HQ Supreme Allied Commander Transformation
Purchasing and Contracting Section
Office of Budget and Finance
Norfolk, Virginia | USA

Request for Proposal

RFP-ACT-SACT-26-66

Headquarters Supreme Allied Commander Transformation's AI-Assisted Tabletop Exercise (TTX) Framework for Cyberspace Operations

BIDDING INSTRUCTIONS

1. General

a. This is a **Firm Fixed Price Deliverables** contract in accordance with the HQ SACT General Terms and Conditions.

b. HQ SACT General Terms and Conditions Dated **15 January 2026** are applicable to this procurement and can be located on the ACT Website at **https://www.act.nato.int/wp-content/uploads/2026/01/HQ-SACT-General-Terms-and-Conditions-20260115.pdf** under Contractor Information.

c. Contract Award is contingent upon funding availability; Partial bidding is NOT allowed.

2. Classification

This Request for Proposal (RFP) is a NATO UNCLASSIFIED document.

3. Definitions

a. The “Prospective Bidder” shall refer to the entity that has indicated its intention without commitment, to participate in this RFP.

b. The term “Bidder” shall refer to the bidding entity that has completed a bid in response to this RFP.

c. The term “Contractor” shall refer to the bidding entity to which the contract(s) is awarded.

d. The term “Contracting Officer” designates the official who executes this RFP on behalf of HQ SACT.

e. “Contracting Officer`s Technical Representative” or “COTR” is the official who is appointed for the purpose of determining compliance of the successful bid(s), per the technical specifications.

f. The term “HQ SACT” shall refer to Headquarters Supreme Allied Commander Transformation.

g. The term “ACT” shall refer to Allied Command Transformation.

h. The term “NATO” shall refer to the North Atlantic Treaty Organization.

i. The term “days” as used in this RFP shall, unless otherwise stated, be interpreted as meaning calendar days.

4. Eligibility

a. This RFP is open to governmental or commercial entities;

b. Established in a North Atlantic Treaty Organization Alliance member nation;

c. Working in the required field and legally authorised to operate in the country and state in which this contract is to be performed, at the time of bidding. Has performed the desired past performance including size, cost and scope, as described in this RFP; and

d. All proposed key personnel identified to work on this requirement must be citizens of a NATO member nation.

e. To this end, bidder shall submit a signed Declaration of Eligibility as per *Enclosure 5.*

5. Duration of Contract

a. The contract awarded shall be effective upon signature (estimated 31st of August 2026).

b. Period of Performance: contract signature (estimated 31 August 2026) to 31 December 2026 for the base period corresponding to Work Package (WP0), with one (1) follow-on option period (WP1) - 1 January 2027 – 30 June 2027.

The option period may be exercised solely at the discretion of HQ SACT based on satisfactory contractor performance, availability of funding, budgetary & operational requirements and Contracting Officer approval.

6. Exemption of Taxes

In accordance with the agreements, (Article VIII of the Paris Protocol, dated 28 August 1952) goods and services under this contract are exempt from taxes, duties, and similar charges. The Contractor remains liable for all taxes levied on the Contractor and on Contractor's employees, to include responsibilities to report and withhold and/or disburse income tax on payments to Contractor's employees. See paragraph 14 of HQ SACT's General Terms and Conditions for provision in its entirety.

7. Amendment or Cancellation

a. HQ SACT reserves the right to amend or delete any one or more of the terms, conditions or provisions of the RFP prior to the date set for bid closing. A solicitation amendment or amendments shall announce such action.

b. HQ SACT reserves the right to cancel, at any time, this RFP either partially or in its entirety. No legal liability on the part of HQ SACT shall be considered for recovery of costs in connection to bid preparation. All efforts undertaken by any bidder shall be done considering and accepting, that no costs shall be recovered from HQ SACT. If this RFP is cancelled, any/all received bids shall be returned unopened, per the bidder's request.

8. Bidder Clarifications

a. Prospective Bidders should seek clarification at their earliest convenience. Any explanation regarding the meaning or interpretation of this RFP, terms, clause, provision or specifications, shall be requested in writing, to the contracting e-mail address hqsact.contracting@nato.int. Any request for clarifications must be received via email no later than **17 JULY 2026.**

b. In lieu of a bidder's conference, HQ SACT invites bidders to submit technical and contractual questions not later than **17 JULY 2026.**

c. Information in response to all inquiries / requests for clarification to a prospective bidder shall be furnished to all prospective bidders at the following link: http://www.act.nato.int/contracting as a Question-and-Answer (Q&A) addendum. All such addendums and any necessary solicitation amendments shall become an integral part of this RFP. Verbal Interpretations shall not be binding.

9. Bid Closing Date

Bids shall be received at HQ SACT, Purchasing and Contracting Office, no later than **05 AUGUST 2026, 0900 hours, Eastern Time, Norfolk, Virginia, USA.** No bids shall be accepted after this date and time. **No hard copy proposals will be accepted.** Please see Proposal Submission (paragraph 12) for more details.

10. Bid Validity

a. Bids shall remain valid for a period of one hundred and twenty days (120) from the applicable closing date set forth within this RFP. HQ SACT reserves the right to request an extension of validity. Bidder shall be entitled to either grant or deny this extension of validity. HQ SACT shall automatically consider a denial to extend the validity as a withdrawal of the bid.

b. **HQ SACT will not accept supplier proposals prepared, in whole or in part, by means of generative artificial-intelligence (AI) tools, including and without limitation to chatbots, such as Chat Generative Pre-Trained Transformer (Chat GPT), or other language generating tools. HQ SACT reserves the right to screen applications to identify the use of such tools. All applications prepared, in whole or in part, by means of such generative or creative AI applications may be rejected without further consideration at HQ SACT's sole discretion, and HQ SACT reserves the right to take further steps in such cases as appropriate.**

11. Content of Proposal

The proposal shall consist of two (2) separate documents (Technical / Price) sent via e-mail as per the instructions. No hard copy proposals will be accepted. The E-mailed documents shall be received no later than **05 AUGUST 2026, 0900 hours, Eastern Time, Norfolk, Virginia, USA.**

a. **Technical Proposal shall be a Signed PDF document and contain:**

1) Company description (limited to 10 pages);

2) A table of contents for the entire proposal (as per Enclosure #1);

3) The bidder's full name, address, Points of Contact, Telephone, e-mail address, Internet site;

4) Compliance statement (as per Enclosure#2);

5) Past performance (as per Enclosure #3);

6) Signed Declaration of Eligibility (as per Enclosure #5)

7) List of key personnel to provide services;

8) Supplementary relevant information, if applicable; and

9) Compliance and Best Value Criteria Matrices (as per Annex A).

b. **Price Proposal shall be**

1) **Submitted in U.S. Dollar Currency.** Contractor may request payment post award in alternate currency based on agreed conversion rate.

