Artificial Intelligence for Decision Making Initiative

The Artificial Intelligence for Decision Making Initiative (the Initiative) (Round 2) is now accepting applications.

The Initiative is a collaborative project between the Office of National Intelligence (ONI) and the Defence Science and Technology Group (DSTG), to develop Artificial Intelligence (AI) and Machine Learning (ML) expertise and capability in areas of significant importance to the Australian defence and national security community.

Individuals are invited to apply their skill and expertise to solve one of 10 AI and ML research and development related challenges.

Successful applicants will be provided with three-month funding of up to \$20,000 per project and could also have the opportunity to be part of a national network focused on developing AI and ML technology. There is also the opportunity for project prototypes to be considered for progression through the Defence Artificial Intelligence Centre (DAIC), or defence and university sectors.

The Initiative is being delivered on a national basis through the Defence Science Centre, Defence Science Institute, Defence Innovation Network and Defence Innovation Partnership.

The Challenge topics are:

- 1. Multi-Modal Narrative Extraction
- 2. Reasoning with Uncertainty in Temporal Knowledge
- 3. Effective updating of deep learning models with limited new data
- 4. Understanding Linguistic Feature Encoding in Transformers
- 5. Word search over Wav2vec 2.0 neural representation
- 6. Al Enabled Portfolio Design for Defence Capability Investment Projects
- 7. Automatic parsing & annotation of semi-structured documents
- 8. Goal-based agent learning and reasoning in uncertain environments
- 9. Decision making in uncertain, dynamic and complex information environments
- 10. Strategy formulation in open adversarial environments

The Challenge Statements can be found here:

Project Requirements

Funded projects will demonstrate prototype solutions, in the form of a software tool or related product that demonstrates the solution(s) to the chosen Challenge.

Applicants must also provide project reports that detail the approach to the Challenge and anoverview of the solution, to enable assessment of project performance.

The maximum funding amount is \$20,000 per project.

The length of projects must be three months and must be completed by the end of February 2022.

The intent of the Initiative is to fund individuals to undertake separate projects, however smallteam-based proposals may be considered, subject to available funding. Funding for a team-based proposal is restricted to the same arrangements for an individual.

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Individuals may submit applications to as many Challenges as they wish, however only one project will be funded per applicant, and each project must be discrete and stand alone from others.

A licence to use the intellectual property developed as part of project must be provided to the grant sponsor via IP Licence Deed. This licence will be for Commonwealth Use purposes only.

Applications will be assessed by a Panel.

Conditions of Funding

The Initiative is only open to Australian citizens and permanent residents who reside in Australia. Proof of citizenship or permanent residency status must be provided if requested.

Funds can be used for direct costs associated with the project, including salary and salary oncosts. Due to the small funding amount and desire to support capability the funds cannot be used for the recovery of indirect overheads.

Only personnel listed on the application can be involved in the project or supported by the funds.

Eligibility

Applications will be accepted from small teams or individuals who meet eligibility requirements.

The Initiative is open to Australian citizens or permanent residents who reside in Australia who are:

- Currently employed by an Australian-based company, university or research organisation; or
- Currently self or unemployed; or
- Currently enrolled at an Australian university in an undergraduate or post-graduate degree.

Currently employed or enrolled applicants should apply via their institution, while those who are self or unemployed should apply as individuals.

There may be a requirement for identification, police and other background checks prior to the commencement of the project.

Project Outcomes and Deliverables

The aim of the Initiative is to fund short pilots to identify and propose novel, prototype and nascent solutions and approaches to the designated Challenges.

Specific deliverables will be discussed with successful applications.

Criteria

The following criteria will be used to assess proposals:

- Novelty of approach (30%)
- Feasibility of proposal (20%)
- Relevance to the problem (30%)
- Potential to transition the research / product into Defence and National Security capability (20%)

Intellectual Property

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Ownership of intellectual property developed using the grant funds will be retained by the successful applicants. All successful applicants will be required to grant a licence to the Commonwealth to use project intellectual property for Commonwealth purposes via an <u>IP Licence Deed.</u>

Submitting your Application

Applications will only be accepted via the Initiative's Application Form https://www.tfaforms.com/4899649

Contract arrangements

This program brings together funding sourced from multiple Commonwealth agencies and is administered on a state basis. Recipients will be required to enter into an agreement with their local defence science facilitation network as listed below. This means a variety of agreements will be used for successful applicants, dependent on their location, the original source of funds and the organisational nature of the applicant. Core principles and requirements are common across the agreements.

Applicant Location	Facilitation Network	Sample Agreement
VIC and TAS	Defence Science Institute (DSI) <u>www.defencescienceinstitute.com</u>	DSI Agreement
NSW and ACT	Defence Innovation Network (DIN) <u>www.defenceinnovationnetwork.com</u>	
SA and NT	Defence Innovation Partnership (DIP) www.defenceinnovationpartnership.com	<u>DIP Agreement</u>
WA	Defence Science Centre (DSC) www.wa.gov.au/organisation/department-of-jobs-tourism- science-and-innovation/defence-science-centre	
Queensland	Queensland Defence Science Alliance (QDSA) www.queenslanddefencesciencealliance.com.au	

Opening and Closing Timeframes

The Initiative will have a continuous assessment process, with only outstanding applications funded.

Applications will be accepted from 10 May 2021, closing 7 June 2021.

It is expected up to 50 projects could be funded.

Getting help

Refer to our Frequently Asked Questions.

If you require other assistance or guidance to complete the application form please email enquiries@defenceinnovationpartnership.com. We will respond to your email within two working days.