

IFIB-ACT-SACT-21-01



NORTH ATLANTIC TREATY ORGANIZATION
HEADQUARTERS, SUPREME ALLIED COMMANDER TRANSFORMATION
7857 BLANDY ROAD, SUITE 100
NORFOLK, VIRGINIA 23551-2490

Description of Acquisition

Part 1 Bidding Instructions

IFIB-ACT-SACT-21-01

Amendment 1

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.

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PART 1 BIDDING INSTRUCTIONS

1. General

This is a Firm Fixed Price Deliverables contract in accordance the General Terms and Conditions; **Contract Award is contingent upon funding availability; Partial bidding is allowed.**

2. CLASSIFICATION

This IFIB is a NATO UNCLASSIFIED document.

3. DEFINITIONS

- (a) The "Prospective Bidder", shall refer to the entity that has completed and returned the Enclosure of the transmittal letter of this IFIB, and has indicated thereon its intention without commitment, to participate in this IFIB.
- (b) The term "Bidder", shall refer to the bidding entity that has completed a bid in response to this IFIB.
- (c) The term Contractor shall refer to the bidding entity to whom the contract is awarded.
- (d) The term "Contracting Officer" designates the official who executes this IFIB 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, per the technical specifications.
- (f) The term "HQ SACT" shall refer to Supreme Headquarters Allied Command Transformation.
- (g) The term "ACT" shall refer to Allied Commander Transformation.
- (h) The term "NATO", shall refer to the North Atlantic Treaty Organisation.
- (i) The term "days" as used in this IFIB shall, unless otherwise stated, be interpreted as meaning calendar days.
- (j) The term "Habitual Residence", means HQ SACT, Norfolk, Virginia, VA 23511.

4. ELIGIBILITY

This IFIB is open to companies:

- (a) Established in a North Atlantic Treaty Organisation Alliance member nation.

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- (b) Working in the required field of study and legally authorised to operate in the United States of America, at the time of bidding.
- (c) Has demonstrated the desired past performance as described in this IFIB.
- (d) Offering key personnel who are citizens of NATO member nations.

5. DURATION OF CONTRACT

- (a) The contract awarded shall be effective upon date of award.

Period of Performance:

Base Period is on or about 04 January 2021 – 31 December 2021.

6. EXEMPTION OF TAXES

- (a) In accordance with the agreements (Article VIII of the Paris Protocol dated, 25 August 1952) goods and services under this contract are exempt from taxes, duties and similar charges.

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 IFIB 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 IFIB 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 IFIB 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 IFIB, terms, clause, provision or specifications, shall be requested in writing, from the Contracting Officer. The Contracting Officer must receive such requests for clarification no later than **10 days prior to closing**.

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- (b) In lieu of a bidder's conference, HQ SACT invites bidders to submit initial technical questions not later than **23 October 2020**.
- (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-procurements> as a Question and Answer addendum. All such addendums and any necessary solicitation amendments shall be incorporated into this IFIB. Oral Interpretations shall not be binding.

9. BID CLOSING DATE

Bids shall be received at HQ SACT, Purchasing and Contracting Office, no later than **4 December 2020, 0900 hours, Eastern Standard Time, Norfolk, Virginia, USA**. No bids shall be accepted after this time and date.

10. BID VALIDITY

Bids shall remain valid for a period of one hundred and twenty days (120) from the applicable closing date set forth within this IFIB. 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.

11. CONTENT OF PROPOSAL

The proposal shall consist of 2 separate single PDF documents (Technical / Price) sent via e-mail as per the instructions. **No hard copy proposals are required or will be accepted.** E-mailed PDF documents shall be received no later than **4 December 2020, 0900 hours, Eastern Standard Time, Norfolk, Virginia, USA**.

A table of contents for the entire proposal

- (a) The bidder's full name address, Point of Contacts, Telephone, Fax number and Internet site, (See Enclosure #2);
- (b) Compliance statement (See Enclosure #3);
- (c) Provision of administrative, financial and technical volumes
- (d) Best Value Matrix
- (e) Past performance (See Enclosure #4)
- (f) Company price proposal (Enclosure #5)

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.

12. PROPOSAL SUBMISSION

- (a) Proposals shall be submitted in two separately e-mailed packages, one containing a **single PDF document** of the Technical volume and one containing a **single PDF document** of the Price volume. **Multiple files that must be pieced together to form the technical proposal will be rejected.** The e-mail subject and PDF files shall be clearly marked with the IFIB Solicitation reference number and indicate if it is the Technical or Price Volume.
- (b) Proposal packages must be received by the HQ SACT identified Contracting Officers prior to the 0900 deadline. Delays in receipt due to server processes either at the contractors facility, HQ SACT or both do not constitute an acceptable delay to the deadline. **Contractors should ensure there is sufficient time to transmit proposals and confirm receipt prior to the established deadline.**
- (c) **Price proposals shall be in U.S. Dollar currency.** Contractor may request payment post award in alternate currency based on NATO published conversion rate for 2021. Prices shall be on a Firm Fixed Price Basis and include any relevant discount schedule.
- (d) It is the sole responsibility of the interested company to review any Q & A that may be issued in support of this solicitation, prior to bid submission at www.act.nato.int/contracting.
- (e) No oral bids or oral modifications or telephonic bids shall be considered.
- (f) It is the ultimate responsibility prior to submission that all proposal submissions are reviewed to ensure they meet the technical and administrative specifications and that offers meet the limitations and expressed conditions.

13. LATE PROPOSALS

- (a) It is solely the bidder's responsibility to ensure that the proposal reaches HQ SACT prior to the established closing date and time. All late bids shall be disqualified. Only if it can be unequivocally demonstrated that the late arrival of the bid package was the result of NATO staff negligence (mishandling) shall the bid be considered.
- (b) A delay in electronic transfer does not constitute a valid excuse for late submission.

14. BID WITHDRAWAL

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.

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A bidder may withdraw their bid up to the date and time specified for bid closing. Such a withdrawal must be completed in writing or facsimile, with attention to the HQ SACT Contracting Officer. As this is a best value evaluation, contractor pricing will be opened and held within the contract file, whether considered or not. A bid withdraw will be annotation on the Contract Award Record.

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 IFIB. HQ SACT is not responsible for any content that is not clearly identified in any proposal package.
- (b) Due to the highly technical nature of this requirement, HQ SACT reserves the right conduct pre-award discussions with proposed key personnel to accurately assess identified technical competencies. Discussions will be limited to scope of this IFIB and the evaluation criteria identified in Annex A.
- (c) Proposals shall be evaluated and awarded based on best overall value to NATO. The following factors are considerations;
 - Successful administrative submission of bid packages and requested Enclosures, as listed in this IFIB. (Pass/Fail)
 - Technical factors/pricing factors rated the following: Technical/Price=70/30
 - Acceptance of HQ SACT General and Special Terms and Conditions.

