ANNEX A TO
ACT/CAPDEV/CAP/TT-8199/SER:NU
DATED: 13 FEB 24

Headquarters Supreme Allied Commander Transformation Norfolk, Virginia

Amendment #1

REQUEST FOR INFORMATION

RFI-ACT-SACT-24-12

This document contains a Request for Information (RFI) call for input from Industry and Academia to provide capabilities and solutions applicable to NATO's

Space Domain Capabilities

RFI respondents should carefully read this document in its entirety, and follow the guidance provided.

This RFI is open to Industry and Academia that originate, or are chartered/incorporated, within NATO Nations.

HQ Supreme Allied Commander Transformation RFI 24-12 General Information	
Request For Information No.	24-12
Project Title	Industry and Academia input to NATO's Space Domain Capability
Due date for questions concerning requested information	15 March 2024 ~~01 March 2024~~, 0900 (9:00 am) (EST)
Due date for submission of requested information	29 March 2024 ~~22 March 2024~~, 0900 (9:00 am) (EDT)
Contracting Office Address	NATO, HQ Supreme Allied Commander Transformation (SACT), Purchasing & Contracting Suite, 100 7857 Blandy Rd, Norfolk, VA, 23511-2490

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All request for clarifications, questions and responses to this RFI must be sent via email to all Points of Contact listed above.	

1. **INTRODUCTION**

   1.1. **Summary:** Headquarters Supreme Allied Commander Transformation (HQ SACT) is issuing this Request For Information (RFI) to engage with Industry and Academia on future Space Domain Capabilities. The intention is to evaluate what could be immediately available, the art-of-the-possible and state-of-the-art with respect to systems, products, services, technologies, and methodologies pertaining to Space. This will support NATO Governance decision making on Common Funded Capability Delivery.

   1.2. This RFI involves Industry and Academia in an examination of Alliance-wide current and future capabilities related to Space. Future capabilities will be either Nationally-owned or commercially available (procured by a Nation as Host Nation (HN), or by a NATO Agencies). HQ SACT has not made a commitment to procure any of the systems, products, services, or technology described herein, and the release of this RFI shall not be construed as such a commitment, nor as authorization to incur cost for which reimbursement will be required or sought. Further, respondents are advised that HQ SACT will not pay for any information or administrative costs incurred in responding to this RFI. The costs for responding to this RFI shall be borne solely by the responding party. Not responding to this RFI does not preclude participation in any subsequent Request For Proposal (RFP), if issued in the future.

   1.3. This in an **RFI ONLY**. This RFI **DOES NOT** constitute a current RFP nor a commitment to issue a future RFP, nor does it constitute the commencement of any other type of procurement process for the Project. Therefore, those choosing to respond to this RFI **will not**, merely by virtue of submitting such a response, be deemed to be "bidders" on the Project in any sense, and **no** such respondent will have any preference, special designation, advantage or disadvantage whatsoever in any subsequent procurement process related to the Project. HQ SACT is not seeking proposals at this time; therefore, HQ SACT will not accept unsolicited proposals in respect to this RFI.

2. **GENERAL BACKGROUND**

   2.1. **HQ SACT Framework for Collaborative Interaction (FFCI)**

   2.1.1. HQ SACT has implemented a Framework of Collaborative Interaction (FFCI) to increase opportunities for Nations, Industry and Academia to contribute to HQ SACT's capability development efforts through collaborative work. Such collaboration enables HQ SACT, and NATO as a whole, to benefit from National, Industrial and Academic models, advice, capabilities and experience in the course of this work. In addition to the benefits HQ SACT gains from such projects, this collaborative effort will provide Nations, Industry, and Academia with an improved understanding of NATO's Capability Requirements (CRs) and associated issues and development challenges that need to be addressed by HQ SACT. Potential collaborative projects are on specific topics that are of mutual interest to all parties but shall be restricted to collaborations in non-procurement areas. Several

mechanisms have been developed to support the initiation of collaborative projects between Nations, Industry and Academia and HQ SACT ranging from informal information exchanges, workshops, studies or more extensive collaboration on research and experimentation.

