

TERMS OF REFERENCE

NATO SPACE PITCH DAY

OBJECTIVE

The goal of the call for proposals is to contribute to accelerating state-of-the-art technology solutions in support of NATO C4ISR and cyber capability requirements. The NATO Space Pitch Day at NITEC Connect is also intended to further expand the space industry engagement with NATO by supporting Startups and Small and Medium Enterprises (SMEs). The NCI Agency welcomes technology proposals, which focus on space applications that can be used in the NATO Space Centre in AIRCOM for Space Situational Awareness.

PROBLEM STATEMENT

The NCI Agency, in partnership with the NATO Space Centre located in AIRCOM, are seeking industry solutions related to applications that can improve or contribute to Space Situational Awareness (SSA). NATO defines SSA as the understanding of a space object's position in time. This includes both objects that are active functional systems, de-commissioned systems or debris, whose positional awareness is critical for operational planning purposes. An effective SSA capability offers opportunities to understand space systems operating in, from, to and through space,

while providing the ability to anticipate and mitigate potential threats to space-based systems and/or the environment. The aim of this space focused pitch day, planned during NITEC Connect, is to identify applications that can process and visualise multiple streams of open-source data, providing aspects of SSA, such as one or more of the following (note this list is not exhaustive):

- Dynamically calculate sensor coverage gaps (including due to terrestrial weather conditions) over an area of interest as defined by the user;
- Dynamically calculate sensor ground coverage over time;
- Identifying potential electro-magnetic interference issues over defined areas of interest, both space-based and ground-based;
- Assessing ground-based augmentation effects based on the location of PNT and ISR satellites;
- Using forensic data fusion identify geolocation and characterization of radio-frequency emitting sources in a range of frequencies to be set by the user;
- Fuse/Analyse various intelligence sources necessary to provide operationally relevant SSA to the user.

Solutions can include any combination of methodologies and technologies, to include artificial intelligence and machine learning algorithms. Solutions that can use open standards such as ESRI REST, OGC WMS, OGC WMC, OGC WFS and OGC KML will be advantageous.

Solutions must specify the degree of accuracy of the data used.

PROCESS

An impartial Selection Board will select the proposals to be presented at a virtual pitch session. The selection board will be NCI Agency-led and include leadership from the AIRCOM Space Centre, representatives from the NATO Space operational community as well as NCI Agency Space Technology and

Innovation experts. The Board will possibly include other experts from across NATO entities. All submissions will be assessed against the criteria listed below. Selected submissions will be further evaluated in a virtual pitch session planned to take place during NITEC Connect in June 2021. Exact date and practicalities will be communicated to the participants in due course.

What is on offer?

- Feedback/ mentoring session with NATO space leadership;
- Potential to demonstrate their solution on-site with NATO;
- Potential to put their system into operational use with NATO;
- One registration waiver for admission to the next NCI Agency flagship conference; and
- Featuring of winners via the NCI Agency's and NATO AIRCOM communication channels.

The NCI Agency, together with AIRCOM 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 competition to turn their solution into an operational capability.

ELIGIBILITY CRITERIA

Who can apply: Any company from [30 NATO member countries](#) can respond to the call for proposals of NATO Space Pitch Day at NITEC Connect.

EVALUATION CRITERIA AND ASSESSMENT OF PROPOSALS

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

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

The Selection Board's decision will be final.

TIMELINES

Launch date: 23 April 2021

Deadline to Submit: 16 May 2021

Announcement of the selected pitches: week of 24 May/ 1 June 2021

Virtual pitch session and announcement of the best solutions: 17 June 2021

HOW TO PARTICIPATE

Interested applicants submit the required information about their proposal via a dedicated online submission form available on the NCI Agency website, together with any relevant attachments in support of the submission to be sent to IndustryRelations@ncia.nato.int, no later than the announced date of the closure of the submission period. During the submission period, Q&As will be published and available on the dedicated section of the NCI Agency website. Responses to the call for proposals will be analysed by the NCI Agency-led Selection Board internally and will not be released to other participants. Results of the Pitch Day, 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.

DISCLAIMER

The NATO Space Pitch Day 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. 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 Pitch Day and the virtual pitches do 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 Pitch Day at any time.