2) Prices shall be on a **Firm Fixed Price Basis,** include any relevant discount schedule.

3) Price proposal (as per Enclosure #4).

12. Proposal Submission

a. Proposals shall be separate e-mail submissions to:

Technical proposal: **hqsact.techproposal@nato.int**

Price proposal: **hqsact.priceproposal@nato.int**

b. E-mail subjects shall include the solicitation information along with company name (for example: RFP -ACT-SACT-26-66_Tech_ABC Inc. / RFP -ACT- SACT-26-66_Price_ABC Inc.). **Allow sufficient time in sending your submission should you encounter e-mail size challenges**.

c. No verbal bids or verbal modifications or telephonic bids shall be considered.

d. It is the ultimate responsibility of a prospective bidder prior to submission that all proposal submissions are reviewed to ensure they meet the technical, contractual and administrative specifications and that offers meet the limitations and expressed conditions.

13. Late Proposals

a. It is solely the bidder`s responsibility that every effort is made to ensure that the proposal reaches HQ SACT prior to the established closing date and time. No late bids shall be considered.

b. **A delay in an e-mail exchange due to server or size restrictions does not constitute a delay by NATO.**

14. Bid Withdrawal

A bidder may withdraw their bid up to the date and time specified for bid closing. Such a withdrawal must be completed in writing with attention to the HQ SACT Contracting Officer.

15. Bid Evaluation

a. The evaluation of bids and determination as to the responsiveness and technical adequacy or technical compliance, of the products or services requested, shall be the responsibility of HQ SACT. Such determinations shall be consistent with the evaluation criteria specified in the RFP. HQ SACT is not responsible for any content that is not clearly identified in any proposal package.

b. Proposals shall be evaluated and awarded taking into consideration the following factors:

1) Successful administrative submission of bid packages as requested in paragraph 11 and as listed in this RFP.

2) Successful determination of compliance on mandatory criteria (Compliant/non-compliant).

3) Technical factors / pricing factors rated as follows: Technical / Price = 70/30 (Best Value)

4) Technical clarifications as determined may be conducted.

5) Acceptance of HQ SACT General Terms and Conditions.

16. Proposal Clarifications

During the entire evaluation process HQ SACT reserves the right to discuss any bid, clarify what is offered and interpret language within the bid to resolve any potential areas of concern.

17. Award

a. HQ SACT intends to award a firm fixed price services contract to the successful bidder whose proposal represents the Best Value offer to NATO. Partial awards will not be considered.

b. HQ SACT will collect information from references provided by the successful bidder on its past performance. Contractors must provide authorization to contact references or that past performance shall not be considered.

c. HQ SACT reserves the right to negotiate minor deviations to the listed General Terms and Conditions to this RFP.

18. Surge Capability:

A surge capability requirement is included to have a contract vehicle in place should emerging circumstances require a quick and temporary increase in contractor services within the scope of the existing Statement of Work. The selected supplier shall be prepared to provide additional services if needed to support this SOW. The contractor

shall be prepared to evaluate requirements and submit a price proposal for any new in scope requirement for consideration by HQ SACT. Surge proposals will be evaluated by the Contracting Officer for fair and reasonable pricing and should be developed based upon the same pricing structure as the original contract proposal. Surge requirements include, but are not limited to, required repairs identified during the annual maintenance checks, but not already accounted for and will be incorporated by formal contract modification. Requests for pricing are made on a non-committal basis and do not constitute a formal commitment by HQ SACT to contract for additional work; supplier will not be reimbursed costs for preparing price proposals or other related expenses in response to a surge request. HQ SACT surge efforts will not exceed 50% of the annual contract value or 50% of the cumulative contract value.

19. Lodging a complaint

Interested Parties should consult Appendix 1 of Procedure for NATO Competitive Procurement Policy (https://www.nato.int/content/dam/nato/webready/documents/finance/procurement-procedure_en.pdf) to learn more about to learn more about applicable dispute resolution procedures. For this RFP, complaints shall be lodged by an interested party within 15 calendar days from the date when the interested party first knew, or ought to have known, about the circumstances giving rise to the grounds for the potential dispute, whichever is earlier. For complaints relating to the contract award decision, the deadline is 15 calendar days from the day following the date on which the contract award decision is communicated to the bidders.

20. Proposed Candidates

If successful, contractor company must notify HQ SACT of any special accommodations or requirements of its personnel for on-site support.

21. Communications

All communication related to this RFP, between a prospective bidder and HQ SACT shall only be through the nominated HQ SACT Contracting Officer. Designated contracting staff shall assist the HQ SACT Contracting Officer in the administrative process. There shall be no contact with other HQ SACT personnel regarding this RFP. Such adherence shall ensure Fair and Open Competition with equal consideration and competitive footing to all interested parties.

22. Points of Contact

Hqsact.contracting@nato.int

Enclosure 1: Proposal Content / Checklist

PROPOSAL CONTENT / CHECKLIST

Table of Contents

☐ Bidder's name, address, POC, Contact numbers, email address.

☐ Compliance Statement (as per Enclosure 2).

☐ Past Performance (including References) (as per Enclosure 3).

☐ List of Key Personnel.

