

HQ Supreme Allied Commander Transformation

RFIP-ACT-SACT-24-16 **ANNEX I**

HQ Supreme Allied Commander Transformation

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Headquarters Supreme Allied Commander Transformation Norfolk Virginia



REQUEST FOR INNOVATIVE PARTICIPATION (RFIP) RFIP-ACT-SACT-24-16

This document contains a Request for Innovative Participation (RFIP) Call for Industry and Academia collaboration regarding the Innovation Challenge 2024/Spring (IC-24/Spring) calling for solutions (applications, systems, tools, concepts etc.) that can support solution development for NATO. Industry and Academia wishing to respond to this RFIP should read this document carefully and follow the guidance for responding.

General Information	
Request For Information No.	RFIP-ACT-SACT 24-16
Project Title	Innovation Challenge 2024/Spring: Remote Explosive-Contaminated Area Recognition and Neutralization (RECARN)
Deadline for submission	17 April 2024 23:00 GMT
Contracting Office Address	NATO, HQ Supreme Allied Commander Transformation (HQ SACT) Purchasing & Contracting Suite 100 7857 Blandy Rd, Norfolk, VA, 23511-2490
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SECTION I - INTRODUCTION

- 1.1 **Summary.** HQ SACT is issuing this Request for Innovative Participation (RFIP) announcement in order to facilitate collaboration between the NATO HQ SACT Innovation Branch and industry and/or academia regarding solutions¹. The purpose of this RFIP is to request representatives from industry and academia to submit solutions (either existing and/or under development) to the scenario presented within **Annex I** to participate in the NATO Innovation Challenge 2024/Spring (IC-24/Spring). All submissions must conform to this RFIP.

A Selection Committee composed of representatives from NATO HQ SACT, supported by advisors from the IC-24/Spring Partners² and other relevant experts invited by NATO HQ SACT will select up to **10 solutions** amongst the responses submitted by industry and/or academia. The selected solutions will participate in the IC-24/Spring *Pitch Day* projected to be June 12, 2024. Participation in the *Pitch Day* will be either on-site, in Vilnius Lithuania, an/or online. An Advisory Panel composed of representatives from NATO HQ SACT, supported by the IC-24/Spring partners and other relevant experts invited by NATO HQ SACT, will assess which solution(s) best responds the scenario presented in **Annex I**. The final selection of the IC-24/Spring winners will be done by a board of representatives from HQ SACT, advised by the IC-24/Spring Partners and other relevant experts invited by NATO HQ SACT.

The nature of this event will be **discovery only**. The event is not intended to solicit any type of contracts. However, relevant solutions could potentially support development of future concepts, doctrine, STANAGs, user requirements, capability development, etc.

- 12 **Dates.** The event and timelines of IC-24/Spring are described in Section III. It will take place between 27 February and 12th June 2024, with the IC-24/Spring *Pitch Day* taking place online and on-site on 12 June 2024.
- 13 **Disclaimer.** This is a Request for Innovative Participation (RFIP) **ONLY**. In no way does the RFIP constitute a current Request for Proposal (RFP) or a commitment to issue a future RFP. HQ SACT has not committed nor intends to commit to procure any product(s)/solution(s) described herein, and the release of this RFIP shall not be construed as a commitment, nor an authorization to incur cost for which reimbursement will be required or sought after. Further, respondents are advised that HQ SACT will not pay for any information or administrative costs incurred in *responding* to this RFIP. HQ SACT will not pay any costs associated with participating in the IC24/Spring. The costs for responding to this RFIP and participating in the IC-24/Spring shall be borne solely by the responding party. Not responding to this RFIP does not preclude participation in any subsequent RFP if issued in the future.

SECTION II BACKGROUND

2.1 HQ SACT Framework for collaborative Interaction (FFCI).

- 2.1.1 HQ SACT has implemented a Framework for Collaborative Interaction (FFCI) to increase opportunities for industry and academia to contribute to HQ SACT capability development efforts through collaborative work. These collaborations enable HQ SACT, and NATO to benefit from industry/academia models, advice, capabilities and experience in the course of work. In addition to the benefits HQ SACT gains from such projects, the collaborative effort will provide industry/academia with an improved

¹ In this RFIP, the term “solutions” refers to applications, tools, systems concepts or devices.