2.1.2. Depending on the level and type of interaction needed for a collaborative project, a specific agreement may be required between parties. The FFCI agreement for any specific project, if required by either party for the project to proceed, will range from "Non-Disclosure Agreements" (NDA) for projects involving exchange of specific information to more extensive "Declaration of Mutual Collaboration" to address intellectual property and other issues.

2.1.3. More extensive information on the HQ SACT FFCI initiative can be found on the ACT website being developed to support FFCI projects at http://www.act.nato.int/ffci. Note that respondents of this RFI are not required to initiate an FFCI agreement to respond to this RFI.

2.2. The Common Funded Capability Delivery Governance Model (CFCDGM)

2.2.1. The CFCDGM aims to accelerate the delivery of capabilities required by NATO commanders and the NATO Enterprise. It consists of six stages across the capability development life cycle, four NATO Governance level decision points, or Gates, and two optional decision Gates.

2.2.2. At the first decision Gate, the Military Committee (MC) approves the Operational Requirements (ORs) and determines if the submission of a Capability Requirements Brief (CRB) is required at the first optional decision Gate. Factors that may lead the MC to require governance approval of this product include; anticipated capability type, the expected level of complexity and/or likely existence of more than one viable alternative for filling the ORs.

2.2.3. During stage 2 (Requirements Development), a CRB is developed to identify the specific CRs and potential courses of action, also to examine and confirm the courses of action that are best suited to deliver the capability within scope, cost and schedule.

2.2.4. During stage 3a (Capability Programme Planning), a Capability Programme Plan (CPP) is created, which includes details about the programme scope, schedule, risks and through-life costs. An Analysis Of Alternatives (AOA) occurs during this stage that involves an analytical comparison of the operational effectiveness, risk and lifecycle cost of alternatives that are under consideration to satisfy ORs as described in the Operational Requirement Statement and CRs articulated in the CRB. Alternatives identified can involve combinations of materiel and non-materiel solutions from multiple Nations, Industry and/or Academic sources. **The intent of this RFI is to collect the information required to conduct these stage 3a activities and inform the development of the CPP.**

2.2.5. This is not a formal request for submissions and it does not constitute the commencement of any other type of procurement process for the CPP; but rather a general request intended to determine **if any possible solutions exist that should be included in one or many alternatives** during the development of the CPP. Discussions related to the specific CPP requirements and related procurements should not occur during the RFI solicitation to avoid any conflict of interest or unfair competitive advantage.

3. PROGRAMME DESCRIPTION

3.1. Background

3.1.1. In the 2022 Strategic Concept, NATO reaffirmed that strategic competitors and potential adversaries are investing in technologies that could restrict the Alliances: access and freedom to operate in Space; degrade Space capabilities; target civilian and military infrastructure; impair defence; and, harm security.

3.1.2. The Concept also highlighted that NATO's secure use of and unfettered access to Space is key to effective deterrence and defence. NATO should enhance its ability to operate effectively in Space to prevent, detect, counter and respond to the full spectrum of threats using all available tools necessary.

3.1.3. Therefore, NATO must be prepared to operate in a degraded, denied and disrupted Space environment, and be able to respond to such challenges with agile and flexible effects and Space actions to meet NATO's three core tasks of Collective Defence, Crisis Management and Cooperative Security.

3.1.4. NATO's approach to Space intends to fully integrate Space as a routine activity within NATO. This includes, the:
- Integration of Space into all processes, including the Operations Planning Process;
- Integration of Space into all operations, missions and activities;
- Establishment of adequate training, operational advice and risk assessments pertaining to Space;
- The integration of Space capabilities, using applicable systems, to support decision-makers, military commanders, staff and forces across all operational domains with:
  - o Accurate assessments on Space threats and its environmental status;
  - o Space Data, Products, and Services;
  - o Effects and Space actions available to NATO for inclusion in planning and execution of all operations, missions and activities.