☐ Technical Proposal, including the Compliance matrix (as per Annex A).

☐ Price Proposal (Excel worksheet – as per Enclosure 4 - provides mandatory price proposal format).

☐ Declaration of eligibility (as per Enclosure 5).

Enclosure 2: Compliance Statement

COMPLIANCE STATEMENT TO SEALED BID RFP-ACT-SACT-26-66

It is hereby stated that our company has read and understands all documentation issued as part of this RFP. Our company proposal submitted in response to the referenced solicitation is fully compliant with the provisions of this RFP and the intended contract with the following exception(s); such exceptions are considered non-substantial to the HQ SACT solicitation provisions issued.

Note: Any requested deviations/adjustments or considerations regarding HQ SACT General Terms and Conditions **must be identified here - at the time of bidding - for consideration by the Contracting Officer.**

Clause	Description of Minor Deviation
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(If applicable, add another page)

Company:_____

Signature:

Name &Title:_____ Date: _____

Company Bid Reference: _____

Bidder's proposal must be based on full compliance with the terms, conditions and requirements of the RFP and all future clarifications and/or amendments. The bidder may offer variations in specific implementation and operational details provided that the functional and performance requirements are fully satisfied. In case of conflict between the compliance statement and the detailed evidence or explanation furnished, the detailed evidence/comments shall take precedence/priority for the actual determination of compliance. Minor or non-substantial deviations may be accepted. Substantial changes shall be considered non-responsive.

Enclosure 3: Past Performance Information Form

Company is required to submit a minimum of two (2) past performances within the last five (5) years. Company should be clear how the company met the requirements of past performance. Reference to a contract must include a detailed description of the work performed relevant to the requirements outlined in the SOW. Generic or Vague references to the contract awarded without clear connection to work performed will be disqualified

(a) Contracting Entity:

(b) Contract No:

(c) Type of Contract (Firm Fixed Price, IDIQ, Requirements):

(d) Title of Contract:

(e) Description of Work Performance and Relevance to Current Acquisition (Type of facility, capacity, estimated patronage, summary of staff used):

(f) Contract Dollar Amount:

(g) Period of Performance:

(h) Name, Address, Fax and Telephone No. of Reference:

(i) Indicate Whether Reference Acted as Prime or Sub-contractor:

(j) Comments regarding compliance with contract terms and conditions:

(k) Complete Contact Information for client:

(l) Permission to contact client for reference: Yes / No

Name/Signature of Authorized Company Official: _____

_____

This Enclosure is designed to assist the respective company provide HQ SACT with all necessary documents/information required. For clarification, please refer to bidding instructions in part 1 of subject solicitation.

Enclosure 4a – Mandatory Price Proposal Excel Spreadsheet

Pricing shall be submitted using the excel workbook provided. Bidders may elect to submit a PDF proposal for pricing **in addition to the required excel workbook.**
Proposals not submitted in the proper format will not be considered.

#	Work package/Option	Deliverable	Timeline	Price
1	WP0/Base	D0.1: CyC2 TTX development framework package	NLT T_0 + 14 weeks	
		D0.2 Basic UI/UX for the definition, creation, and interconnection of TTX elements		
		D0.3: Basic MVP-1 code to run a simple, user-configurable TTX		
		D0.4 MVP-1 documentation, including Product Requirements Document (PRD), System Architecture Design (SAD), Frontend Description, Backend Description, Integration Description, phase handover descriptions, Installation and user manual		
2	WP1/Option 1	D1.1 - Stand Alone MVP-2 Package	NLT T_{01} + 14 weeks	
		D1.2 - Handover package: installation/configuration guidance, operator/facilitator user guide, tailoring guidance, reset/replay instructions, and technical description		
		D1.3: Initial library of three representative TTX		
		D.1.4: MVP-2 documentation, including Product Requirements Document (PRD), System Architecture Design (SAD), Frontend Description, Backend Description, Integration Description, phase handover descriptions, Installation and user manual		
		D1.5 - Gamification layer design specification: requirements and implementable design aligned to the platform data model and interfaces		

**T_0 – effective date of the base contract = base period purchase order signature date; T_{01} – option 1 effective date = option 1 purchase order signature date;*
The timelines are maximal. Bidders are welcome to propose shorter timelines, subject to them being objectively realistic in being able to meet such timelines.

Enclosure 4b –Price Proposal Equivalent Effort

	Estimated person-hours	
ROLE	**WP0**	**WP1**
Project/Delivery Lead		
UI/UX & Information Visualization Lead		
TTX Writer/Designer		
Software Developer		
Other (specify)		
….		

Note: This is a deliverables contract. The estimated effort to perform the work is required for evaluation purposes only, to more easily understand the cost basis of the pricing.

Enclosure 5 – Declaration of Eligibility for NATO Competitive Procurement

Date:

Declaration of Eligibility for NATO Competitive Procurement

To: ACT Procurement Authority

Subject: Declaration of Eligibility for NATO Competitive Procurement

Reference: IFIB-ACT-SACT-26-66 AI-Assisted Tabletop Exercise (TTX) Framework for Cyberspace Operations.

With reference to the above-mentioned NATO Competitive Procurement (NCP) opportunity, the following *[insert Country of Origin]* vendor has expressed an interest in receiving the solicitation document:

a. **Vendor Name:**
b. **Address:**
c. **Point of Contact/Title: Mr./Ms.:**
d. **Email Address:**
e. **Phone #:**

2. I certify that this vendor has the necessary financial, technical and professional competence to be admitted by the Government of *[insert Country of Origin]* as a bidder were it responsible for awarding a contract of this nature. The vendor listed above is security cleared to the level of this procurement opportunity.