² NCIA, Ministry of Defence of Lithuania, experts from Lithuania and Old Dominion University (USA).

understanding of developmental challenges to be addressed by HQ SACT, and NATO's capability requirements and the associated issues. Potential collaborative projects are on specific topics that are of mutual interest to both parties, but shall be restricted to collaborations in non-procurement areas. Several mechanisms have been already developed to support the initiation of collaborative projects between industry/academia and HQ SACT ranging from informal information exchanges, workshops, and studies to more extensive collaboration on research and experimentation.

- 2.1.2 Since 2017 HQ SACT has conducted Innovation Challenges; these are informative and exploratory events focused mainly on the application of new technologies. The collaborative interaction sought for the IC-24/Spring is focused on industry/academia's RFIP responses and willingness to share knowledge, expertise, and products/solutions with NATO and national representatives participating (see scenarios at Annex I).

SECTION III - DESCRIPTION OF THE IC-24/Spring

3.1 **Background.**

The HQ SACT Innovation Hub is the main organizer of the IC-24/Spring. The HQ SACT Innovation Hub also coordinates the NATO Innovation Network, federating national entities in order to leverage open innovation.

3.2 **Planned activities.** The IC-24/Spring will consist of:

- a. Initial Selection Phase: The selection will be announced the 17th May 2024. Finalists will be contacted directly via email by the project coordinator in charge of the challenge, and the announcement will be made on the IC-24/Spring Webpage. The selected submissions will be invited to be presented live online on the *Pitch Day*. Any cost associated with presenting online remains the sole responsibility of the industry/academia providing the submission.
- b. Final selection phase: On the *Pitch Day*, the winners of the IC-24/Spring will be selected by a Board of HQ SACT representatives, supported by relevant experts invited by NATO HQ SACT and announced as part of the *Pitch Day* program. Any cost associated with presenting online or in person remains the sole responsibility of the industry/academia providing the presentation.

All information provided in response (abstracts, supporting materials, and, if selected for *Pitch Day*, in the presentations) will be releasable to the public. Only abstract submissions selected for presentation at IC-24/Spring *Pitch Day* will be showcased in the public domain.

3.3 **Expected input from industry/academia.** See below in Section IV.

3.4 **Expected benefits to industry.** Through this collaboration, HQ SACT offers industry/academia an opportunity to gain awareness about the particularities of the innovation challenges in NATO and partner Nations. It will be an opportunity to engage with HQ SACT Innovation Hub and other participants within a framework of a community of interest focused on the development of innovative solutions based on new technologies in support of the NATO Innovation Process.

3.5 **Monetary Awards**

3.6.1 HQ SACT presents three levels of monetary awards for the top three winners of the IC-24/Spring:

- a. 1st place: \$5,000 USD;

- b. 2nd place: \$2,500 USD;
- c. 3rd place: \$1,000 USD.

3.5.2 The monetary award is presented in the form of 1st/2nd/3rd place recipients of the HQ SACT Innovation Challenge 2024/Spring. The presentation of the award does not alter the relationship between HQ SACT, and will only be presented to eligible industry or academia entries, who have complied with the terms and conditions defined for the Challenge. The recipients are responsible for the proper recording and reporting of the monetary award to the appropriate tax authorities and the payment of any associated taxes.

3.5.3 Monetary awards will be paid to the recipient in the form of Electronic Funds Transfer.

SECTION IV - REQUESTED INFORMATION

4.1 **Intent.** The intent of this RFIP is to call for formal collaboration with industry and Academia in order to present solutions based on new technologies that can support the improvement of the NATO Innovation process. These solutions should be applicable in a federated information environment and should be interoperable by design. Additionally, they should be intuitive, requiring none or very limited training at the end-user level. Solutions are sought at different levels of development, from the “advanced concept development stage” through “customizable applications” available on commercial off-the-shelf. Solutions may address some of the challenges described in the scenario presented in Annex I, associated to one or more of the following ***areas of interest***:

- Remote Reconnaissance Technology
- Data Analysis and Visualization
- Remote Neutralization Mechanisms
- Safety and Reliability
- Integration with Existing Systems

The inherent discovery nature of the IC-24/Spring allows for novel approaches to these challenges.

4.2 **Responses to the RFIP.**

In response to the RFIP, please submit an abstract (**4500 characters maximum, space not included**) describing the solution idea and answering the criteria. Based on this submission and the eventual file attached, an IC-24/Spring Selection Committee will select up to **10** abstracts to be presented at the Innovation Challenge *Pitch Day*. In the event that the scores result in a tie (between the 10th and 11th place), the 11th finalist will be permitted to participate in the pitch day before the final jury. The response to this RFIP should be submitted through the [webform](#) with the following information:

- a. The name of the participant (Industry/academia)
- b. The name of the proposed solution and which area(s) of interest it addresses
- c. Name(s) of participant’s representative(s) (new representatives cannot be appointed after pre-selection)

The abstract can include:

- a. Limited to 4500 characters max text document, space not included.
- b. Max 5 graphics, pictures or slides.
- c. Eventual file attached to the submission

NOTE: all information provided in response to this RFIP has to be releasable to the public.