16. PROPOSAL CLARIFICATIONS

During the entire evaluation process HQ SACT reserves the right to discuss any bid with the order to clarify what is offered and interpretation of language within the bid, to resolve in potential areas of non-compliance.

17. AWARD

HQ SACT intends to award a firm fixed price contract(s) to the Offeror(s) whose proposal(s) represents the overall best value to NATO. Partial awards are authorized.

HQ SACT will collect information from references provided by the Offeror in regard to its past performance. Contractors must provide authorization to contact

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references.

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

18. COMMUNICATIONS

All communication related to this IFIB, 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 in regards to this IFIB. Such adherence shall ensure Fair and Open Competition with equal consideration and competitive footing leverage to all interested parties.

19. POINT OF CONTACT IS:

Tonya Bonilla, ACT Contracting Officer 757-747-3575,
tonya.bonilla@act.nato.int

and

Catherine Giglio, ACT Contracting Officer 757-747-3856,
catherine.giglio@act.nato.int

All correspondence shall be forward to:

HQ SACT, BUDFIN BRANCH
Purchasing & Contracting,
Contracting Officer
IFIB-ACT-SACT-21-01
ATTN: Tonya Bonilla/Catherine Giglio
7857 Blandy Road, Suite 100,
Norfolk, VA, U.S.A.

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1.1 ENCLOSURE 1

PROPOSAL CONTENT / CHECKLIST

Table of Contents

- ☐ Bidder`s name, address, POC, Contact numbers, email address.
- ☐ Compliance Statement.
- ☐ Past performance (including References).
- ☐ List of Key personnel.
- ☐ Technical Proposal.
- ☐ Price Proposal.

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2.1 ENCLOSURE 2

(The label below is to be completed by the bidder and affixed to the exterior envelope; parcel or package mailed or deliver to ACT)

2.2 SEALED BID TO IFIB-ACT-SACT-21-01 (To be opened by Contract Awards Committee (CAC Only))

Sender: _____

HQ SACT
IFIB-ACT-SACT-21-01
Attn: Tonya Bonilla / Catherine Giglio
7857 Blandy Road, Suite 100,
Norfolk, VA 23551-2490
U.S.A

3.1 ENCLOSURE 3

COMPLIANCE STATEMENT TO SEALED BID IFIB-ACT-SACT-21-01

It is hereby stated that our company has read and understands all documentation issued as part of IFIB-ACT-SACT-21-01. Our company proposal submitted in response to the referenced solicitation is fully compliant with the provisions of IFIB-ACT-SACT-21-01 and the intended contract with the following exception(s); such exemptions are considered non-substantial to the HQ SACT solicitation provisions issued.

Clause

Description of Minor Deviation.

[illegible][illegible]

(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 IFIB 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.

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4.1 ENCLOSURE 4

PAST PERFORMANCE INFORMATION FORM

- (a) Contracting Agency:
- (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.

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4.2 ENCLOSURE 5

IFIB-ACT-SACT-21-01 SEALED BID PRICE PROPOSAL

COMPANY NAME: **ABC, Inc**

ADDRESS: **Street,**

CITY, POST CODE

TO: Chairman of Supreme Allied Commander Transformation, (HQ SACT)
Contracts Award Committee.

ATTN: Tonya Bonilla

7857 Blandy Road, Suite 100

Norfolk, VA 23551

Please verify and acknowledge propriety of above, by duly completing signatures below.

Authorizing Company Official:

Printed _____ Name: _____

Position: _____

Title: _____

Authorizing Company (Signature): _____, Date: _____.

Company name Witness Official:

Printed _____ Name: _____

Position: _____

Title: _____

Witness Signature: _____, Date _____

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PROPOSED RATES MUST BE FULLY “LOADED” [G&A, O/H ETC.], HOWEVER THEY MUST NOT INCLUDE PER DIEM (MEALS & LODGING) AND TRAVEL. TRAVEL (AND RELATED EXPENSES) WILL NOT BE COVERED UNDER THIS CONTRACT, BUT HANDLED SEPARATELY IN ACCORDANCE WITH THE ACT FINANCIAL MANUAL.

SUBJECT: IFIB-ACT-SACT-21-01 Sealed Bid Price Proposal

Please find on behalf of **Insert: Company Name** to provide HQ SACT with services (collectively referred as “ITEMS”), subject to the provisions, terms and conditions stated in IFIB ACT-SACT-21-01 and the “**Insert : Company Name** Technical proposal”, submitted in accordance with solicitation provisions. Include requested Milestone payment schedule if applicable. **Companies should identify any proposed milestone payments in addition to the total price proposal for each study.**

Space Technologies Horizon Scan Study	\$
Small Satellites in Military Space Operations Study	\$

Total Proposal Cost \$ _____

Please verify and acknowledge propriety of above, by duly completing signatures below.

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Authorizing Company Official:

Printed _____ Name: _____

Position: _____

Title: _____

Authorizing Company (Signature): _____, Date: _____.

Company name Witness Official:

Printed _____ Name: _____

Position: _____

Title: _____

Witness Signature: _____, Date _____

Warfare Development S&T Space Studies

Statement of Work (SOW)

A. Background

ACT has developed, upon MC tasking, an initial NATO Warfighting Capability Concept (iNWCC) to address the future needs of Warfare Development (WD) putting the stress on the need for continuous Innovation and exploitation of Emerging and Disruptive Technologies (EDT).

The Science and Technology Section of the Innovation Branch manages the Warfare Development (WD) EDT Roadmap that promotes coherency and enables identification of gaps within strategic WD Science and Technology activities, and associated military risks and opportunities. Those risks and opportunities are becoming catalysts for Science and Technology studies and demonstrators that are developed with the involvement of nations, and their industries and academia.

This Statement of Work specifies the following studies, detailed in appendixes, to be initiated in 2021 in order to meet the pressing agenda of iNWCC ambitions:

- Space Technologies Horizon Scan Study (Appendix A)
- Small Satellites in Military Space Operations Study (Appendix B)

Both studies will be conducted during a 12-month period of performance.