3. **Extension to Other NCP Opportunities[1].** In addition to the referenced project, this Declaration of Eligibility may be used for other ACT NCP opportunities and is valid for the vendor in paragraph 1 for a period of three (3) years, unless rescinded in writing by the National Responsible Authority of *[insert Country of Origin].*

Check one:

Yes

No

[1] Note to Vendor: If “Yes” is checked, then present this Declaration of Eligibility for expressed interest in other ACT NCP Opportunities

Signature
[Name of National Responsible Authority]
[insert Country of Origin]

Statement of Work

AI-Assisted Tabletop Exercise (TTX) Framework for Cyberspace Operations

In support of NATO Headquarters Supreme Allied Commander Transformation (HQ SACT), Cyberspace Branch

Introduction

1 Allied Command Transformation (ACT) is NATO's leading agent for change: driving, facilitating, and advocating the continuous improvement of Alliance capabilities to maintain and enhance the military relevance and effectiveness of the Alliance. The main objectives of ACT are providing appropriate support to NATO missions and operations; leading NATO military transformation; improving relationships, interaction and practical cooperation with Partners, Nations and international organisations. ACT therefore leads Alliance concept development, capability development, training and lessons learned initiatives and provides unfettered military support to policy development within NATO.

2 The exploitation of cyberspace as a domain of operations presents an increasingly growing challenge for the Alliance, requiring new strategies, concepts, architectures, processes and capabilities to enable NATO to defend itself in cyberspace as effectively as it does in the physical domains. In this context, ACT Cyberspace Branch is responsible, among others, for developing appropriate cyberspace warfare products such as strategic outlook analysis, horizon scanning, research and feasibility studies and capability surveys. Those products inform ACT's activities in the area of concept definition and experimentation and are the source for development of forward-looking cyberspace capabilities that enable NATO operations and missions.

Background

3 As the cyberspace domain continues to evolve, NATO must develop, mature, and validate new capabilities and concepts to enable effective cyberspace operations, while simultaneously preparing and training the cyberspace workforce to employ those capabilities and concepts across strategic, operational, and tactical levels. Tabletop Exercises (TTX) are essential to support cyberspace warfare development efforts, from concept and capability validation to education and training. They enable structured, scenario-driven decision-making and coordination across organizations and help identify gaps and improvements.

4 Traditional cyber TTX design and execution is resource-intensive and often produces

one-time results that are difficult to tailor, extrapolate or reuse. Recent advances in Artificial Intelligence (AI) – including Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and orchestrated agentic AI – offer the potential to reduce manual workload and increase reuse by generating and tailoring scenarios/injects and enabling AI-driven personas and skills to support scalable role play. Such approaches, furthermore, reduce the time and effort requirements to run several similar instances of the game, thus enabling the training or decision making community to play several games in a few hours, an ability which is an intrinsic requirement to quickly converge to detailed solutions in response to the TTX raised dilemmas.

5 This Statement of Work (SoW) defines the tasks and deliverables for industry support to develop an AI-assisted Cyberspace Command and Control (CyC2) TTX framework and stand-alone MVP. **The work is structured as one (1) initial Work Package (WP0) and one (1) optional follow-on Work Package (WP1), which may be exercised at NATO ACT's discretion based on the outcomes of preceding work**.

Aim and Scope

6 The aim of this SoW is to develop and deliver a reusable, AI-assisted CyC2 TTX framework and a stand-alone MVP that enables ACT to generate, tailor, execute, and report cyberspace operations TTX with reduced human effort, thereby supporting concept development/validation and enabling repeatable cyberspace warfare development opportunities and role-based training.

7 The following activities are in scope of this SoW:

7.1 Review and use ACT-provided documentation and guidance related to cyberspace operations and CyC2.

7.2 Define a reusable TTX framework and methodology (method, artefacts, templates, data/knowledge model) to define, describe and build cyberspace operations TTXs, supporting repeatable and tailorable instances and enabling fast planning, execution and assessment of the TTXs.

7.3 Develop and deliver a stand-alone MVP implementing core framework capabilities, including:

7.3.1 Heuristic or AI-supported definition and description of as-is organizations, personas, workflows, tasks and products.

7.3.2 Heuristic or AI/supported definition and description of to-be organizations, personas, workflows, tasks and products.

7.3.3 AI-assisted scenario/vignette development and tailoring.

7.3.4 AI-assisted inject generation, scheduling, delivery, and logging.

7.3.5 AI-assisted creation and orchestration of personas (AI role players) mapped to organizations, roles, workflows, tasks, and role-based skills.

7.3.6 Orchestrated execution of the resulting TTX

7.3.7 Participant decisions/responses tracking and facilitation.

7.3.8 AI-assisted outputs (e.g., after-action report (AAR) /timeline/observations) suitable for warfare development documentation and reuse.

7.4 Support iterative reviews with ACT and incorporate agreed changes.

7.5 Deliver the package and documentation enabling ACT to run, reset, and replay TTX independently.

8 The following activities are out of scope of this SoW:

8.1 Integration with NATO operational systems/networks or real-time data feeds.

8.2 Processing/handling of information above NATO UNCLASSIFIED.

8.3 Delivery of an enterprise production system beyond the framework and MVP.

8.4 Hosting, maintaining or operating the resulting system beyond the delivery date and end of the project.

Activities and Deliverables

9 The work is organized into two WPs: one initial WP and one optional WP.

WP1 (Initial): CyC2 TTX Framework & AI-Assisted MVP-1 "TTX Engine"

10 Purpose: Define the TTX framework for cyberspace operations and deliver a stand-alone MVP-1 that demonstrates end-to-end AI-assisted TTX generation, execution support (including AI personas), and reporting, thereby enabling ACT to reuse the tool for CyC2 concept validation and related discussion/analysis.

11 Tasks:

11.1 Confirm intended use cases, target audiences, expected exercise formats, and constraints.

11.2 Define, develop and document a framework of TTX-development agents, roles, products, product templates and hand-over artifacts to support the user in the

development of a TTX. This framework shall be able to be used with common coding environments, such as Cursor, Visual Studio/Github Copilot, Claude, etc.[1]

11.3 Using the above methodology, define and implement an end-to-end TTX lifecycle design methodology, along with the reusable artefacts/templates (mini-scenario, organizations, storylines, vignettes, injects, personas -and role-, facilitator guide, evaluation criteria).