4.3 **Evaluation of Solutions and Selection Process.** A Selection Committee will be convened to analyze and evaluate the responses to the RFIP and select which submissions will be presented/demonstrated at IC-24/Spring. The Selection Committee will assess each response according to the following criteria:

4.3.1 *Eligibility:* The response to this RFIP should reflect a solution that addresses at least one of the areas of interest presented at paragraph 4.1.

Submissions will specifically be scored against:

- **Effectiveness:** How well does the solution identify and neutralize explosive-contaminated and minefields areas?
- **Safety:** What measures are in place to ensure the safety of personnel and the environment?
- **Innovation:** How creative and novel is the approach to remote reconnaissance and neutralization?
- **Scalability:** Can the solution be scaled for different conflict zones and operational scenarios?
- **Integration:** How well does the solution integrate with existing military and humanitarian systems?

4.3.2 *Priority:* The Selection Committee retains the right to prioritize the answers to RFIP based on the relevance and diversity of the solutions, on the proposed *demonstration* method, and the complexity of the challenges addressed. Additionally, ensuring a balanced representation of both industry and academia will be part of the prioritization process.

4.3.3 **Status: Only submissions by industry and academia (involving individual team members) headquartered, and/or located in NATO member countries will be considered for IC-24/Spring.**

4.4 *Terms applicable to this RFIP:* The participating industry and academia agree that HQ SACT may without any limitation or further compensation use the participant's name as well as voice and/or likeness of its representative(s) in any and all media for the purpose of advertising and promoting the HQ SACT Innovation Challenge, and any associated programs. Furthermore, the participant(s) grants HQ SACT and the IC- 24/Spring the right to take photographs and videos of the submission in connection with the challenge and grants the right to HQ SACT to use and publish the photographs and videos with or without the participant's name for any lawful purpose including but not limited to publicity, illustration, advertising, and internet/social media content. Additionally, the participant(s) agree that the IC- 24/Spring and thus HQ SACT may demonstrate the operation and functionality of the submission (but may not modify or publicize the source code) in connection with advertising and promoting the IC- 24/Spring and subsequent events organized by HQ SACT.

a. The participating industry and academia represents and warrants no contractual or other obligations that would:

- (i) prevent the participant from granting the right of use provided here and/or
- (ii) prevent the participant from claiming Intellectual Property ownership rights in materials or inventions created by the participant and incorporated into the submission.

b. Representation and Warranties: The participating industry and academia represents and warrants that:

- (i) the participant(s) is the original author of the submitted contributions;
- (ii) the participant(s) acknowledges, the submission will not infringe on any third party's copyright, patent, trademark, trade secret, right of publicity or property or any other right;

- (iii) the submission is not the subject of any actual or threatened litigation or claim;
 - (iv) the submission will not be obscene, offensive, libelous, pornographic, threatening, abusive, or otherwise objectionable; and
 - (v) the submission will not contain any content that is illegal, would constitute or encourage a criminal offense, or would otherwise give rise to liability or violate any law.
 - c. The participating industry and academia agree to grant HQ SACT, a non-exclusive, use of the submission as necessary to conduct the IC- 24/Spring and for internal evaluation purposes by HQ SACT:
 - (i) in any Intellectual Property incorporated into the submission;
 - (ii) in Intellectual Property that is needed to operate or use the submission;
 - (iii) in Intellectual Property covering other materials or inventions that are incorporated into the submission, and/or
 - (iv) in Intellectual Property that is needed to operate or use the submission.
 - d. Furthermore, participants acknowledge and agree that the submission is submitted in a non-confidential basis. The HQ SACT shall have no obligation to prevent the disclosure or otherwise treat as confidential such submission. Also, to the extent that the submission includes publication of information or content [here](#).
 - e. By responding to this RFIP and participating in the IC- 24/Spring it is constituted industry and academia acknowledge and agree that the IC- 24/Spring will receive many entries and submissions in connection with this RFIP. As such other participants' entries and submissions may be similar or identical in theme, idea, format, or other respects to the submission. By responding to this RFIP the participating industry and academia waives any and all past, present or future claims against HQ SACT and the IC- 24/Spring relating to such similarities, or asserting that any compensation is due in connection with the submission.
 - f. Limitation of Liability: In no event shall the HQ SACT be liable for incidental, exemplary or punitive damages arising out of or in connection with the IC- 24/Spring, industry and academia participation, or the submission. If a participant has a dispute with any stakeholder in the IC- 24/Spring or any other third party, the participating industry and academia releases HQ SACT and the IC- 24/Spring from any and all claims, demands and damages, (actual and consequential) of every kind and nature arising out of or in any way connected with such disputes.
 - g. Release and Indemnification: By responding to this RFIP and participating in the 24/Spring, industry and academia agree, on behalf of that participant and the heirs, executors and administrators, to release and hold harmless the 24/Spring (and thus HQ SACT) from any claim, liability, damage, litigation, illness, injury or death that may occur, directly or indirectly, whether caused by negligence or not, from participating in the 24/Spring. This includes any entry (submission) submitted by the participating industry and academia.
- 4.5 **Communication and Follow-on.** The answers to RFIP should be submitted through the event webform [IC/SPRING24 - WEBPAGE](#) . Post-submission, RFIP respondents maybe contacted to provide additional information on their proposals/response.