B. Introduction

The Space domain encompasses all activities, functions and operations undertaken to, in, through, and from Space. The NATO Science and Technology Organisation's Technical Trends report highlights the need to understand and leverage new technologies to maintain a high ability to improve Operational Space Support (OSS). This is provided through the functional areas of Satellite Communications (SATCOM), Intelligence, Surveillance and Reconnaissance (ISR), Positioning, Navigation and Timing (PNT), Space Situational Awareness (SSA), METOC and Shared Early Warning (SEW), to maintain a robust Space Domain Awareness (SDA), to include environmental intelligence and operational considerations, and coordinating effects through operations and other functions. NATO must be able to conduct future operations, missions, and activities at all times, including in the Space Domain.

New technologies and manufacturing methods have changed the nature, availability and costs of the use of Space. Such technologies include new propulsion options such as the advanced electric propulsion systems, on-board Artificial Intelligence (AI), advanced robotics, on-orbit remote servicing of satellites, system miniaturisation (enabling smaller and cheaper satellites), improved and novel sensors, 3D-printing, improved power storage and efficiency, and next generation encryption technologies

C. Type of Contract and Period of Performance

1. **Type of Contract:** This contract is a Firm Fixed Price contract with Deliverables as outlined below.
 2. **Period of Performance:** 6 January 2021 – 15 December 2021
- D. Experience Required:** The proposed team to complete this study is expected to have
- a. a minimum of 3 or more years' experience in academic research in space studies
 - b. publication of more than two articles in peer-reviewed journals over strategic applications of space and
 - c. proof of work in Technology Analysis and Foresight in Security Research or Defence Research
 - d. conducted Horizon Scanning in a military relevant technology field
 - e. be fluent in English (both written and oral)
- E. Acceptance Criteria:** Acceptance criteria for all the tasks include, but are not limited to the following criteria:
- a. **Content**
 1. *Space functional areas.* The study will cover all the Space functional areas (SATCOM, ISR, PNT, SSA, METOC and SEW).
 2. *The report will address impact of new technologies from a joint functions perspective.* The joint functions are: maneuver, Fires, C2, Intel, Information, Sustainment, Force Protection, Civilian-Military areas.
 3. *Follow-on experimentation.* The report will provide advice on how to assess new technologies in experimentations and/or training activities (e.g. exercises) to help NATO develop future Technics and Procedures.
 - b. **Presentation**
 4. *Structure.* The written deliverables shall be well structured, with good use made of headings and signposting methods to highlights key points or ideas.
 5. *Citations.* The various perspectives or opinions cited are sourced from readily accessible and credible source material, made available using hyperlinks (where possible), footnotes (when needed) and a reference list. Authors must avoid plagiarism and should cite (hyperlink or footnotes) whenever using text or ideas that belong to another source.
 6. *Credible.* The references used in shaping the written deliverables are drawn from an array of credible sources, from government and non-government arenas, from geographically dispersed and culturally diverse locations.
 7. *Visualisation.* Graphics are not essential, however, the Author has approval to make use of graphics and pictures where necessary to communicate, signpost key points, and enhance the reading experience. Author is encouraged to create callout boxes of important quotes or pertinent information throughout the product.

8. *Open*. The written deliverables need to be in an industry standard, open (editable) format and not locked.

Each study will have a one-day mid-year (August) review workshop (virtual) to review the main findings progress and findings up to that point with the COTR and the ACT Space SME.

F. Place of Performance: Contractors Facility.
Travel is not required for this Statement of Work.

G. Contractor Performance Requirements and Reporting

Contracting Officer's Technical Representative (COTR). The Contracting Officer shall assign a COTR. The COTR shall provide direction, guidance, and support information, as needed, for all technical and content areas of the SOW. The COTR shall resolve outstanding disputes, problems, deficiencies, and/or questions on the technical aspects of the SOW; review and approve all contractor duties for completeness and accuracy; and review the contractor's work. The COTR's written approval of work performed is mandatory for contractor invoices to be successfully processed. The COTR shall receive a letter of appointment from the Contracting Officer that describes in detail his/her roles and responsibilities to which he/she shall sign formal acceptance. The COTR for this contract as identified is Cdr Dietmar Teufel, Innovation Branch, S&T Section.

H. Proof of Past Performance

Contractors shall provide detailed evidence (a resume) of past performance that demonstrates their expertise in the topic.

I. Security

1. All work is unclassified and contractors do not require security clearances.
2. Security Considerations for the Deliverables: None. Deliverables will not be classified and, therefore, will not bear any classification markings.

Appendix A - Space Technologies Horizon Scan Study

Background and Scope of Work

The Space domain encompasses all activities, functions and operations undertaken to, in, through, and from Space. NATO needs to understand and leverage new technologies to improve Operational Space Support (OSS)¹, maintain a robust Space Domain Awareness (SDA), including environmental and operational intelligence, and coordinate effects (Space Domain Coordination - SDC). NATO must be able to conduct future operations, missions, and activities at all times, including in the Space Domain.

New technologies and manufacturing methods have changed the nature, availability and costs of the use of Space. Such technologies include new propulsion options, on-board Artificial Intelligence (AI), advanced robotics, on-orbit remote servicing of satellites, etc. Use of Space and Space-derived data will only increase over the next 20 years, enabling more capable and ubiquitous C4ISR capabilities. Combined with Big Data / Advanced Analytics (BDAA) and AI, this has the potential to significantly improve situational awareness (SA) at all levels, support near real-time assessments of operational effectiveness and increase targeting success.

Space technologies impact all the joint functions, as they depend on one or several Space functional areas (PNT, ISR, SATCOM, SEW, SSA and METOC). Additionally, other Space-related developments and technologies will have a direct impact on future Alliance operations, beyond those affecting the joint functions.

The Alliance needs to exploit the opportunities offered by Space technologies to their fullest, but also address interoperability and compatibility issues, resilience and redundancy.

This Science and Technology study is intended to provide a backdrop for future activities by conducting a horizon scan of available space technologies, and associated risks and opportunities for Warfare Development.

Tasks

There is difficulty to identify and understand the fast developments of complex technologies and their trends but this is required to meet the ambition of the Warfare Development agenda. Particularly it is essential to evaluate the impact of new Space-related technologies on military operations (risks & opportunities).

Key aspects that the study should consider:

- Identification of which future technologies could be used in NATO operational activities and how they may be integrated. This includes, but is not limited to:
 - provision of new Space based products & services
 - tools for better information sharing and awareness
 - New Tactics, Techniques and Procedures (TTPs) and Education, Training, Exercise and Evaluation (ETEE) activities

¹ Encompassing the functional areas of Satellite Communications (SATCOM), Intelligence, Surveillance and Reconnaissance (ISR), Positioning, Navigation and Timing (PNT), Space Situational Awareness (SSA), METOC and Shared Early Warning (SEW).

