

# **Statement of Work**

## **Development of a**

### **“Cyberspace Technology Horizon Scan”**

#### **in support of NATO HQ SACT Cyberspace Branch**

#### **RB-ACT-SACT-21-99**

## **1. INTRODUCTION AND BACKGROUND**

- 1.1. Allied Command Transformation (ACT) is the NATO warfare development command. The Cyberspace Branch is responsible, among others, to develop appropriate cyberspace warfare products, able to anticipate and inform how warfare will evolve in cyberspace. The outcomes of these warfare development activities are often the source for development of forward looking cyberspace warfare capabilities. Warfare development (including the one in cyberspace) entails multiple activities, including strategic foresight analysis, horizon scanning, feasibility studies, comparative warfare analysis, developing relevant concepts, innovation, experimenting and exercising them.
- 1.2. Cyberspace Strategic Outlook (formely known as the Cyberspace Strategic Foresight Analysis) is a continuous activity that provides a wide-ranging shared understanding of the future cyberspace domain and describes the trends and characteristics of potential adversaries and cyber-attacks in the next 10-15 years. This study informs Technology Horizon Scanning (HS) activities, which look into the interaction of cyber-attacks trends, identifies weak and sensitive areas, assess technology trends and then develop cyber capability proposals and recommendations for next 5-10 years. Together, Cyberspace Strategic Outlook and Horizon Scan are required to improve the Alliance’s long-term perspective of future cyberspace domain to support and inform cyber warfare development accordingly.
- 1.3. This SoW describes ACT’s request for the execution and documentation of a cyberspace technology horizon scan study, in support of cyberspace warfare development efforts of NATO HQ SACT Cyberspace Branch.

## **2. SCOPE OF WORK**

- 2.1. This project will develop a single document to be used to inform Cyberspace Warfare Development process. The target of the document (unless otherwise agreed during kick off meeting) will be cyberspace in 2030.

2.2. Previous cyberspace technology Horizon Scan (released in April 2021) will be made available for reference purposes. However, the scope of this work is a stand-alone, independent study that shall not be constrained by previous work or findings.

2.3. The document purpose is to inform NATO cyberspace on:

2.3.1. Which new or evolving technologies should be considered for cyberspace warfare development purposes.

2.3.2. The type of threat/opportunity they present to NATO.

2.3.3. How should NATO invest resources into developing and adopting them (monitor, research, implement, reinforce).

2.3.4. Relative priorities.

2.3.5. Other considerations (technology maturity, availability, ethical constraints, legal implications, etc.)

2.4. All deliverables shall be provided in both paper and electronic format, including all source tables, figures and diagrams. Sponsor approval shall be required for the use of non-MS-Office readable and editable formats in the product.

2.5. The document will be developed to include, as a minimum, the following sections:

*Table 1 – Table of contents of Cyberspace Horizon Scan*

<b>Section</b>	<b>Title</b>	<b>Contents summary</b>
	Executive summary	
1	Introduction	Aim, background, scope, assumptions, structure of the document.
2	Foreseen cyber technology evolution.	An overview of current relevant technologies in cyberspace. Foreseen evolution during the period (202x-2030).
3	Threats and Opportunities for NATO	Why NATO should adopt the technologies under discussion. What is the threat or opportunity presented by each technology.
4	Recommendations for technology adoption	Justified recommendation to monitor, research, implement, reinforce
5	Innovation roadmap	A one page/poster with a graphical representation of technologies, use cases, capabilities, innovation and transformation during the period 202x-2030.

Section	Title	Contents summary
6	Conclusions and recommendations.	Summary and additional recommendations and considerations out of (or that did not fit in) the preceding chapters. One of the recommendations shall be when and how to repeat this horizon scanning, and which improvements should be done.
App	Appendixes	Definitions, acronyms, references, other supporting materiel.

3. **MILESTONES** Contract award (T<sub>0</sub>): c.a. 1 September 2021.

3.2. Project kick-off meeting: T<sub>0</sub>+1 week, location ACT, Norfolk.

3.3. Progress meeting and review of draft #1 (including at least chapters 1-3): T<sub>0</sub>+4 weeks, location ACT, Norfolk.

3.4. Progress meeting and review of draft #2 (including at least chapters 1-6): T<sub>0</sub>+7 weeks, location ACT, Norfolk.