- 4.6 **Questions.** Questions of a technical nature about this RFIP announcement shall be submitted solely to the project coordinator of the challenge: pierre.delom@act.nato.int Accordingly, questions shall not contain proprietary and/or classified information
- 4.7 **Deadline for responding to this RFIP.** 17 April 2024 11:00 PM GMT
- 4.8 **Summary.** This is a RFIP only. The purpose of this RFIP is to request both industry and academia to present and demonstrate solutions (either existing and/or under development) based on new technologies that may support the improvement of NATO Innovation Process. HQ SACT has not made a commitment to procure any of the products/solutions described herein, and release of this RFIP shall not be construed as such a commitment, nor as authorization to incur cost for which reimbursement will be required or sought after. It is again re-emphasized that this document is a RFIP, and not a RFP of any kind.

Innovation Challenge Scenario: **Remote Explosive-Contaminated Area Recognition and Neutralization**

Background:

In conflict zones and post-conflict regions, the presence of explosive-contaminated areas poses a significant threat to both military forces and civilian populations. The challenge is to develop innovative solutions for remote reconnaissance and neutralization of explosive-contaminated areas to ensure the safe passage of civilians or military formations in the speed of relevance, and facilitate recovery efforts. The solutions should prioritize speed, efficiency, safety, and minimal human intervention.

Objective:

Create cutting-edge technologies that can remotely recognize and neutralize explosive-contaminated areas including mine obstacles, minimizing risks to personnel and allowing for efficient access to critical zones.

Key Requirements:

1. ****Remote Reconnaissance Technology:****

Develop a system capable of remotely scanning and identifying explosive-contaminated areas. This could include the use of satellites images, drones, sensors, or other innovative technologies to detect and map the presence of explosives.

2. ****Data Analysis and Visualization:****

Create a solution that processes the data collected during reconnaissance and presents it in a user-friendly, interoperable format¹. The system should enable quick decision-making for further actions and provide real-time updates on the level of contamination.

3. ****Remote Neutralization Mechanisms:****

Design technologies that can remotely neutralize explosive devices or create safe pathways through contaminated areas. This could involve robotic systems, automated deactivation mechanisms, or other innovative approaches that do not require direct human involvement.

4. ****Safety and Reliability:****

Prioritize safety features to prevent accidental detonation or harm to the environment. Develop fail-safes and redundancy mechanisms to ensure the reliability of the technology in challenging conditions.

5. ****Integration with Existing Systems:****

Ensure compatibility and integration with existing military and humanitarian systems. The solution should be adaptable to various scenarios and easily implemented in different operational environments.

Evaluation Criteria:

- ****Effectiveness:**** How well does the solution identify and neutralize explosive-contaminated and minefields areas?
- ****Safety:**** What measures are in place to ensure the safety of personnel and the environment?
- ****Innovation:**** How creative and novel is the approach to remote reconnaissance and neutralization?
- ****Scalability:**** Can the solution be scaled for different conflict zones and operational scenarios?
- ****Integration:**** How well does the solution integrate with existing military and humanitarian systems?

¹ For example STANAG 2432 formats

Winning teams will not only receive recognition for their innovative solutions, but may also contribute to creating safer environments in conflict-affected regions.