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- Identification of risks and opportunities these new technologies and tools present to the Alliance
 - How potential adversaries could benefit from these new technologies
 - Which technologies will be used by commercial or industrial actors (third parties) that could interfere with NATO's activities and operations
 - What are the human capital and ETEE approaches to increase overall awareness
- Analysis of the improvement of space technology with impacts on military domain (land, air, space itself, naval, cyber) and space functions (SATCOM, ISR, PNT,SSA, METOC, SEW)
 -

Deliverables

The work required is planned to be conducted in four Stages. This work is planned for delivery that reflects the nature of the tasking outlined. The final report has to be in a format and be sufficiently academically rigorous that it could published.

- Stage I Discovery (what is available?) with delivery of a discovery report not later than 31 March 2021
- Stage II Opportunities and Risks (red and blue use cases) with delivery of the main findings not later than 31 August 2021
- Stage III draft report 15 October
- Stage IV, final report within 12 months not later than 15 December 2021
- A status report (2 pager) at the end of every month containing progress, main findings and way ahead which has to be discussed with the COTR.

Appendix B - Small Satellites in Military Space Operations Study

Background and Scope of Work

The global commercial Space industry has taken a leading role not just in the development of satellites but increasingly in the improvement of sensors, communications and launch systems. This trend has led to a significant decrease in launch costs, new options for the deployment of Space-based assets, and the near real-time commercial availability of high-quality Space-derived information. The continued evolution of commercial interest in Space is the biggest development foreseen over the next 5-10 years. This growth in commercial Space includes new launch actors and capabilities (e.g. SpaceX and RocketLab), the increasing use of low-cost small satellites (smallsats) for communication or earth observation, on-orbit replenishment, repair or salvage capabilities and large-scale constellations for communications.

- Small Satellites are classified as follows (NASA)
- Minisatellite, 100-180 kilograms
- Microsatellite, 10-100 kilograms
- Nanosatellite, 1-10 kilograms
- Picosatellite, 0.01-1 kilograms
- Femtosatellite, 0.1-1 gram

CubeSats are a class of nanosatellites that use a standard size and form factor. The standard CubeSat size uses a "one unit" or "1U" measuring 10x10x10 CMs and is extendable to larger sizes; 1.5, 2, 3, 6, and even 12U (NASA)

This Science and Technology study is part of an overall effort to discover future opportunities and threats in the space environment. There, civilian and commercial providers will continue to expand and provide future opportunities for NATO.

Tasks

NATO's dependence on National Space capabilities is predicted to increase, reflecting a continuing need for cooperation and interoperability. This study should investigate how small satellites and CubeSats could expand the effectiveness of NATO operations. Understanding and leveraging the Space domain is critical to NATO military planners and warfare development.

Key aspects that the study should consider:

- Overview of small satellites and availability for potential military use in accordance with the following functional areas, especially considering dual use and including limitations:
 - Satellite Communications (SATCOM)
 - Intelligence, Surveillance and Reconnaissance (ISR)

- Positioning, Navigation and Timing (PNT)
- Space Situational Awareness (SSA)
- Meteorology and Oceanography (METOC) - including Space weather (SWx)
- Shared Early Warning (SEW)
- Potential and limitations of CubeSats in the functional areas.
- Overview of current and future commercial and government capability to launch small satellites.
- Analysis of the impact of small satellites, cub sat and improvements of launch systems on military domains (land, air, space itself, maritime, cyber) and space functions (SATCOM, ISR, PNT,SSA, METOC, SEW)
- Identify operational use cases for small satellites for NATO, including necessary capabilities
- Estimate the risk from small satellites and commercial launch systems to space services of NATO and Operational Security.
- Develop recommendations for the Alliance and identify operational use cases which benefit NATO (technology cards and vignettes)

Deliverable

The work required for 2021 is planned to be conducted in four phases. This work is planned for delivery that reflects the nature of the tasking outlined. The final report has to be in a format and be sufficiently academically rigorous that it could published.

- Stage I Discovery (what is available?) with delivery of a discovery report the report not later than 31 March 2021
- Stage II Opportunities and Risks (red and blue use cases) with delivery of the main findings not later than 31 August
- Stage III draft report 15 October
- Stage IV, final report not later than 1531 December 2021
- A status report (2 pager) at the end of every month containing progress, main findings and way ahead, which has to be discussed with the COTR

TO STATEMENT OF WORK; SPACE STUDIES

Best Value Criteria for the Space Technologies Horizon Scan Study

Contractor's technical proposals will be assessed on the qualifications of the individuals proposed to perform the work. Individuals' résumés will be measured against each of the criteria specified below in order to ascertain whether the companies/individuals have adequately rated the candidate's qualifications. (HQ SACT reserves the right to conduct technical discussions of nominated candidates). **Examples of how detailed knowledge levels were attained are expected.** Ultimately Contractor **companies shall clearly demonstrate compliance by providing unequivocal reference to where candidates meet the criteria set forth in this solicitation (please include page number, reference to CV or links as applicable).**

Company Name:

Proposed Candidate Name:

4.3 ITEM	4.4 POSSIBLE SCORE
a. Highly qualified space domain experts	Two or more PHDs specializing in Space domain (10 pts) on the study team At least one PHD specializing in Space domain (5 pts) on the study team No PHDs specialized in Space domain (0 pts) on the study team
b. Experience in Strategic level assessment of Space Domain	Proven record track of strategic level space studies (10pts) No record (0 pts)

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opportunities and threads and Associated Technologies	
c. Demonstrable experience in conducting impact analysis of emerging and disruptive technologies on enterprises	Past work experience demonstrated in the space domain(10 pts) No past work experience (0 pts)
d. Previous publications on strategic applications of space.	Peer Reviewed journals (10 -20 points) Other scientific or military journals (5-10 points) Other means of publication (0-5 points)
e. Demonstrable past work experience with commercial Space companies	Past work experience demonstrated (10 pts) No past work experience (0 pts)
f. Demonstrable past work experience with government Space centers/organizations	Past work experience demonstrated (10 pts) No past work experience (0 pts)
g. Demonstrable past work experience with military organizations	Past work experience demonstrated (10 pts) No past work experience (0 pts)
h. Experience in development of space technologies including demonstrators	Past work experience demonstrated (10 pts) No past work experience (0 pts)
i. Experience in Horizon Scanning of military relevant technology fields	Past work experience demonstrated (10 pts) No past work experience (0 pts)