11.4 Implement the above methodology in a basic UI/UX (User Interface/User Experience) that allow TTXs administrators to create organizations, training audience-personas, role-playing-personas, and associated artifacts (mini-scenario, injects, scores, etc.)

11.5 Implement orchestrated agentic AI to play the developed TTX by code-enabling selected organizations (skills, behaviours, coordination), personas, workflows and activities, thus reducing the burden on human exercise control.

11.6 Provide facilitator controls (e.g., pace control, inject edit/override, persona behaviour tuning within defined constraints, export logs).

11.7 Implement automated generation of exercise outputs (e.g., timeline reconstruction, key decisions/actions, observations/issues, and ACT-agreed reporting elements) suitable for warfare development reuse.

11.8 Deliver a stable stand-alone MVP-1 package and documentation enabling ACT to run, reset, and replay a delivered exercise without contractor support.

12 Deliverables:

12.1 D0.1: CyC2 TTX development framework package: implemented methodology, agents, tasks, rules, product and handover templates and other artifacts, data/knowledge model, assumptions/constraints, etc.

12.2 D0.2 Basic UI/UX for the definition, creation, and interconnection of TTX elements (organizations, workflows, personas, etc).

12.3 D0.3: Basic MVP-1 code to run a simple, user-configurable TTX, including at least 5 organizations, 20 AI-agent role players, 20 human players, 2 workflows, 20 injects and 2 products.

12.4 D0.4 MVP-1 documentation, including Product Requirements Document (PRD), System Architecture Design (SAD), Frontend Description, Backend Description, Integration Description, phase handover descriptions, Installation and user

[1] ACT does not want to influence nor constrain the selection, design or implementation of this TTX development support framework, but for illustration purposes only, an example of AI agent-enabled framework is available at https://github.com/synaptic-ai-consulting/AAMAD.

manual. For effort estimation purposes, the generation of this documentation should be automatically done by the framework agents.

13 Acceptance criteria:

13.1 The framework clearly defines how to generate, tailor, execute, and evaluate TTXs for cyberspace operations and how artifacts interrelate.

13.2 The MVP-1 supports an end-to-end workflow: generate scenario/injects/personas → execute with inject delivery and AI role play → capture/log responses → produce an AAR/output package.

13.3 AI personas demonstrably represent multiple roles mapped to an organization/RRA structure and can be tailored to different C2 structure variants.

13.4 ACT can run, complete, reset, and replay the sample TTX independently, by re-using the framework documents (PRD, SAD, frontend, backend, integration) and handover products.

WP1 (Option 1): Expanded Platform Capability & Foundations for a Future Gamification Layer, MVP-2

14 Purpose: Expand and mature the WP0 MVP-1 into a more sophisticated platform (MVP-2) implementing the full framework functionality, improving scalability and tailoring, and delivering an implementable design specification for a later gamification layer to improve usability and support role-based training at scale. The WP-2 platform shall provide more tools for exercise planning, design, execution and assessment. It shall provide AI-tools to capture persona roles and tasks from real job descriptions, as well as organizational mission statements and workflow and products definition. It shall as well provide mature mechanism to evaluate persona (role-player or human) performances and achievement of objectives. It shall as well enable adding TTX campaigns to a campaign library, enabling retrieval, modification and re-execution of previous TTXs.

15 Tasks:

15.1 Enhance the UI/UX to enable the characteristics/requirements for MVP-2, above.

15.2 Increase the library of AI personas and skills; improve orchestration to support more complex cyber C2 structures and multi-level interactions.

15.3 Improve facilitator tooling, structured logging, analytics/visualization, and reporting outputs (including improved reuse across multiple runs where feasible).

15.4 Deliver additional exercise content packs and/or a reusable library aligned to ACT-agreed priorities.

15.5 Deliver an actionable design specification for a gamification layer (UI/UX and mechanics concepts, progression/scoring, training modes, integration approach) that can be implemented later without re-rearchitecting the platform.

16 Deliverables:

16.1 D1.1: Stand Alone MVP-2 Package (runnable): implementing the delta functionality and additional requirements as described for WP1, above.

16.2 D1.2: Handover package: installation/configuration guidance, operator/facilitator user guide, tailoring guidance, reset/replay instructions, and technical description; include source/project artefacts as required to ensure ACT retention and ability to configure and replay over time.

16.3 D1.3: Initial library of three representative TTX, including mini-scenarios, organizations, personas, workflows, tasks, injects, products and evaluation sets. The list of representative TTXs shall be agreed with ACT at the end of WP0, but for the purpose of evaluating the job, they could look like any of the following:

16.3.1 Use of a dedicated Cyber Component Command (CyCC) versus tasking a Joint Force Command (JFC).

16.3.2 Benefits of a national liaison officer in the CyCC.

16.3.3 Identification of non-allocated roles in a defensive cyberspace operation.

16.3.4 Cyber C2 workflow flaws identification

16.3.5 Etc.

16.4 D1.4: MVP-2 documentation, including Product Requirements Document (PRD), System Architecture Design (SAD), Frontend Description, Backend Description, Integration Description, phase handover descriptions, Installation and user manual. For effort estimation purposes, the generation of this documentation should be automatically done by the framework agents.

16.5 D1.5: Gamification layer design specification: requirements and implementable design aligned to the platform data model and interfaces.

17 Acceptance criteria:

17.1 ACT can create and tailor multiple TTXs without contractor support using the delivered mechanisms/templates.

17.2 Expanded personas/skills and orchestration support more complex C2 structures and role interactions.

17.3 Reporting supports warfare development reuse and repeatability (clear capture of decisions, outcomes, and observations).

17.4 Gamification layer design is implementable and consistent with the delivered platform architecture/data model.

Schedule/milestones

18 The following table shows expected project milestones. The provider shall propose any changes to the plan for discussion and agreement (if applicable) during kick-off meeting.