3.5. Delivery of final draft for comments: T<sub>0</sub>+10 weeks, location ACT, Norfolk.

3.6. Final meeting and delivery of final paper: T<sub>0</sub>+12 weeks, location ACT, Norfolk.

4. **OTHER CONSIDERATIONS**

4.1. The following tools will be used to ensure project execution compliance with NATO requirements and continuous inter-organization alignment, while limiting the risk of the execution:

4.1.1. Formal appointment of a project manager from both ACT and the provider, as the single PoC for each entity for project scope, management, quality assurance and evaluation.

4.1.2. At the request of ACT's PM, invitation to other NATO stakeholders representatives (e.g., from Allied Command Operations (ACO) or the NATO Communications and Information Agency (NCIA)) to participate in workshops and to discuss supplier products, should those require coherence with those organizations areas of responsibility. This participation could be replaced with a list of questions/comments from those organizations to be discussed during the appropriate technical workshops.

4.1.3. Formal delivery acceptance, per product and product draft required after each draft as well as prior to project closure.

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- 4.2. Within 30 days after ACT acceptance the product, the provider will be invited to brief final results to ACT leadership, at NATO SACT HQ in Norfolk, VA, and to an audience comprising ACT selected staff plus invitees from other commands, agencies or national representatives (as deemed adequate by ACT). There will be no additional costs for ACT should supplier accept this optional invitation. ACT will release necessary background documentation to the provider during the project kick-off meeting.
- 4.3. The provider may request additional information to be provided by ACT prior to any of the kick-off or progress meetings, which ACT will furnish if adequate and available. The provider may request additional information required for the execution of the activities at any time in between meetings. In these cases, ACT speed of response will be "best possible". ACT will supply the relevant documentation and support required to complete the tasks within the agreed deadlines, specifically when it applies to sufficient documentation / support in order to understand the existing requirements and solutions that are in place. Review, feedback and acceptance of all draft and deliverable documents and outputs will be provided in a timely manner, as agreed between the parties during the detail project plan development at the kick-off-meeting.
- 4.4. The provider will only use the above documents and information for the purposes of the execution of this contract and will immediately return or destroy all copies of the documentation once this purpose is fulfilled.
- 4.5. Disclosure of, and access to the above documentation or information to provider's personnel will solely be made on a need to know basis.
- 4.6. The provider and/or their personnel will not, without prior authorization from ACT, release to third parties any of the above documentation or information, its subject matter or any other aspect thereof.
- 4.7. This provision will remain in effect after the completion of the project and will cease to apply to any particular piece of information or documentation once that information or documentation becomes public knowledge other than through an act, default or omission of the provider.
- 4.8. All products delivered by the provider must be fully releasable to all NATO nations. Unless otherwise agreed by ACT, all products released by the provider shall be at unclassified.

## **5. TYPE OF CONTRACT AND PERIOD OF PERFORMANCE**

- 5.1. Type of Contract: This is a firm-fixed-price contract in accordance with the General Terms and Conditions; as such, all employer responsibilities for the contractor performing under this contract shall lie with the contractor company.
- 5.2. The Period of Performance extends from contract award date plus one week to 6<sup>th</sup> December 2021. Any (no-cost) extension to the period of performance shall be subject to ACT approval after careful consideration of the justification.

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## **6. PLACE OF PERFORMANCE**

- 6.1. Place of Performance for the indicated activities shall be at the discretion of the provider, at his own preference and cost. Location of project meetings shall be in general at ACT HQ in Norfolk, VA, unless prior agreement is reached to conduct them in a different location or via VTC.
- 6.2. No infrastructure or purchaser furnished equipment shall be provided to the provider, which will be responsible for all necessary tools and logistics necessary to execute the work.

## **7. INFORMATION SECURITY**

- 7.1. The provider will have access and work with documentation classified up to NATO RESTRICTED. Therefore personnel allocated to the activities in this SoW are required to have NATO RESTRICTED clearance or national equivalent. The provider shall comply with NATO policy when handling any NATO furnished information.

## **8. INTELLECTUAL PROPERTY RIGHTS**

- 8.1. Specific information to IPR is articulated in the General and Special Terms and Conditions that support this contract.

## **9. RELEASABILITY AND EXPORT CONTROL**

- 9.1. The products or services under this SOW will need to be releasable NATO. The provider will make all required efforts to obtain necessary authorizations from Government, Industry or any other owner of the information to disclose. Nothing herein requires the provider to provide information to ACT that is subject to Export Control Laws, IPRs or any other constraints prior to receiving the applicable authorizations.