Best Value Criteria for the Small Satellites in Military Space Operations Study

Contractor's technical proposals will be assessed on the qualifications of the individuals proposed to perform the work. Individuals' résumés will be measured against each of the criteria specified below in order to ascertain whether the companies/individuals have adequately rated the candidate's qualifications. (HQ SACT reserves the right to conduct technical discussions of nominated candidates). **Examples of how detailed knowledge levels were attained are expected.** Ultimately Contractor **companies shall clearly demonstrate compliance by providing unequivocal reference to where candidates meet the criteria set forth in this solicitation (please include page number, reference to CV or links as applicable).**

Company Name:

Proposed Candidate Name:

4.5 ITEM	4.6 POSSIBLE SCORE
j. Highly qualified space domain experts	Two or more PHDs specializing in Space domain (10 pts) on the study team At least one PHD specializing in Space domain (5 pts) on the study team No PHDs specialized in Space domain (0 pts) on the study team
k. Experience in Strategic level assessment of Space Domain opportunities and threads and Associated Technologies	Proven record track of strategic level space studies (10pts) No record (0 pts)

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l. Demonstrable experience in conducting impact analysis of emerging and disruptive technologies on enterprises	Past work experience demonstrated in the space domain(10 pts) No past work experience (0 pts)
m. Previous publications on strategic applications of space.	Peer Reviewed journals (10 -20 points) Other scientific or military journals (5-10 points) Other means of publication (0-5 points)
n. Demonstrable past work experience with commercial Space companies	Past work experience demonstrated (10 pts) No past work experience (0 pts)
o. Demonstrable past work experience with government Space centers/organizations	Past work experience demonstrated (10 pts) No past work experience (0 pts)
p. Demonstrable past work experience with military organizations	Past work experience demonstrated (10 pts) No past work experience (0 pts)
q. Experience in development of space technologies including demonstrators	Past work experience demonstrated (10 pts) No past work experience (0 pts)
r. Experience in Horizon Scanning of military relevant technology fields	Past work experience demonstrated (10 pts) No past work experience (0 pts)

HQ SACT GENERAL CONTRACT TERMS AND CONDITIONS

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1. Definitions. As used throughout this contract, the following terms shall have meanings as set forth below:

- a. "HQ SACT" means the Supreme Headquarters Allied Command Transformation, located at 7857, Blandy Road, Suite 100, Norfolk, Virginia, United States of America. Wherein a subordinate command is referred, it shall have equal meaning and representation as HQ SACT. (HQ SACT SEE, JALLC, JWC, JFTC).
- b. Contracting Officer means the person executing and managing this contract on behalf of HQ SACT.
- c. Inspector means a person appointed by the Contracting Officer for the purpose of determining compliance with the technical requirements of the contract.
- d. The North Atlantic Treaty Organization is hereafter referred to as "NATO".
- e. The term "days" shall be interpreted as meaning calendar days

2. Applicable law. Except as otherwise provided in this contract, this contract shall be governed, interpreted and construed with the laws of the commonwealth of Virginia of the United States of America.

3. Assignment. This agreement is not assignable by the Contractor either in whole or in part unless agreed in writing by HQ SACT Contracting Officer in accordance with;

- a. Any modifications, including changes, additions or deletions and instructions under this contract shall not be binding unless issued in writing by the Contracting Officer
- b. Sub-contractors shall be limited to citizens or legal entities of member nations of NATO, unless specifically authorized by the Contracting Officer.
- c. The Contractor shall determine that any sub-contractor proposed by him for the furnishing of supplies or services which shall involve access to classified information in the Contractor's custody has been granted an appropriate facility security clearance by the sub-contractor's national authorities, which is still in effect, prior to being given access to such classified information.

4. Acceptance

- a. Acceptance or rejection of the supplies shall be made as promptly as practicable after delivery, except as otherwise provided in this contract.
- b. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or otherwise stated in the Contract. It is the action by which HQ SACT acknowledges that the Contractor has fully demonstrated that the deliveries are HQ SACT General Terms & Conditions complete and operational. The formal acceptance will take place when the following requirements have been met:
 - Availability at final destination of all deliverables.

- Successful completion of acceptance testing.
- Verification of the inventory.
- Satisfactory completion of all training or other services, if any, required by that date.
- Agreement between the Contracting Officer and the Contractor on a discrepancy list (if necessary) and corresponding clearance dates.

c. When discrepancies exist and if these do not prevent satisfactory use or operation of the supplies, the Contracting Officer may declare the acceptance provisional. In this case he will withhold from payment an amount commensurate with the importance of the discrepancies but in any case not less than ten (10) percent of the total contract value and this until all discrepancies have been cleared; at that time the acceptance becomes final.

5. Service and Parts Availability. Unless as specified otherwise in the Technical Specifications, the Contractor and his subcontractors will maintain and furnish a source of an adequate supply of services, components, spare parts and sub-assemblies to properly maintain the supplies for a period of minimum five (5) years from Contract Effective Date.

6. Preferred Customer

a. The Contractor warrants that the prices set forth in this contract are as favourable as those extended to any Government, Agency, Company, Organization or individual purchasing like quantities covered by the contract under similar conditions. In the event that prior to complete delivery under this contract the Contractor offers any of such items in substantially similar quantities to any customer at prices lower than those set forth herein, the Contractor shall so notify HQ SACT and the prices of such items shall be correspondingly reduced by a supplement to this contract.

b. Prices in this sense means "Base Price" prior to applying any bonuses.

7. Notice of Shipment

a. At the time of delivery of any supplies to a carrier for transportation, the Contractor shall give notice of shipment to the Contracting Officer and to such other persons or installations as are designated by the Contracting Officer. If such instructions have not been received by the Contractor at least one working day prior to such delivery to a carrier, the Contractor shall request instructions from the Contracting Officer concerning notice of shipment to be given.

b. The following information shall be included in such notification:

(1) Contract Number

(2) Shipping address

From: (Name and complete address of consignor) To: (Name and complete address of consignee)

(3) Listing of supplies by Contract Items(s)

- (4) Number of and marking on packages(s)
- (5) Weight and dimensions of packages(s)
- (6) Name and address of Carrier, mode and date of shipment with waybill number,
- (7) Customs documents required by Contractor (if applicable).

