DEFENCE INNOVATION NETWORK
To go far, go together

DIN PILOT PROJECTS 2.0 2023

GUIDE LINES

1. About

1.1. DIN's Pilot Projects 2.0 program supports the maturation and commercialisation track of previously funded projects (through DIN's Pilot Project program), with the goal of enhancing the prospects for commercialisation of emerging technologies relevant to Defence.

1.2. The key objective of the DIN Pilot Projects 2.0 is to identify and fund completed Pilot Projects with the highest potential to become commercial products or services through technology maturation, as demonstrated by a robust and thorough TRL scheme that will develop advanced prototypes. In addition, DIN Pilot Projects 2.0 funding is expected to strengthen links between project teams, commercialisation partners and Defence and increase commercialisation capacity at DIN universities.

1.3. The scheme is administered by the Defence Innovation Network and funded by the NSW Government.

2. Funding

2.1. DIN will support two projects with eligible costs of up to $200,000 scoped for 12-18 months. Project budgets will be assessed on merit, and DIN reserves the right to amend project funding.

2.2. The project funding should be distributed amongst participating universities to demonstrate genuine collaboration. 15% of the total budget (up to $30,000) is considered as minimum funding distribution per participating university.

3. Eligibility

3.1. The Pilot Projects 2.0 scheme is open only to project teams that have previously received and successfully completed projects funded by the DIN Pilot Projects program.

3.2. A successfully completed project means that the project has already reached its end date, that project milestones were achieved, and the final reports were submitted to DIN.

3.3. Project proposals must demonstrate inter-university collaboration and involve at least two DIN member universities.

3.4. DIN encourages the participation of diverse project teams in the program. Gender, culture, and career seniority diversity of project teams are strongly encouraged.

3.5. Industry involvement and co-funding are strongly encouraged but are not necessary for a successful proposal. DIN funds cannot be used to cover the expenses of an industry partner. Similarly, strong connections with Defence Science and Technology Group or the Australian Defence Force are favourable.

3.6. Applicants must explicitly indicate how they will involve end users, either as participants or as points of contact as the project progresses to help ensure a fit-for-purpose technology maturation strategy.

3.7. To be eligible, an industry partner must have an Australian Business Number and be registered as a company, entity or individual that will agree to form a company to enter into a grant agreement.

3.8. 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 will take the form of a cash contribution following the execution of a Multi-Institutional Funding Agreement between participating universities and the Defence Innovation Network.

4.2. DIN funding will be paid to the lead organisation. The Lead organisation is responsible for distributing the funds to Collaborating organisations.

4.3. Project funding can be spent on eligible expenses incurred at participating universities only. Industry cash contributions have to be transferred and consumed at the universities.

4.4. 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 rather than CI salaries.
- *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 the attachment of 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 or top-ups for HDR students* working on the project. However, given the term of the projects (12-18 months), budget line items for PhD stipends must be specifically justified and are subject to approval.

4.5. Budget items that are NOT supported by the Pilot Projects 2.0 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.

4.6. 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.

4.7. DIN reserves the right to tailor funding support according to what it believes is required to deliver the project.

5. Selection criteria

5.1. DIN will evaluate applications against information and evidence provided in relation to the following selection criteria. Applicants should also take note of the instructions and guidance to reviewers below.

- **Excellence (25% weighting)**
  This component will focus on excellence targeting the production of an advanced prototype. Applicants should provide a detailed and credible plan of envisaged tasks that will advance the level of maturity of the proposed emerging technology. There will be some tolerance for exploratory work within the project plan when the nature of the exploratory work helps to refine the capabilities of the technology, but the focus should be firmly on maturing the technology to higher TRL levels.

- **Implementation plan (25% weighting)**
  The plan should provide a detailed set of tasks and validation steps that will demonstrate the achievement of TRL levels. The below links provide guidance on the complex nature of advancing TRL as the technology moves past the early prototype towards the advanced prototype stage. Concepts such as productisation and ruggedisation fall into scope within this section. The plan should delineate tasks in such a way that the individuals and organisations responsible for specific tasks are clearly identifiable.
  The identified tasks and responsibilities should link to the **Team** section below.
  Applicants should emphasise specific elements to be demonstrated / tested / validated, by which the attainment of the next TRL level will be achieved, using multiple criteria as set out in the files. End-user feedback and commercialisation partner participation should be identified and incorporated at appropriate points of time in the Implementation Plan.

  JPL Technology Readiness Level Assessment Guideline
  TRL assessments for various disciplines

  Applicants should provide an assessment of the current TRL of their emerging technology using credible and multicriteria assessments based on the files provided in

the links above. Projects below a demonstrated current level of TRL 4 will not be considered.

- **Positioning (25% weighting)**
  Applicants should provide a critical competitor analysis that highlights the position of the proposed emerging technology within the landscape of competing existing or emerging solutions. The analysis should directly compare and contrast existing systems (commercialised or at any stage of development) against the proposed emerging technology. Applicants are encouraged to take account of the patent literature, open literature, and company websites/media releases.

- **Team component (25% weighting)**
  Applicants should first provide a detailed analysis of the skills and expertise required to maximise the chances of success to produce an advanced prototype and demonstrate the achievement of TRL levels. Any specialised facilities required to support the productisation process should be specified.
  This section should then detail *how* the assembled team, including commercialisation partners and Defence points of contact, are able to satisfy the analysis conducted above.