Work Package	Milestone	Description	Timeline
WP0 (base)	M0.1	Kick-off of WP0 (initial)	T0 (contract award)
	M0.2	Delivery and review of initial draft deliverables for WP0.	T0+4 weeks
	M0.3	Delivery and review of updated draft deliverables for WP0.	T0+8 weeks
	M0.4	Delivery and review of updated draft deliverables for WP0.	T0+11 weeks
	M0.5	Delivery and review of final deliverables for WP0.	T0+14 weeks
WP1 (option 1)	M1.1	Activation of WP 1 (option 1) and kick-off	T0 (beginning of WP1)
	M1.2	Delivery and review of draft deliverables for WP1.	T0+4 weeks
	M1.3	Delivery and review of updated draft deliverables for WP1.	T0+8 weeks
	M1.4	Delivery and review of updated draft deliverables for WP1.	T0+11 weeks
	M1.5	Delivery and review of updated draft deliverables for WP1.	T0+14 weeks

Estimated Effort

19 The estimation of effort required to complete the works in the scope of this SoW is the sole responsibility of the bidding contractors. To facilitate understanding of the provider-estimated effort, the bidder shall complete a table like the one below with the

estimated person hours per role and WP. Roles below are provided for illustration purposes, only, and shall be modified based on the proposed provider roles:

ROLE	WP0	WP1
Project/Delivery Lead		
UI/UX & Information Visualization Lead		
TTX Writer/Designer		
Software Developer		
Other (specify)		

20 For illustration purposes only, and to clarify the level of detail that ACT expects form the deliverables, ACT estimates that WP0 would require 8 person-month, and WP1 would require about 6 person-month. It is also worth noting that ACT expects deliverables in Technology Readiness Level TRL-6 or TRL-7 (technology demonstration and an MVP ready to demonstrate concepts in an operational environment).

Other Considerations

21 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:

21.1 Formal appointment of a Project Manager (PM) from both ACT and the provider, as the single PoC for each entity for project scope, management, quality assurance and evaluation.

21.2 At the request of ACT's PM, invitation to other NATO stakeholders' representatives (e.g., from the NATO Allied Command Operations, NATO Joint Force Commands, 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.

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

22 The provider may request additional information to be furnished by ACT prior to any

of the kick-off or progress meetings, which ACT will provide 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 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 detailed project plan development at the kick-off-meeting.

23 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.

24 Disclosure of, and access to the above documentation or information to provider’s personnel will solely be made on a need-to-know basis.

25 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.

26 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.

Type of Contract and Period of Performance

27 Type of Contract: This is a product-based, firm-fix-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.

28 The Period of Performance will be defined and confirmed in the Purchase Order issued by ACT. For planning purposes, the work is structured as a base period (WP0) and up to one option period (WP1[2]), with the following indicative durations, commencing from the date(s) specified in the PO:

28.1 WP0 (base): fourteen (14) weeks from Kick-off / PO effective date (as specified in the PO). This WP shall in any case be completed before 31st December 2026.

28.2 WP1 (option 1): fourteen (14) weeks from the effective date of the corresponding purchase order.

[2] Option periods will be exercised solely at the ACT’s discretion and will commence only upon written notice of option exercise.

29 ACT project sponsor approval is required to deviate from the milestones identified above. Any (no-cost) extension to the period of performance shall be subject to ACT approval after careful consideration of the justification.

Place of Performance and Travel

30 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 via VTC, unless prior agreement is reached to conduct them in a different location or.

31 No infrastructure or purchaser furnished equipment shall be provided to the awarded company, which will be responsible for all necessary tools and logistics necessary to execute the work, including handling and transmitting NATO documentation up to NATO UNCLASSIFIED.

32 Travel to conduct the activities in support of this SoW is not expected.

Information Security

33 The provider will have access and work with not classified and NATO UNCLASSIFIED documentation, only. The provider and personnel allocated to the activities in this SoW shall comply with NATO policy when accessing and handling any NATO furnished information (up to NATO UNCLASSIFIED).

Intellectual Property Rights

34 Specific information to IPR is articulated in the General and Special Terms and Conditions that support this contract. All furnished materials associated assets and documents (Intellectual Property) will be the property of ACT unless otherwise agreed in writing with the parties.

Releasability and Export Control

35 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.

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Annex A: Compliance and Best Value Criteria Matrices

Contractor technical proposal will be assessed based on criteria mentioned in Compliance and Best Value Criteria Matrices. The Contractor must demonstrate their experience and expertise in the subject matter.

The technical evaluation will be done in two steps. Contractor technical proposal will be first evaluated against the Compliance Matrix to be assessed as Compliant/Non-Compliant, and second against the Best Value Criteria Matrix to assess the technical score that the contractor obtains used afterwards to establish Best Value score based on the Technical/Price 70/30% criterion.

A "NOT COMPLIANT" in any of the criteria categories in the compliance matrix will result in the bidder's proposal as being "Technically Non-Compliant" unless otherwise specified. A zero score in any best value criterion where "Zero points in this criterion disqualifies the bidder" is indicated will result in the bidder's proposal as being "Technically Non-Compliant".

Compliance Matrix

#	Item	Compliant / Non-compliant	Page, Paragraph and Line Number Reference where Bidder meets criteria.
1.	Contractor is headquartered in a NATO nation and all personnel supporting this contract (including subcontractor's personnel) must be a citizen of a NATO member nation. If individuals have dual citizenship that includes a non-NATO nation, their citizenship must be provided. Contractor shall be legally authorized to operate in NATO member nations at the time of the bidding.		
2.	Contractor is to provide a minimum of two past performance citations (for work within the past five years) to show that it has successfully completed work that is similar to or directly traceable to the requirements outlined in this SOW.		
3.	Key personnel citizen of NATO member nation with		

#	Item	Compliant / Non-compliant	Page, Paragraph and Line Number Reference where Bidder meets criteria.
	valid passport with no travel restrictions. (Nationality must be indicated to include other citizenships)		
4.	Contractor's key personnel possess demonstrated proficiency in English as defined in STANAG 6001 (Standardized Linguistic Profile (SLP) 3333 - Listening, Speaking, Reading and Writing) or equivalent.		