8. Security

- a. The Contractor shall comply with all security requirements prescribed by HQ SACT and the National Security Authority or designated security agency of each NATO country in which the contract is performed.
- b. The Contractor shall be responsible for the safeguarding of NATO classified information, material and equipment entrusted to him or generated by him in connection with the performance of the contract.
- c. Any known or suspected breaches of security or other matters of security significance shall be reported by the Contractor to the Contracting Officer and to the National Security Authority or designated security agency.
- d. The Contractor shall apply to the Contracting Officer for approval before sub- contracting any part of the work, if the sub-contract would involve the sub-contractor in access to classified information. The Contractor shall place the sub-contractor under security obligations no less stringent than those applied to his own contract

9. Inspection

- a. Unless otherwise specifically provided for in the specifications, all equipment, materials and articles incorporated in the work covered by this contract are to be new and of the most suitable grade of their respective kinds for the purposes intended. All workmanship shall be first class.
- b. All supplies (which terms throughout this clause includes without limitation raw materials, components, intermediate assemblies, and end products) shall be subject to inspection and test by HQ SACT, to the extent practicable at all times and places including the period of manufacture, and in any event prior to acceptance.
- c. In case any supplies are defective in material or workmanship or otherwise not in conformity with the requirements of this contract, HQ SACT shall have the right either to reject them (with or without instructions as to their disposition) or to require their correction or to accept them against reduction in price which is equitable under the circumstances.
- d. If any inspection or test is made by HQ SACT on the premises of the Contractor or sub-contractor, the Contractor without additional charge shall provide all reasonable facilities and assistance to inspectors in the performance of their duties. If HQ

SACT inspection or test is made at a point other than the premises of the Contractor or a sub-contractor, it shall be at the expense of HQ SACT except as otherwise provided in this

contract. In case of rejection HQ SACT shall not be liable for any reduction in value of samples used in connection with such inspection or test. HQ SACT reserves the right to charge to the Contractor any additional cost of HQ SACT inspection and test when supplies are not ready at the time such inspection, when test is requested by Contractor or when re-inspection or retest is necessitated by prior rejection. Failure to inspect supplies shall neither relieve the Contractor from responsibility for such supplies as are not in accordance with the contract requirements nor impose liability on HQ SACT therefore.

e. The inspection and test by HQ SACT of any supplies does not relieve the Contractor from any responsibility regarding defects or other failures to meet the contract requirements which may be discovered prior to acceptance. Except as otherwise provided in the contract, acceptance shall be conclusive except as regards latent defects, hidden deficiencies, fraud, or such gross mistakes as amount to fraud.

10. Title. Unless specified elsewhere in this contract, title to supplies furnished under this contract shall pass to HQ SACT upon acceptance, regardless of when or where HQ SACT takes physical possession.

11. Supply Warranty

a. Notwithstanding inspection and acceptance by HQ SACT of supplies furnished under the contract or any provision of this contract concerning the conclusiveness thereof, the Contractor warrants that for a period of twelve (12) months following the date of acceptance:

(1) All supplies furnished under this contract will be free from defects in material or workmanship and will conform with the specifications and all other requirements of this contract; and

(2) The preservation, packaging, packing and marking and the preparation for and method of shipment of such supplies will conform with the requirements of this contract.

b. The Contracting Officer shall give written notice to the Contractor of any breach of the warranties in paragraph a. of this clause within thirty (30) days after discovery of any defect.

c. Within a reasonable time after such notice, the Contracting Officer may either:

(1) By written notice require the prompt correction or replacement of any supplies or part thereof (including preservation, packaging, packing and marking) that do not conform with requirements of this contract within the meaning of Paragraph a. of this clause; or

(2) Retain such supplies, whereupon the contract price thereof shall be reduced by an amount equitable under the circumstances and the Contractor shall promptly make appropriate payment.

d. When return, correction or replacement is required, the Contracting Officer shall return the supplies and transportation charges and responsibility for such supplies while in transit shall be borne by the Contractor. However, the Contractor's liability for such transportation charges shall not exceed an amount equal to the cost of transportation by the usual commercial method of shipment between the designated destination point under this contract and the Contractor's plant and return.

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- e. If the Contractor does not agree as to his responsibility to correct or replace the supplies delivered, he shall nevertheless proceed in accordance with the written request issued by the Contracting Officer per paragraph c to correct or replace the defective or nonconforming supplies. In the event it is later determined that such supplies were not defective or nonconforming within the provisions of this clause, the contract price will be equitably adjusted. Failure to agree to such an equitable adjustment of price shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Dispute".
- f. Any supplies or parts thereof furnished in replacement pursuant to this clause shall also be subject to all the provisions of this clause to the same extent as supplies initially delivered. Corrected parts will be warranted for a period not less than six (6) months starting at the time the part is received back at the user's location.
- g. In case of a provisional acceptance the warranty period starts at the date of provisional acceptance and ends twelve (12) months after the date of provisional acceptance.
- h. Failure to agree upon any determination to be made under this clause shall be a dispute concerning a question of fact within the meaning of the "Disputes" clause of this contract.
- i. The word "supplies" as used herein includes related services.
- j. The rights and remedies of HQ SACT provided in this clause are in addition to and do not limit any rights afforded to HQ SACT by any other clause of the contract.

12. Invoices

- a. The contractor shall submit an original invoice and three (3) copies (or electronic invoice, if authorized) to the address designated in the contract to received invoices. All invoices shall be submitted no later than 30 days upon completion of work or services performed. Standard Payment Terms are NET 30 days. An invoice must include: 1) Name and address of the Contractor; 2) Invoice date; 3) Purchase Order number and Purchase Order or Contract line item number; 4) Description, quantity, unit of measure, unit price and extended price of the items delivered; 5) Shipping number and date of shipment including the bill of lading number and weight of shipment if shipped on a bill of lading; 6) Terms of any prompt payment discount offered; 7) Name and address of official to whom payment is to be sent: and 8) Name, title, and phone number of person to be notified in event of defective invoice. All invoices shall be certified by the signature of a duly authorized company representative. Invoices for Contractor Travel shall include: 1) Contractor name; 2) Date of Travel; 3) Number of days; 4) Destinations. All invoices shall be submitted to:

HQ SACT

Accounts Payable 7857 Blandy Road
Suite 100, SR-82,
Norfolk, VA 23551-2490

- b. Electronic Fund Transfer is the prescribed method of payment for HQ SACT. Contractors are requested to submit copies of banking information. Such information shall be submitted to HQ SACT 14 days prior to any contract award.