3.2. <u>Process</u>

3.2.1. NATO has started developing the capabilities required for Space following the principles and tenets from the existing Overarching Space Policy[1]. The approach focuses on receiving and sharing the required Space data, products, and services with Nations through relevant agreements and will comply with the Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities and Interoperability (DOTMLPFI) programmatic approach.

3.2.2. With the development of capabilities enabling the three main Operational Functions - Space Domain Awareness (SDA), Operational Space Support (OSS) and Space Domain Coordination (SDC) - NATO Space implementation efforts will neither supersede any existing NATO processes, nor impact initiatives that are not the responsibility of the NATO Space community. NATO Space efforts will rather support these processes and initiatives where applicable, thus avoiding any duplication of efforts.

3.2.3. The NATO Space Programme is in charge of implementing the new NATO Domain, the Space Domain, in a System of Systems Integration approach, leveraging on Capabilities, Assets and Resources coming from already existing Space-related NATO Programmes and leveraging also on Space Capabilities, Assets and Resources coming from Nations, their Industry and Academia, and finally filling the gaps of missing Capabilities, Assets and Resources needed to achieve the NATO Space MMR (Minimum Military Requirement)

3.2.4. Allied Command Transformation (ACT) is surveying Industry and Academia to understand what solutions may be able to support NATO's Space Domain requirements for all three Operational Functions (SDA, OSS and SDC).

3.2.5. This survey seeks to gather information from Industry and Academia on existing Space business processes and solutions, as well as those in development that could potentially be procured by NATO.

3.3. <u>Space Domain Capability Requirements</u>

3.3.1. NATO's Space Domain Capabilities will provide awareness and coordination means for NATO and multinational actions during peacetime vigilance, crisis and conflict. The Space Domain Capabilities may deliver; a set of reporting business processes and solutions, analysis and visualization processes or systems, data management approaches and collaboration systems to advance the current development efforts for the Space Domain. Space communication and information systems support will enable the following business processes:

3.3.2. **Space Domain Awareness (SDA) will:**
- Inform and support operations planners and commanders in distributed headquarters with a coordinated and visualized Recognized Space Picture;

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[1] NATO (17 January 2022). NATOs Approach to Space. NATO's Overarching Space Policy. *https://www.nato.int/cps/en/natohq/official_texts_190862.htm*

- Collect and fuse data and tools from military and commercial sources, including other domains (as well as multi-domain) common operating pictures to inform strategic level decision making;
- Protect, organize and store data in appropriately secure mediums while allowing both automatic and manual data fusion and analytics;
- Connect Nations through relevant agreements to share Space information and Space DPSs;
- Analyse Space products for releasability.

3.3.3. Operational Space Support (OSS) will:
- Provide an entry point for operational support "pull" requests , and capability for "push" engagement with exercises and operations;
- Offer reception, categorization, assessment, and fulfilment of requests for operational support, including process tracking and analysis;
- Analyse Space information to provide relevant timely support and advice to exercise and operational planners and forces;
- Provide adaptation of Space DPSs into viable NATO processes to be used by all NATO users at all levels.

3.3.4. Space Domain Coordination (SDC) will:
- Provide Space community engagement and coordination information portals and collaborative working areas;
- Coordinate and share the development of the Space Operational Domain and capabilities (across DOTMLPFI lines of effort);
- Provide the ability to engage with Nations, Industry and Academia on Space Domain trends and plans.

4. REQUESTED INFORMATION

4.1. This RFI is interested in information that informs alternatives development. Alternatives are comprised of materiel and non-materiel solutions, and combinations thereof across the DOTMLPFI spectrum that contribute to Space Domain CRs which are explained under Para 3.3. These include but are not limited to:
- Systems, products, services, applications (and their functionality), interfaces, data, and dependencies on hardware, facilities, and infrastructure;
- Processes, personnel, and organizational nodes required to operate the capability;
- Technologies and technical standards (open, proprietary).