Best Value Criteria Matrix

PART I – PREVIOUS RELEVANT EXPERIENCE (30 Points)

#	Performance Indicator	Score	Evidence Expected	Explanation of how bidder meets criteria (or reference to section/paragraph in the proposal)	Awarded Score
1	Has the bidder successfully designed, developed and delivered at least one AI-assisted Tabletop Exercise (TTX), wargame or decision-support environment supporting military operations or defence experimentation, rather than conventional cyber awareness or technical cyber training? Zero points in this criterion disqualifies the bidder.	0 or 5	Customer reference, contract, screenshots, acceptance evidence, description of bidder's role		
2	Has the bidder successfully delivered projects involving Cyberspace Operations, Cyber Command and Control (CyC2), operational planning or military decision-making beyond traditional IT or network security?	0 or 5	Project descriptions, customer references, technical documentation		
3	Has the bidder successfully developed AI-enabled applications using Large Language Models (LLMs), Retrieval-Augmented Generation (RAG) and agentic AI to automate knowledge-intensive workflows comparable to those required by this SoW? Zero points in this criterion disqualifies the bidder.	0 or 5	Architecture diagrams, technical descriptions, customer references		
4	Has the bidder previously designed, implemented and delivered orchestrated AI agents or AI personas capable of assuming different organisational roles, behaviours, workflows or decision-making responsibilities?	0 or 3	Demonstrations, architecture descriptions, customer references		
5	Has the bidder developed reusable frameworks, templates, ontologies or knowledge models enabling rapid generation, tailoring and reuse of scenarios, workflows or operational products rather than one-off software solutions?	0 or 3	Framework documentation, architecture descriptions, reference projects		
6	Has the bidder successfully delivered software capable of automatically generating operational products, reports, documentation or decision-support artefacts using AI techniques comparable to those required by this SoW?	0 or 2	Product demonstrations, screenshots, customer references		
7	Has the bidder developed interactive software platforms supporting collaborative planning, role-playing, simulation or exercise execution involving multiple users, organisations or operational roles?	0 or 2	Demonstrations, user guides, reference projects		
8	Has the bidder previously delivered stand-alone software capable of operating without Internet connectivity, cloud services or contractor-hosted infrastructure?	0 or 2	Installation guides, architecture descriptions, customer acceptance evidence		
9	Has the bidder previously delivered complete source code, editable project artefacts and technical documentation enabling the customer to independently maintain, extend and evolve the delivered capability? Zero points in this criterion disqualifies the bidder.	0 or 1	Handover package, source code inventory, acceptance evidence		
10	Has the bidder successfully completed at least one contract during the previous four years directly relevant to the development of AI-assisted decision-support systems, military simulation, experimentation environments or TTX frameworks comparable to the requirements of this SoW? Zero points in this criterion disqualifies the bidder.	0 or 2	Contract references identifying customer, project scope and bidder's role		
	TOTAL SELF-ASSESSMENT SCORE FOR PART I				

PART II – CAPACITY TO SUCCESSFULLY FULFIL THIS CONTRACT (20 Points)

#	Performance Indicator	Score	Evidence Expected	Explanation of how bidder meets criteria (or reference to section/paragraph in the proposal)	Awarded Score
11	Does the proposed project team collectively demonstrate all disciplines required to successfully execute this contract, including AI/LLM engineering, agentic AI orchestration, software architecture, UI/UX design, TTX design, military operational analysis, project management and systems integration? Zero points in this criterion disqualifies the bidder.	0 or 4	Organisation chart, CVs, role descriptions and allocation of responsibilities		
12	Does the proposed Project Manager demonstrate previous experience successfully managing multidisciplinary AI-enabled software developments for defence or government customers involving iterative reviews, multiple deliverables and fixed delivery schedules?	0 or 2	CV, project references, customer evidence		
13	Does the proposed Lead AI Architect demonstrate practical experience designing enterprise software architectures incorporating LLMs, Retrieval-Augmented Generation (RAG), orchestrated AI agents and knowledge-based reasoning? Zero points in this criterion disqualifies the bidder.	0 or 3	CV, architecture portfolio, project references		
14	Does the proposed team include personnel with demonstrated expertise in cyberspace operations, Cyber Command and Control (CyC2), military operational planning or warfare development sufficient to understand ACT documentation without significant customer coaching? Zero points in this criterion disqualifies the bidder.	0 or 2	CVs, publications, previous projects, military experience		
15	Does the bidder demonstrate sufficient personnel availability and organisational capacity to execute both the mandatory and optional Work Packages while supporting ACT workshops, demonstrations, reviews and rapid incorporation of agreed changes within the required schedule?	0 or 2	Resource allocation plan, staffing profile, project schedule		
16	Does the bidder present a realistic project management methodology covering quality assurance, configuration management, issue tracking, risk management, change control, version management and acceptance management throughout the project lifecycle?	0 or 2	Project Management Plan, Quality Plan or equivalent documentation		
17	Does the bidder demonstrate mature software engineering practices supporting collaborative development, source-code management, automated testing, version control, release management and reproducible software builds?	0 or 2	Software development methodology, DevSecOps description, toolchain documentation		
18	Does the bidder demonstrate the ability to securely handle NATO-furnished information, comply with NATO UNCLASSIFIED handling requirements and protect ACT intellectual property throughout project execution? Zero points in this criterion disqualifies the bidder.	0 or 1	Information security policies, quality certifications, security procedures		
19	Does the bidder demonstrate that all software frameworks, AI technologies, development environments and third-party components required to execute this project are already available and do not introduce unacceptable licensing, export-control or delivery risks?	0 or 1	Technology stack, software bill of materials, licensing statement		
20	Does the bidder demonstrate the organizational capability to provide responsive technical support throughout workshops, sprint reviews, demonstrations, acceptance activities and project handover without dependency on unavailable external resources?	0 or 1	Governance model, communication plan, support approach		
	TOTAL SELF-ASSESSMENT SCORE FOR PART II				