13. Payment. Payment shall be made for items accepted by HQ SACT that have been delivered to the delivery destinations set forth in this contract. Payments under this contract

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may be made by HQ SACT by electronic funds transfer payments or (check in exceptional cases) and shall submit this designation to the contracting officer as directed. In the event the Contractor, during the performance of this contract, elects to designate a different financial institution for receipt of any payment made using electronic funds transfer procedures, notification of such change and the required information must be obtained by HQ SACT thirty (30) days prior to the date such change is to become effective. The documents furnishing the information required in this clause must be dated and contain the signature, title, and telephone number of the Contractor official authorized to provide it, as well as the Contractor's name and Purchase Order number. Contractor failure to properly designate a financial institution or to provide appropriate payee bank account information may delay payments of amounts otherwise properly due. Discount time will be computed from date of delivery at place of acceptance or from receipt of correct invoice at the office specified by HQ SACT, whichever is later. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

14. Taxes. The contract excludes all applicable Federal, State, and local taxes and duties. HQ SACT is a tax-exempt organization.

15. Excusable Delays. The Contractor shall be liable for default unless non-performance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of HQ SACT in its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the contracting Officer in writing as soon as is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

16. Indemnity. The contractor shall indemnify HQ SACT and its officers, employees and agents against liability, including costs for actual or alleged direct or contributory infringement of or inducement to infringe, any United States or foreign patent, trademark, copyright, or other intellectual property right, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

17. Disputes. Except as otherwise provided, during the period of performance, any dispute between the parties arising out of the performance of this contract which is not disposed of by agreement shall be decided by the HQ SACT Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of HQ SACT shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to HQ SACT a written appeal. In connection with any appeal of HQ SACT decision under this paragraph, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. A decision shall be rendered within thirty (30) days of receipt of appeal. HQ SACT FC decision is final.

18. Termination for Convenience. HQ SACT reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall

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immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of HQ SACT using its standard record keeping system have resulted from the termination. In the event of the failure of the Contractor and the Contracting Officer to agree as provided in paragraph

d. upon the whole amount to be paid to Contractor by reason of the termination of work pursuant to this clause, the Contracting Officer shall pay to the Contractor the amounts determined by the Contracting Officer. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give SACT any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

19. Termination for Default

a. HQ SACT may, subject to the provisions or paragraph c. below, by written notice of default to the Contractor, terminate the whole or any part of this contract in any one of the following circumstances:

(1) If the Contractor fails to make delivery of the supplies or to perform the Services within the time specified herein or any extension thereof; or

(2) If the Contractor fails to perform any of the other provisions of this contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms and in either of these two circumstances does not cure such failure within a period of ten days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

b. In the event HQ SACT terminates this contract in whole or in part as provided in paragraph a. of this clause, HQ SACT may procure supplies or services similar to those so terminated and the Contractor shall be liable to HQ SACT for any excess costs for such similar supplies or services. The Contractor shall continue the performance of this contract to the extent not terminated under the provisions of this clause.

c. Except with respect to defaults of sub-contractors, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the contractor. If the failure to perform is caused by the default of a sub-contractor, and if such default arises out of causes beyond the control of both the Contractor and sub-contractor, without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform unless the supplies or services to be furnished by the sub-contractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

d. If this contract is terminated as provided in paragraph a. of this clause, HQ SACT, in addition to any other rights provided in the clause, may require the Contractor to transfer title and deliver to HQ SACT in the manner and to the extent directed by the Contracting Officer:

(1) Any completed supplies and

(2) Such partially completed supplies and materials, parts, tools, die, jigs, Fixtures, plans, drawings, information and contract rights (hereinafter called "Manufacturing materials") as the Contractor has specifically produced or Specifically acquired for the performance of such part of this contract as has been terminated; and the Contractor shall, upon direction of the Contracting Officer, protect and preserve property in the possession of the Contractor in which HQ SACT has an interest. Payment for completed supplies delivered to and accepted by HQ SACT shall be at the contract price. Payment for manufacturing materials delivered to and accepted by HQ SACT and for the protection and preservation of property shall be in an amount agreed upon by the Contractor and Contracting Officer; failure to agree such amount shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Dispute". HQ SACT may withhold from amounts otherwise due the Contractor for such completed supplies or manufacturing materials such sum as the Contracting Officer determines to be necessary to protect HQ SACT against loss because of outstanding liens or claims of former lien holders.

e. If, after notice of termination of this contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of HQ SACT, be the same as if the notice of termination had been issued pursuant to such clause. If, after such notice of termination of this contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, and if this contract does not contain a clause providing for termination for convenience of HQ SACT the contract shall be equitably adjusted to compensate for such termination and the contract modified accordingly; failure to agree to any such adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes".

f. Both parties are under duty of good faith. The contract includes not only the specific terms, but also law and customary practice applicable in the place where the contract is to be carried out and to the Type of Trade to which the contract relates.

20. Limitation of Liability. Except as otherwise provided by an express or implied warranty, the Contractor will not be liable to HQ SACT for consequential damages resulting from any defects or deficiencies in accepted items

21. Export Control. Contractor warrants that, if applicable all necessary technical assistance agreements (TAA), export control or other associated arrangements shall be valid prior to contract award. Should a Contractor require export pre-approval HQ SACT legal staff will be provided a preview of said companies request PRIOR to the companies submission to a Government entity. Upon validation of request by HQ SACT Legal staff, subject agreement or request may be submitted to appropriate authority. (Please note: There are no specified time delays regarding TAA, aor export control request being processed. However, experience has shown request can take anywhere from 30 days to 90 days depending on complexity of request, and administrative preparedness).

22. Risk of Loss. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to HQ SACT upon: 1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or 2) Delivery of the supplies to HQ SACT at the destination specified in the contract, if transportation is f.o.b. destination.

23. Authorization to Perform. The Contractor warrants that he and his sub- contractors have been duly authorized to operate and do business in the country or countries in which this contract is to be performed; that he and his sub-contractors have obtained all necessary licenses and permits required in connection with the contract; that he and the sub-contractors will fully comply with all the laws, decrees, labour standards and regulations of such country or countries during the performance of this contract; and that no claim for additional moneys with respect to any authorizations to perform will be made upon HQ SACT.

24. Performance. Candidates/contractors who accept HQ SACT issued contracts, shall, at a minimum, serve in a designated capacity for no less than 180 calendar days from commencement of contract period of performance. Contracts' with performance periods having less than 180 days in totality shall require contractors to serve a minimum of 50% of estimated performance period. Should a candidate vacate the contract in less time than described, HQ SACT reserves the right to cancel the contract in whole or part. Replacement candidates, if acceptable to HQ SACT, shall be reviewed by HQ SACT for compliance, and, or technical acceptance per the original Statement of Work and final acceptance by HQ SACT Contracting Officer.

