

**Headquarters Supreme Allied Commander Transformation
Statement of Work
for
Deliverables in Support of Capability Programme Plan for
“Intelligence and ISR Functional Services”**

14 June 2022

1. Introduction

The North Atlantic Treaty Organization (NATO) recently implemented a new Common Funded Capability Delivery (CFCD) model intended to accelerate the delivery of NATO’s common funded capabilities. Headquarters Supreme Allied Commander Transformation (HQ SACT) is currently working toward the development of Capability Programme Plan (CPP) – an intermediary step within the CFCD that aims to direct the necessary actions across the NATO-recognised lines of development including: doctrine, organisation, training, materiel (including software), leadership, personnel, facilities and interoperability (DOTMLPFI). HQ SACT’s Analysis of Alternative’s (AoA) Branch conducts a comparative analysis of the Operational Effectiveness, Rough Order of Magnitude (ROM) Life Cycle Costs, and Risk and Opportunities of identified alternatives, including all DOTMLPFI considerations. The Standard Operating Procedure, “AoA in NATO’s Capability Delivery Lifecycle” [Ref A] provides further guidance and detail regarding the conduct of AoAs in support of NATO CFCD programmes.

2. Background

The purpose of this Statement of Work (SoW) is to describe the scope of the contracted services required in support of the NATO Intelligence and ISR Functional Services (CPP) development. The CPP aims to develop an overarching and integrated intelligence capability encompassing multiple intelligence disciplines including Open Source Intelligence (OSINT) and Imagery Intelligence (IMINT), among others. Strategic competition against peer, near peer, and hybrid threats requires that NATO decision makers have timely access to high quality intelligence. NATO needs a capability to support NATO’s decision-making process applicable in peacetime and through the full spectrum of conflict to include crisis and war. This capability needs to provide for the provision of data, the management of data and the exploitation of data. This work seeks to analyse potential solutions for this challenge.

3. Scope of Work

- 1) **Part 1. Alternatives cost estimation:** The Contractor will perform a whole life cycle cost analysis of up to ten (10) alternatives. The analysis will serve as a relative cost comparison metric used to inform the overall selection of an alternative.
- 2) **Part 2. Programme Implementation Plan cost estimation:** The Contractor will analyse and develop a refined assessment of the through-life cost profile of the programme considering the selected alternative’s proposed projects;

includes analysis/estimates of investment, O&M and manpower profiles, as applicable, as well as programme and project level cost and schedule tolerances.

4. Cost Data

Cost data will be provided by NATO where available from Nations and industry. The Contractor will require to further liaise with programme staff, stakeholders, and others to identify and solicit additional information and data as needed. The majority of data will be passed to the Contractor at the kick-off meeting, but may continue to be matured throughout the duration of the task in line with advice from the Contractor. The following data will be provided (where available):

- a. Descriptions of alternatives and options for the delivery of services.
- b. Qualitative risks and issues for all DOTMLPFI lines of development for each of the alternatives.
- c. Data collected from current service providers (where available): lists of services, associated costs, and overall lifecycle plan for the services.
- d. Information from previous NATO programmes and projects (where available)
- e. Expected procurement and transition schedules, once alternatives are sufficiently mature to allow selection.
- f. NATO agreed inflation indices (National GDP deflator forecasts).
- g. NATO agreed foreign exchange rates.
- h. Other contextual documentation or information, as needed.

5. Requirement Description

The Contractor will be accountable to the designated NATO ACT Technical Authorities, and will be responsible for the fulfilment of the following requirements:

- a. Continuously consult as appropriate with technical authority, project/programme managers, operational users, etc., within NATO commands and agencies to obtain the information necessary for analysis.
- b. Undertake regular interactions to brief progress and process clarifications; provide weekly progress reports to the technical authorities.
- c. Collect the relevant documents and information from programme subject matter experts, stakeholders, and external sources.
- d. Facilitate workshops as necessary to solicit or consolidate information required for analyses.
- e. Conduct comparative Rough Order of Magnitude Life Cycle Cost (ROM LCC) estimates:

Part I: Conduct comparative Rough Order of Magnitude Life Cycle Cost (ROM LCC) estimates for up to **ten (10)** alternatives as per [Ref a]:

- (1) Develop a cost breakdown structure (CBS) in consultation with NATO, identifying cost drivers.

- (2) Develop and propose a ROM LCC & schedule model and analysis roadmap for the programme detailing the types of analyses (methods, models, etc.), required data gathering, and analysis schedule.
- (3) Develop a cost breakdown structure (CBS) in consultation with NATO; CBS must be suitable for comparative/relative analysis; identify cost drivers (See Annex A)
- (4) Develop the ROM LCC & schedule model and perform analysis – present estimate in the form of three-point estimates reflecting baseline estimate (most likely), optimistic estimate (realistic minimum), and pessimistic estimate (realistic maximum). Task includes sensitivity analysis of key assumptions and cost drivers and estimation of risk/uncertainty.
- (5) Present analysis results and supporting evidence in presentation and written form.