PART III – TECHNICAL QUALITY OF THE PROPOSED SOLUTION (30 Points)

#	Performance Indicator	Score	Evidence Expected	Explanation of how bidder meets criteria (or reference to section/paragraph in the proposal)	Awarded Score
21	Does the proposal demonstrate a comprehensive understanding of the objectives, operational context and intended outcomes of this Statement of Work, including how AI-assisted TTXs support cyberspace warfare development, concept validation and role-based training, rather than simply restating the SoW requirements? Zero points in this criterion disqualifies the bidder.	0 or 5	Technical proposal, executive summary		
22	Does the proposed solution present a technically sound end-to-end architecture supporting the complete TTX lifecycle, including framework definition, scenario generation, AI personas, orchestration, execution, assessment, reporting and replay ability? Zero points in this criterion disqualifies the bidder.	0 or 5	Architecture diagrams, system design, workflow descriptions		
23	Does the proposal demonstrate a coherent and technically credible implementation of Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), agentic AI and orchestration technologies that directly support the objectives of this SoW? Zero points in this criterion disqualifies the bidder.	0 or 4	AI architecture, technical description, technology stack		
24	Does the proposed solution provide a reusable TTX framework, including methodologies, templates, knowledge models, artefacts and workflows that enable rapid creation, tailoring and reuse of future TTXs by ACT personnel? Zero points in this criterion disqualifies the bidder.	0 or 4	Framework description, methodology, sample artefacts		
25	Does the proposal describe a realistic approach for AI-assisted generation, scheduling, orchestration and management of injects, AI personas, organizations, workflows and operational products while preserving operational realism and military credibility?	0 or 3	Functional design, workflow diagrams, use-case descriptions		
26	Does the proposed User Interface and User Experience (UI/UX) provide an intuitive environment enabling exercise administrators to create, modify, execute, monitor and assess TTXs with minimal technical expertise?	0 or 2	UI mock-ups, wireframes, workflow descriptions		
27	Does the proposal present a technically sound methodology for automatically generating operational outputs, including timelines, after-action reports, observations, decision logs and warfare development products suitable for direct ACT reuse?	0 or 2	Reporting architecture, sample outputs, methodology		
28	Does the proposal demonstrate a practical and credible methodology for iterative development, including regular ACT reviews, progressive refinement, configuration control and incorporation of agreed changes throughout all project phases?	0 or 2	Development methodology, project plan		
29	Does the proposal identify the principal technical risks associated with AI-assisted TTX development and provide realistic mitigation strategies covering AI behavior, hallucination control, knowledge management, scalability, maintainability and schedule risks?	0 or 1	Risk register, mitigation strategy		
30	Does the proposal introduce innovative technical capabilities that significantly improve TTX preparation, execution, scalability, repeatability or warfare development while remaining technically achievable within the proposed schedule and contract scope?	0 or 2	Innovation section, technical proposal		
	TOTAL SELF-ASSESSMENT SCORE FOR PART III				

PART IV – LONG-TERM VALUE, SUSTAINABILITY AND NATO INDEPENDENCE (20 Points)

#	Performance Indicator	Score	Evidence Expected	Explanation of how bidder meets criteria (or reference to section/paragraph in the proposal)	Awarded Score
31	Can the complete solution operate entirely within NATO-controlled environments without requiring Internet connectivity, cloud-hosted services, external AI services, contractor-hosted infrastructure or remote licensing servers during normal operation beyond project completion and formal product delivery? Zero points in this criterion disqualifies the bidder.	0 or 4	System architecture, deployment model, software bill of materials, infrastructure description		
32	Will ACT receive all source code, prompts, AI-agent definitions, configuration files, knowledge bases, templates, workflows, documentation and other project artefacts necessary to independently maintain, modify, extend and evolve the complete capability? Zero points in this criterion disqualifies the bidder.	0 or 3	Intellectual Property statement, deliverables list, handover package, configuration inventory		
33	Can ACT personnel create, modify, tailor, execute, reset and replay TTXs, organizations, personas, workflows, injects, products and evaluation criteria without contractor support or software development expertise? Zero points in this criterion disqualifies the bidder.	0 or 3	User guide, administrator guide, UI demonstration, framework description		
34	Does the proposed framework support compatibility with commonly used AI-assisted software development environments (e.g., Cursor, GitHub Copilot, Claude or equivalent) to facilitate future NATO development and maintenance?	0 or 2	Technical architecture, framework description, development methodology		
35	Does the solution minimize dependence on proprietary technologies, commercial licensing constraints, vendor-specific AI services or third-party products that could restrict NATO's future operation, modification or distribution of the capability?	0 or 2	Technology stack, licensing statement, software inventory		
36	Does the bidder provide comprehensive technical documentation, including Product Requirements Document (PRD), System Architecture Design (SAD), frontend, backend, integration, installation, configuration, administration and user documentation sufficient for ACT to independently operate and maintain the capability? Zero points in this criterion disqualifies the bidder.	0 or 2	Documentation plan, document index, sample documentation		
37	Is the proposed software architecture modular, extensible and configurable so that ACT can incorporate additional AI agents, personas, TTX scenarios, workflows, products and future gamification capabilities without fundamental redesign?	0 or 1	Architecture diagrams, modular design description, interface specifications		
38	Does the solution provide mechanisms to capture, store, retrieve and reuse previous TTX campaigns, scenarios, personas, injects, outputs and lessons learned, enabling continuous warfare development and organizational learning over time?	0 or 1	Data model, knowledge management approach, repository description		
39	Does the proposed solution fully comply with ACT requirements for WP0, MPV-1, and WP1, MVP-2, separately and without postponing any MVP-1 feature to MVP-2?	0 or 2	Technical architecture, framework description, development methodology		
	TOTAL SELF-ASSESSMENT SCORE FOR PART IV				

	TOTAL SELF-ASSESSMENT SCORE				

Note: There is no intermediate score for each individual requirement. The technical proposal either receives the corresponding points for fulfilling the requirement or it receives 0 points for not fulfilling it.