High-quality research and a strongly competitive proposal. Investigators have provided evidence of previous ability to deliver. Risks have been well articulated and mitigated, although some residual risks might remain. The potential benefits outweigh potential risks.
- [3] Outstanding: Of the highest quality and at the forefront of research in the field. Well budgeted for the proposed statement of work. Soundtrack record of investigators. Risks have been adequately identified and mitigated.

#### 5. Team Technical/Scientific Merits; Collaboration and Track Record

- **[0] None:** The team consists of an individual lead researcher (with or without students, research associates) or has inadequate expertise to lead to a successful outcome.
- **[1] Low:** The team consists of two lead researchers from the same institution (with or without students, research associates).
- [2] Good: The team consists of two or more lead researchers from different institutions with fitfor-purpose expertise.
- [3] Excellent: The team consists of two or more lead researchers from different institutions that encapsulate the best expertise from across the DIN.

#### PILOT PROJECT ASSESSMENT FORM

Application Number:						
Title:						
Reviewer Name:						
Reviewer's Institution:						
Security - What level	of DISP men	nbership i	is recor	nmende	d for this proposal? <sup>3</sup>	
ENTRY	LEVEL 1	LEVEL 2	2 LE\	/EL 3		
unclassified research	n become sen encies on gov	sitive (e.g.	., perfor	mance th	ivities? At what point does hreshold, user requirements, nent, public perception or institutional	
Criterion 1 – Identified	I need in Def	ience				
Ranking (circle one):	0	1	2	3		
Comments:						
Criterion 3 - Novelty a	nd potential	to becom	ie world	l-leading	3	
Ranking (circle one):	0	1	2	3		
Comments:						
Criterion 4 – <b>Technica</b>	I and scient	ific merit/	Scienti	fic and t	echnical risk	
Ranking (circle one):	0	1	2	3		
Comments:						

### Criterion 5 – Team collaboration and expertise

<sup>&</sup>lt;sup>3</sup> Refer to https://www.defence.gov.au/business-industry/industry-governance/defence-industry-security-program/eligibility-suitability

Ranking (circle one): (	) <i>~</i>	1	2 3	3
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Comments:

#### Main strength

Please provide a brief comment (25-50 words) regarding the main strength of the proposal. Please provide constructive and respectful comments, which will be provided to applicants as feedback.

#### Main weakness

Please provide a brief comment (25-50 words) regarding the main weakness of the proposal. Please provide constructive and respectful comments, as these will be provided to applicants as feedback.