25. Travel. In accordance with AFM Section 24, Contractor Travel, travel by contractors in support of the HQ SACT mission will only be performed when a member of the approved International HQ SACT Peacetime Establishment is unable to perform the mission. Once contractor travel has been established under a contract and a contractor is tasked to travel, the HQ SACT Contractor Travel Request form must be filled out and approved prior to any travel being conducted. The in-house Travel Agency will set the Transport Ceiling Cost and at that time the contractor may elect to book their transportation with the in-house travel agency. (Please refer to Clause Number 7 above).

Transport tickets purchased through the in-house travel agency will be reimbursed by the HQ SACT entity directly to the in-house travel agency, and the applicable travel line of the contract will be charged. These costs will not be invoiced by, or paid to, the contractor company. When transport tickets are purchased through another source only the ceiling cost allocated by the in-house travel agency will be reimbursed to the contractor company. Per Diem is based on the NATO Group One subsistence allowance, which covers meals, lodging, incidental expenses and any applicable overhead and/or fees. Per Diem Reimbursement will only be made at these rate amounts. NATO Group III daily subsistence allowances are posted on HQ SACT website at <http://www.act.nato.int/contracting>.

26. Proposed Candidates. No proposals shall be accepted or considered for candidates already assigned to an existing contract with HQ SACT, without the prior permission of the Contracting Officer. .

27. Partial awards will be allowed when determined in the best interests of NATO. The Contracting Awards Board and the Contracting Officer, when deemed prudent and necessary

have the authority to make this determination. Partial bidding shall be consistent with released solicitation.

28. Competition. HQ SACT reserves the right to engage in Full and Open Competition after exclusion of sources.

29. Contractor Notice Regarding Delay. In the event the Contractor encounters difficulty in meeting performance requirements, or when he anticipates difficulty in complying with the contract delivery schedule or date, he shall immediately notify the Contracting Officer in writing, giving pertinent details; provided, however, that this data shall be informational only in character and that this provision shall not be construed as a waiver by HQ SACT of any delivery schedule or date, or of any rights or remedies provided by law or under this contract.

30. Notice and Assistance regarding Patent and Copyright Infringement

a. The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

b. In the event of any claim or suit against HQ SACT on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to HQ SACT, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of HQ SACT except where the Contractor has agreed to indemnify HQ SACT.

c. This clause shall be included in all sub-contracts.

31. Health, Safety and Accident Prevention. If the Contracting Officer notifies the Contractor in writing of any non-compliance in the performance of this contract, with safety and health rules and requirements prescribed on the date of this contract by applicable national or local laws, ordinances and codes, and the Contractor fails to take immediate corrective action, the Contracting Officer may order the Contractor to stop all or part of the work until satisfactory corrective action has been taken. Such an order to stop work shall not entitle the Contractor to an adjustment of his contract price or other reimbursement for resulting increased costs, or to an adjustment of the delivery or performance schedule.

32. Patent Indemnity. If the amount of this contract is in excess of \$1,000,000 , the Contractor shall indemnify HQ SACT and its officers, agents and employees against liability, including costs, for infringement of any letters patent (except letters patent issued upon an application which is now or may hereafter be kept secret or otherwise withheld from issue by order of the government which issued the letters patent) arising out of the manufacture or delivery of supplies under this contract, or out of the use or disposal by or for the account of HQ SACT of such supplies. The foregoing indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by HQ SACT of the suit or action alleging such infringement and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in the defence thereof; and further, such indemnity shall not apply to:

- a. An infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used or directing a manner of performance of the Contract not normally used by the Contractor;
- b. An infringement resulting from an addition to, or change in, such supplies or components furnished which addition or change was made subsequent to delivery or performance by the Contractor; or
- c. A claimed infringement which is settled without the consent of the Contractor, unless required by a court of competent jurisdiction.

33. Rights in Technical Data and Computer Software

- a. Ownership of Work Product. HQ SACT is and shall be the sole and exclusive owner of all right, title, and interest throughout the world in and to all the results and proceeds of the Research performed under this Agreement, including but not limited to inventions, derivative works, documents, reports, summaries, raw data, algorithms, charts, graphs, research results, methods, models, maps or drawings, tools, software (including source code), and other works which are created due to or as part of the Research by the Foundation, and including all patents, copyrights, trademarks, trade secrets and other Work Product (all of the above-described results and proceeds of the Research are herein referred to as "Work Product") and shall be deemed to be work made for hire. Accordingly, Sponsor may modify, protect, publish, incorporate into other documents, share with others, or otherwise use without restriction all aspects of the Work Product as HQ SACT deems fit in its sole discretion. The Foundation will not in any way use, license, or allow third parties to use the Work Product or any portion thereof without the express prior written consent of Sponsor.
- b. Technical data and software delivered under this contract shall be marked with the number of this contract, name of Contractor and the rights transferred to HQ SACT.

34. Software Releases and Updates.

- a. All software implemented on or delivered with the supplies shall be at the start of acceptance, the most recent versions or releases as available.
- b. The Contractor shall for a duration of minimum five (5) years after acceptance, and upon their availability, offer to HQ SACT all software changes, fixes and new releases. These shall be offered at no cost when they are offered free of charge on the commercial market.

35. Inconsistency between English Version and Translation of Contract. In the event of inconsistency between any terms of this contract and any translation thereof into another language, the English language meaning shall control

36. Contract Effective Date (CED). The effective date of the contract is the date of last signature by the contracting parties, or a specific date set forth in the Contract.

37. Enforcement. Failure by either party to enforce any provision of this contract will not be deemed a waiver of future enforcement of that or any other provision. The invalidity or unenforceability of any provision of this contract shall not affect the other provisions hereof,

and this contract shall be construed in all respects if such invalid or unenforceable provisions were omitted

38. Order of Precedence. Any inconsistencies in the solicitation or contract shall be resolved by giving precedence in the following order: (1) Special Terms and Conditions;

(2) General Terms and Conditions and Purchase Order terms; (3) solicitation provisions if this is a solicitation; (4) the specification/statement of work; (5) other HQ SACT documents, exhibits and attachments; (6) addenda to this solicitation or contract, including any license agreements for computer software, or other Contract agreements.

39. Entire Agreement. This contract sets for the entire agreement between the parties with respect to the subject matter hereof, and supersedes all prior agreements or representations, oral or written, regarding such subject matter. HQ SACT shall not be bound by, and specifically objects to any term, condition, or other provision inconsistent with or in addition to any provision of this contract that is submitted by Contractor in any correspondence or any document unless HQ SACT specifically agrees to such provision in a written instrument signed by an authorized representative of HQ SACT.