Part II: Conduct LCC estimate for the selected alternative for use in the Programme Implementation Plan and Project Data Sheets:

- (1) Develop a detailed Life Cycle Cost and Schedule estimate for the underlying projects developed for the selected alternative; present estimate in the form of three-point estimates reflecting baseline estimate (most likely), optimistic estimate (realistic minimum), and pessimistic estimate (realistic maximum). Task includes sensitivity analysis of key assumptions and cost drivers, as well as an estimation of risk/uncertainty.
- (2) Develop a CBS in consultation with NATO, identifying cost drivers. (See Annex A)
- (3) Present analysis results and supporting evidence in presentation and written form.
- (4) Cost and schedule tolerance recommendations for the underlying projects developed for selected alternative following the ACT Tolerance Framework.

6. Schedule and Deliverables

The table below describes the context, specific deliverables, and proposed schedule for the Contractor to support the development and production of the Intelligence and ISR Functional Services CPP.

| Serial | Activity | Deliverables | Schedule/ Remarks |
|--------|---|---|---|
| 1.1 | <p>Kick off Meeting Workshop/Meeting to discuss alternatives and proposed approach. Engage with stakeholders to gather feedback for refinement.</p> | <p>Proposed methodology / approach, required data collection (Power Point or MS Document). -Meeting minutes highlighting all direction, guidance, and recommendations from the meeting</p> | <p>Estimated: 13JUL22 (D day)</p> |
| 1.2 | <p>Bi-Weekly Update Weekly progress reports with assigned Project Lead and COTR</p> | <p>-Email/written or verbal on progress, key actions/deliverables (as dictated by technical authority)</p> | <p>Every two weeks</p> |
| 1.2 | <p>Workshops</p> | <p>- Data collected through the execution of workshops and stakeholder engagements (as determined through the course of regular interaction with the customer)</p> | <p>As required</p> |
| 1.3 | <p>Presentation of Cost and Schedule Estimates for Alternatives Prepare and lead briefing to present ROM cost and schedule estimates for each alternative.</p> | <p>-ROM cost & schedule estimates for the ten alternatives -Models and methods adopted/used for cost estimations (parameters and inputs included) -Cost Data and Assumptions List (CDAL) and summary of cost estimation methodology used -Basic definitions, ground rules, constraints and assumptions used in cost estimation process -Cost Breakdown Structures -Identification of the cost drivers -Appropriate level of sensitivity analyses for each alternative/project -Risk and uncertainty assessment, including risk scenarios; should include potential costs as well as risk mitigation costs</p> | <p>Estimated: 24AUG22 (D+45)</p> |
| 1.4 | <p>Technical Report: ROM Cost and Schedule Estimate of Alternatives Produce a written report for Rough Order of Magnitude</p> | <p>AoA cost and schedule ROM Report -Should have all informational elements contained in the presentation</p> | <p>Estimated: 21SEP22 (D+75)</p> |

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| | (ROM) cost and schedule estimates for each alternative. | -Document should be done in MS Word; all diagrams, tables, and graphics must be editable | |
| 2.1 | Part II Workshop. Present proposed approach methodologies, ground rules and assumptions and tolerance generation for selected Alternative | -Proposed methodology / approach, required data collection (Power Point or MS Document). -Meeting minutes highlighting all direction, guidance, and recommendations from the meeting | Post AoA, before initial PiP meetings. Estimated September 2022. (No Later than D+46, earlier if possible) |
| 2.2 | Briefing/presentation of Final Cost, Schedule & Tolerance Estimates Report Lead meeting to present cost, schedule and associated tolerances for the detailed estimate. Meeting shall cover all findings, ground rules & assumptions, and final cost, schedule and tolerance estimates across all areas of DOTMLPFI. | -Cost & schedule estimates for the selected alternatives -Models and methods adopted/used for cost estimations (parameters and inputs included) -Cost Data and Assumptions List (CDAL) and summary of cost estimation methodology used -Basic definitions, ground rules, constraints and assumptions used in cost estimation process -Cost Breakdown Structures -Identification of the cost drivers -Appropriate level of sensitivity analyses for each alternative/project -Risk and uncertainty assessment, including risk scenarios; should include potential costs as well as risk mitigation costs -Cost and schedule tolerance recommendations for the projects developed for the selected alternative | NLT D+91 |
| 2.3 | Programme Implementation Plan (PIP) Cost, Schedule & Tolerance Estimates Report Producing detailed cost and schedule estimate for the down selected alternative. Cost and schedule estimates shall have tolerances produced following the ACT Tolerance Implementation Framework. | PIP Cost & Schedule Estimate and Tolerances Report -Should have all informational elements contained in the presentation -Document should be done in MS Word; all diagrams, tables, and graphics must be editable | NLT D+121 |

Note: This is a proposed timeline only, and is subject to contract award date and data availability.