4.2. This RFI will herein refer to one or many potential combinations of these as "your capabilities". This information will inform alternatives and will be described using the NATO Architecture Framework, Version 4[2].

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[2]   NATO (17 August 2022). NATO Architecture Framework, Version 4. *https://www.nato.int/cps/en/natohq/topics_157575.htm*

4.3. This RFI is also interested in information that informs alternatives analysis from various perspectives. HQ SACT is interested in how Nations, Industry and Academia capabilities relate to the functional and non-functional CRs which are explained under Para 3.3 and rephrased as questions in Appendix 1.

4.4. Finally, this RFI is interested in information that informs capability programme planning. This includes the availability, readiness, and feasibility of Industrial and Academic capabilities.

4.5. Eligibility to Respond. Only Industry and Academia that originate or are chartered/incorporated within NATO Nations are eligible to respond to this RFI. Companies from Partner Nations who want to participate are recommended to partner with a primary company headquartered within a NATO Nation.

4.6. Responses to the RFI. The response(s) to this RFI may be submitted by email. Submission is to include all of the Technical and Contracting Points of Contact listed above (page 2).

4.7. Response Date. Responses to this RFI must be received by 09:00 (9:00 am) Eastern Daylight Time (EDT) on ~~22 March 2024~~. 29 March 2024

4.8. Questions for Industry and Academia. Please see Appendix 1 for questions and provide your answers on the spreadsheet.

NOTE TO RESPONDENTS

In the interest of time and to maximise the number of responses to this RFI, the information provided should not be extremely complicated, overly detailed, or require significant effort to complete. Additionally, responses are not required if it is not applicable to your capabilities. A statement that the question is not applicable (NA) will be sufficient. Finally, in addition to your responses, we encourage you to include any existing materials you may have pertaining to your capabilities (e.g., marketing brochures, pamphlets, flyers, etc.).

4.9. Clarifications and Questions

4.9.1. Inquiries of a technical nature about this RFI shall be submitted by e-mail to the aforementioned points of contacts by 09:00 (9:00 am). Eastern Standard Time (EST) on 01 March 2024. Accordingly, questions in an e- mail shall not contain proprietary and/or classified information. Answers will be posted as soon as possible on the HQ SACT Procurement and Contracting (P&C) website at: https://act.nato.int/contracting.

4.9.2. HQ SACT reserves the right to seek clarification on any submission.

4.10. Intent/Objectives. This RFI is intended to provide Industry and Academia an opportunity to provide data that would allow NATO to determine potential benefits they might receive from a capability.

4.11. Expected Benefits to Respondents. Industry and Academia participants will have the chance to reveal state-of-the-art systems, products, services and technology in the Space Domain area of interest.

4.12. Expected Benefits to NATO. Exposure to, and understanding of, current, emerging and future capabilities in the Space Domain area of interest.

4.13. Expected Input from Industry and Academia. Expected input to this RFI is Industry and Academia perspective on relevant current, emerging and future capabilities in the Space Domain area of interest.

4.14. Classified Information. NATO information that is CLASSIFIED is not included herein but can be passed to authorized Industry and Academia recipients with appropriate clearances and control measures.

4.15. Proprietary Information. Proprietary information, if any, should be minimized and clearly marked as such. HQ SACT will treat proprietary information with the same due care as the command treats its own proprietary information, and will exercise due caution to prevent its unauthorized disclosure. Please be advised that all submissions become HQ SACT property and will not be returned.