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 are expected to communicate with their university coordinator to ensure that they have optimum visibility of the progress of intended submissions.

- Macquarie University /Matt van Breugel/
- University of New South Wales /Joshua Sherman, Matt Hand/
- University of Newcastle /PVC Research/
- University of Sydney /Adeline Williams /
- University of Wollongong /Robert Beretov/
- University of Technology Sydney /Murray Dickson/
- Western Sydney University /Andre Urfer/

7. Selection Process

7.1. Applications that have conformed to the application process requirements and are deemed to be within the scope of the call will be subjected to a competitive review process. Peer reviewers, including DSTG experts, provide their recommendations to the DIN.

7.2. The DIN will constitute a Technical Review Panel comprised of selected DIN Steering Committee Members, DSTG experts, NSW Chief Scientist and Engineer, and any co-opted members as deemed fit by the DIN.

7.3. The DIN Technical Review Panel will make final decisions relating to the funding of projects.

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 timeline of the selection process is as follows:

12-Jul-23	Call for Proposals
23-Aug-23	**Applications due**
Aug-Sep-23	Technical Review Panel Assessment
25-Sep-23	Result announcement
Oct-Dec-23	Contracting
01-Jan-24	Project Start

8. Funding Agreements, Reporting Requirements & Acknowledgement

8.1. All successful 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 must be signed between the industry partner and the Lead university before the project work can start.

8.3. Successful applicants will be required to provide a final report to the DIN (Administered by UTS) at *info@defenceinnovationnetwork.com within* two months of the end date negotiated in the Agreement.

8.4. 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.

8.5. 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.

8.6. All changes to the project cost or roll-over of the funds must be justified and approved by the DIN (Administered by UTS).

8.7. Any material or research findings published in respect of a DIN Pilot Projects 2.0 –funded activity must include acknowledgement of the DIN and the NSW Government in a form: "*We thank the Defence Innovation Network and NSW State Government for financial support of this project through DIN Pilot Project 2.0 grant."*

ANNEXURE A: DIN SECURITY POLICY

The DIN reserves the right to cease funding for DIN projects based on security governance.

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 business 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. DIN projects are usually classified at the OFFICIAL or OFFICIAL: SENSITIVE levels.

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 DIN member universities. Universities can develop and demonstrate their security governance through membership in the Defence Industry Security Program.

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 available online. Security recommendations will be communicated to university business offices through DIN university coordinators.

ANNEXURE B: GUIDELINES FOR EXPERT 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. 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 bid or business**; i.e. you have direct or indirect involvement with a competing proposal or business activity.

Reviewers are asked to apply judgement when assessing science excellence and impact relative to the research stage and the area of interest.

Reviewers should assess the proposal against the supplied criteria and are expected to provide an objective appraisal of the proposal against these criteria, i.e. undertake your assessments in accordance with these guidelines. DIN will provide an assessment template to reviewers.

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.

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

ANNEXURE C: ASSESSMENT RANKING SYSTEM

A. Excellence (25% weighting)

Novelty and potential to become world-leading – bearing in mind the intention is to produce a prototype device

- **[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 and will lead to notably improved technology.
- **[3] High:** Distinctive approach that is highly likely to produce leading innovations or capability.

Technical/Scientific Merits; Scientific and technical risk (science component) – bearing in mind the intention is to produce a prototype device

- **[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 the state of the art or their track record. The proposal may lack a compelling element. Risks are partly identified or inadequately mitigated. Risks outweigh benefits.
- **[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. Sound track record of investigators. Risks have been adequately identified and mitigated.

B. Implementation plan (25% weighting)

Potential for impact and implementation pathway

- **[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, including some reference to TRL assessment schemes.

- **[2] Good:** The impact is likely to be significant, and the implementation plan credible. A good analysis of TRL measures is presented, along with a set of demonstration / testing / validation measures.
- **[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. The TRL assessment scheme is excellent and robust, demonstrating a credible plan and set of steps and measures to grow the technology and assess its TRL level.

C. Positioning (25% weighting)

- **[0] None:** The application is largely devoid of any competitor analysis.
- **[1] Low:** The proposal contains some information on competitor technologies but is not especially compelling.
- **[2] Good:** The proposal contains a credible competitor analysis that enables a satisfactory comparison of the merits of the proposed technology but is not comprehensive in nature.
- **[3] Excellent:** The proposal contains a comprehensive competitor analysis and clearly demonstrates the advantages, scope and limitations of the proposed system compared to existing commercialised or emerging systems. Commercial products, patented systems and the open literature are all adequately considered.

D. Team component (25% weighting)

- **[0] None:** The team does not meet the minimum eligibility requirement.
- **[1] Low:** The team has inadequate expertise to lead to a successful outcome or is significantly flawed in its composition.
- **[2] Good:** The team consists of lead researchers from different institutions (with or without students, research associates) with fit-for-purpose expertise. The analysis of the project requirements is credible and the cross-referencing of the team to the requirements is satisfactory.
- **[3] Excellent:** The team has been assembled to encapsulate the best expertise across the DIN. The project analysis is outstanding and comprehensive, provides good details on the needs of the project to advance the maturity of the project, and the proposal clearly demonstrates how the team has been assembled to ensure maximum chances of success.