7. Contractor Essential Technical Competencies

Contractor companies shall submit papers of no more than 15 (fifteen) pages (single-spaced) text, describing in detail:

- a. Their expertise and past experience in developing and delivering products outlined in this SOW.
- b. Contractor companies shall cite at least two past performances based on contracts held within the last ten years that are of similar scope, magnitude, and complexity to the tasks, activities, and deliverables detailed in this SOW, or succinctly state that they have no relevant, directly related or similar past performance experience.
- c. Contractor companies shall show this relevant past and present experience in a manner that is directly traceable to the requirements of the SOW. In particular, contractor companies must show relevant experience in cost and schedule analysis for IT and software focused programme.
- d. Contractor companies shall identify the individual or set of individuals (key personnel) that will deliver on the task and provide evidence to assure appropriate levels of experience and expertise in cost estimating for similarly sized/complexity programmes
- e. Key personnel are proficient in the English language (Listening, Speaking, Reading & Writing). SLP3333

8. Quality of Deliverable

It is expected that all deliverables are developed/delivered in high quality. Reporting deliverables should be produced at the graduate level, in English using the appropriate Microsoft Office Software program. Cost estimates (and their documentation) must comply with NATO STANREC 4755 and 4739, ensuring that they meet the following:

- a. **Replication:** The Contractor must provide a sufficiently detailed audit trail, including documentation of cost data and assumptions list (CDAL) to enable a third party to independently replicate the cost estimates.
- b. **Rationale:** The Contractor must provide justifiable rationale for the selection of the inputs to the proposed models: e.g. chosen analogies, parameter values, labour estimates, cost factors, assumptions, etc.
- c. **Risk:** The Contractor must conduct risk/sensitivity analysis to assess the impact of uncertainty in input values used for the estimate.

9. Bidder Evaluation

HQ SACT intends to award a firm-fixed price deliverables contract to the lowest-priced, technically compliant bid. Technical clarification of essential competencies may be conducted.

10. Type of Contract and Period of Performance

a. Type of Contract

This is a Firm-Fixed Price deliverables contract in accordance with the NATO General Terms and Conditions. All employer responsibilities for the Contractor Personnel performing under this contract shall lie with the Contractor.

b. Period of Performance

The Period of Performance is estimated to be on or about 11 July 2022 to 23 December.

11. Contractor Supervision and Reporting

The Contracting Officer will assign a Contracting Officer's Technical Representative (COTR) to administer all technical contract details. The Contracting Officer has final authority (in consultation with the COTR) to determine if the SOW/contract should be amended, extended, modified or cancelled for evolving requirements, new tasking, and/or technical non-performance.

The technical authorities for this contract will be LTC Michael Adams and Dr. Bianca Barbu, SACT CAPDEV REQ AOA Branch Operations Research Analysts, COL Nicky Bell, Intelligence and ISR Functional Services Programme Director, SACT CAPDEV JISR&JE Branch. For administrative purposes, LTC Kristin Arney and CDR Ludovic Pierrel, SACT CAPDEV CAP JISR, will be the COTR.

a. The COTR shall:

- (1) Resolve outstanding disputes, problems, deficiencies, and/or questions on the technical aspects of the SOW.
- (2) Review (and approve) all Contractor duties for completeness and accuracy.
- (3) Review the Contractor's work at a minimum of monthly, or more often if needed.

b. The COTR's written approval of work reported and deliverables submitted is mandatory for Contractor invoices to be successfully processed.

c. The Contractor shall submit a monthly report to the COTR and the Contracting Officer, detailing progress on the SOW for the reporting period. The report shall include, but not be limited to, the following information:

- (1) Summary of work and status of deliverables during the reporting period;
- (2) Contract hours expended showing a comparison with budgeted hours;
- (3) Current or anticipated problems/deficiencies and recommended solutions.

d. The COTR reserves the right to amend the reporting requirements to receive alternate/additional data and information on a more frequent or less frequent basis, and to request other reports that detail designated aspects of the work or methods to remedy problems and deficiencies.

12. Location of Work

The Contractor will provide support to staff based in HQ SACT, Norfolk VA for the performance of this contract, however will not be required to be co-located. Remote support is viable. No travel is expected.

13. Building, Installation Access.

The Contractor shall be fully responsible for ensuring that he/she has all needed vehicle passes and decals, individual access badges and documents for appropriate access to any NATO facility as required. Personnel details are to be supplied as requested to allow access to HQ SACT.