4.16. Non-disclosure Principles and/or NDA with Third Party Company.

4.16.1. Please be informed that HQ SACT may contract a company to conduct the Analysis of Alternatives investigation in support of this project. HQ SACT will follow nondisclosure principles and possibly conclude an NDA with that company to protect submitted information from further disclosure. As the third party beneficiary of this nondisclosure, this RFI serves to inform you of how HQ SACT plans to proceed and of HQ SACT's intent to protect information from unauthorized disclosure, requiring the third party company to protect the disclosed information and using the highest degree of care that the company utilizes to protect its own Proprietary Information of a similar nature (and no less than reasonable care). This includes the following responsibilities and obligations:

- The third party company receiving the information shall not, without explicit, written consent of HQ SACT:
  - Discuss, disclose, publish or disseminate any Proprietary Information received or accessed under nondisclosure principles and subject to an NDA, if an NDA is concluded;
  - Use disclosed Proprietary Information in any way except for the purpose for which it was disclosed in furtherance of the goals of the instant project, collaboration, activity or contract; or
  - Mention the other Party or disclose the relationship including, without limitation, in marketing materials, presentations, press releases or interviews
  - Exceptions to Obligations. The third party company receiving the information may disclose, publish, disseminate, and use Proprietary Information:

- o To its employees, officers, directors, contractors, and affiliates of the recipient who have a need to know and who have an organizational code of conduct or written agreement with the recipient requiring them to treat the disclosed Proprietary Information in accordance with nondisclosure principles and the NDA (if executed);
- o To the extent required by law; however, the company receiving the information will give HQ SACT prompt notice to allow HQ SACT a reasonable opportunity to obtain a protective order or otherwise protect the disclosed information through legal process; or
- o That is demonstrated in written record to have been developed independently or already in the possession of the company receiving the information without obligation of confidentiality prior to the date of receipt from HQ SACT; that is disclosed or used with prior written approval from HQ SACT; obtained from a source other than HQ SACT without obligation of confidentiality; or publicly available when received.

4.17. Any response to this RFI is considered to establish consent to this process. A copy of the NDA, if or when concluded, can be provided on request.

4.18. Organizational Conflicts of Interest.

4.18.1. Companies responding to this RFI and companies conducting Analysis of Alternatives are hereby placed on notice responding to this RFI could conceivably be a factor in the creation of an Organizational Conflict of Interest (OCI) on a future procurement, if a future procurement were to occur within the capability development process.

4.18.2. Companies are cautioned to consider OCI when responding to this RFI, and to consider internal mitigation measures that would prevent OCI's from adversely affecting a company's future procurement prospects. OCI's can often be mitigated or prevented with simple, early acquisition analysis and planning and the use of barriers, teaming arrangements, internal corporate nondisclosure policies and firewalls, and similar prophylactic measures.

4.18.3. HQ SACT is not in a position to advise responding companies on the existence of OCI or remedial measures, and encourages responding companies to consult internal or external procurement and legal consultants and in-house counsel.

4.18.4. OCI considerations should not be considered a barrier to responding, only a factor for long range business planning.

4.19. Follow-on:

4.19.1. Any and all information provided as part of the submission in response to this RFI may be considered in developing any future HQ SACT requirements.

4.19.2. The data collected in response to this RFI will be used to develop a report to inform the Space Domain CPP. The report will provide an assessment to support

a decision as to whether NATO should pursue an Adopt, Buy or Create approach to meet Space Domain requirements.

    4.19.3. In the event that there is a competitive bidding process later as part of NATO Common Funded Capability Development, the provision of data, or lack of, will not prejudice any respondent.

4.20. Summary. This is an RFI only. The purpose of this RFI is to involve Industry and Academia in an examination of Alliance-wide future capabilities related to the Space Domain with a focus on related systems, products, services, technology, methodologies, and engineering practices. HQ SACT has not made a commitment to procure any capabilities described herein, and release of this RFI shall not be construed as such a commitment, nor as authorization to incur cost for which reimbursement will be required or sought. **It is emphasised that this is an RFI, and not an RFP of any kind.** Thank you in advance for your time and submission to this RFI.

Appendix:
1. Survey