# DEFENCE INNOVATION CHALLENGE 2020

#### TERMS OF REFERENCE

#### **OBJECTIVE**

The objective of the Defence Innovation Challenge is to contribute to accelerating transformational, state-of-the-art technology solutions in support of NATO C4ISR and cyber capability requirements. The challenge is also intended to further expand the innovation ecosystem by supporting Startups and Small and Medium Enterprises (SMEs), awarding the 'top finishers' package to up to ten proposals and providing them a stage to show their solutions to relevant audiences. The winners may subsequently be invited to bid for a contract in this area.

The Defence Innovation Challenge 2020 welcomes proposals which focus on improving the performance of radar. Solutions will address one or more of the following:

- Correlate Aerial Discovery Radar outputs, combining real-time outputs from two or more radar sources to produce a single, combined result aircraft position.
- Automatically convert aircraft plots (location) to tracks (vector).
- Provide confidence levels of their outputs.
- Operate in bad weather conditions or spoofing.
- Be capable of modification to operate on civilian or non-civilian radar data.

Solutions may use artificial intelligence and machine-learning algorithms to approach these challenges, but solutions are not limited only to these technologies.

Selected submissions will be evaluated in a virtual pitch session planned for late summer. Exact date and practicalities will be communicated to the participants in due course.

An impartial, NCI Agency-led Selection Board will judge the submissions and pitches. The Board will include experts from across NATO and AFWERX, a United States Air Force organization focused on innovation. All submissions will be judged against the criteria listed below.

#### The Top Finishers Will Receive

- One registration waiver for admission to NITEC in spring 2021;
- Participation in the award ceremony with the NCI Agency leadership;
- Mentoring session with NCI Agency leads in the respective technology field;
- Possibility to demonstrate their solution on-site with NATO;
- Featuring of winners via the NCI Agency's communication channels; and
- Potential to put their system into operational use, through a competitive bid with the NCI Agency.

#### Invitation to bid for a contract with the NCI Agency

The NCI Agency is looking to leverage effective and innovative solutions that can make a difference for NATO. Alongside the demonstration process, participants may be invited to enter a limited competition to turn their solution into an operational capability. As part of this stage, the invited winners will be offered the opportunity to demonstrate their solutions in a NATO environment, to a relevant NATO audience.

### **ELIGIBILITY CRITERIA**

**Who can apply**: Any company from 30 NATO Nations can respond to the call for proposals of the Defence Innovation Challenge 2020.

# **EVALUATION CRITERIA AND ASSESSMENT OF PROPOSALS**

The submitted proposals and pitches will be evaluated by a Selection Board, composed of experts in the fields concerned, and consideration will be given, but not limited, to:

- 1. Degree of Innovation (from existence of the service (in use at NATO) to leading-edge technology, not in use for this application area).
- 2. Degree of Impact potential (from no beneficial impact on NATO to game-changing impact on NATO operations or business).
- 3. Implementation feasibility (costs, integration needs, security approval).

The Selection Board's decision will be final.

## TIMELINES OF THE CHALLENGE

• Launch date: 24 February 2020

• Deadline to Submit: 15 June 2020

• Virtual pitch session and announcement of the top finishers: July-August 2020

More information on the bidding process, including the timeline, will be communicated following the announcement of the top finishers.

**How to participate**: Interested applicants can submit the required information about their proposal via an electronic form available on the Defence Innovation Challenge 2020 page on the dedicated NITEC20 website, no later than the announced date of the closure of the submission period.

Responses to the Innovation Challenge will be analyzed by the NCI Agency-led Selection Board internally and will not be released to other participants. Results of the Innovation Challenge, including top finishers and descriptions of the solutions, will be announced on public NCI Agency communication channels, including social media. Participants are therefore invited to provide a description of their technical solution releasable to the public as part of their submission to the Innovation Challenge.

#### **DISCLAIMER**

The NITEC Defence Innovation Challenge is not an invitation to bid and the submitted proposals do not guarantee future contract opportunities. Response will be provided on a voluntary basis and NATO is not liable for any expenses incurred as a result of participation in the Innovation Challenge. Negative responses shall not prejudice or exclude companies from any unrelated future procurement that may be initiated by NATO in the future. Participation in the Defence Innovation Challenge and the virtual pitches not constitute NCI Agency endorsement of the technology presented.

The NCI Agency shall not be liable for any failure or delay in delivering the winners package to the extent that such failure or delay is caused by a Force Majeure Event. The NCI Agency reserves the right to modify the terms of reference of this Innovation Challenge at any time.