14. Electronic Devices.

All Contractor personnel shall abide by the security restrictions regarding carrying and using electronic devices (e.g. laptops, cell phones) in all NATO facilities. The Contractor(s) shall be responsible for satisfying the necessary clearance requirements before bringing any such device into a NATO facility.

15. Applicable Standards and Guides

Analysis of Alternatives in NATO's Capability Delivery Lifecycle Standard Operating Procedure [Ref a] provides indicative guidance to conducting analysis in support of NATO CFCD programmes

NATO standardization recommendation (STANREC) 4755 [Ref b] lists recommended practices regarding Life Cycle Cost estimation. NATO STANREC 4755 recommends the following standard: NATO Guidance on Life Cycle Costs ALCCP-01 (Edition B) [Ref c].

ALCCP-1 defines the general approach for Life Cycle Costs estimation within System Life Cycle Management (SLCM) framework and provides guidance on the application and implementation of a method for costs calculation and estimation, ALCCP-1 also provides a common understanding of cost related definitions and a general guidance for cost data collection, processing, validation and presentation. NATO STANREC 4739 lists recommended practices regarding risk management, to include schedule [Ref d].

16. References

- a. NATO SOP 407 - The Analysis of Alternatives in NATO'S Capability Delivery Lifecycle, Revision 1, 14 July 2020.
- b. NATO STANREC 4755, NATO Guidance on Life Cycle Costs, EDITION 2, 23 May 18, NSO/0639(2018)WG3/4755
- c. NATO - ALCCP-1 NATO Guidance on Life Cycle Costs, EDITION B, Dec 17
- d. NATO SANREC 4739 on Risk Management EDITION, 11 April/Avril 2013 NSA/0496(2013)STRCDS/4739
- e. NATO STANDARD ARAMP-1 NATO RISK MANAGEMENT GUIDE FOR ACQUISITION PROGRAMMES Edition 1 Version 1 FEBRUARY 2012

ANNEX A
Example Cost Breakdown Structure

To provide an indicative scale of work for this task, this Annex gives an example of a Cost Breakdown Structure (CBS) used on a previous IT and software-focused Capability Programme Plan. Final cost analyses at the end of this task should provide a similar level of detail.

CBSs presented for comparison of alternatives may be at a higher summary level or lower detailed level if supported by associated evidence. Output cost uncertainty bounds will reflect the quality and resolution of evidence, which is associated with the level of CBS detail.

| | |
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| 1 | IT Hardware |
| 2 | Supplier Project Management |
| 3 | Software Development |
| 4 | Software Licences |
| 5 | Design, Development, Integration |
| 6 | Product & Integration Testing |
| 7 | Security Testing |
| 8 | Service Transition |
| 9 | NATO Engineering Services |
| 10 | NATO Project Management |
| Investment Sub-Total | |
| 11 | Service Support & Helpdesks |
| 12 | Spares & Hardware Maintenance |
| 13 | Software Maintenance |
| 14 | Software Licences |
| Operations & Maintenance Sub-Total | |
| Project Total | |

Note that this example is not applicable to all projects within the “Intelligence and ISR Functional Services” programme, and is only provided to understand the scope of costing requirement.

ANNEX B
Deliverables in Support of Capability Programme Plan for
“Intelligence and ISR Functional Services”

Contractor’s technical proposals will be assessed on the qualifications of the team proposed to perform the work. Individuals’ résumés of proposed team members must be provided. The proposed team as a whole will be measured against the criteria specified below.

Bidder Name _____

| Item | Compliant | Non-Compliant |
|--|-----------|---------------|
| Papers of no more than 15 (fifteen) pages text (single-spaced) | | |
| Expertise and past experience in developing and delivering products outlined in this SOW | | |
| At least two past performances based on contracts held within the last ten years that are of similar scope, magnitude, and complexity to the tasks, activities, and deliverables detailed in this SOW, or succinctly state that they have no relevant, directly related or similar past performance experience. Contractor companies shall show this relevant past and present experience in a manner that is directly traceable to the requirements of the SOW. | | |
| Relevant experience in cost and schedule analysis for IT and software programmes. | | |
| Proposed key personnel have demonstrated at least 10 years of experience and expertise in cost estimating for similarly sized and complex programmes. | | |

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| Proposed key personnel are proficient in the English language (Listening, Speaking, Reading & Writing). SLP3333 | | |
| Demonstrated ability to develop/deliver high quality reports. | | |
| Demonstrated ability to produce deliverables at the graduate level, in English using the appropriate Microsoft Office Software program. | | |
| Cost estimates (and their documentation) must comply with NATO STANREC 4755 and 4739 | | |
| Company is headquartered in one of the NATO Countries with team members that are citizens of NATO countries. | | |