

Notification of Intent to Invite Bids

Project Title:

'Replace Ultra High Frequency Tactical Satellite Radios'

Serial 2016/OCM03117

IFB-CO-14390-TACSAT

Estimated Value: € 40,000,000

This is notification of a Limited Competition for the provision of Ultra High Frequency (UHF) Tactical Satellite (TACSAT) Radios.

This Project (2016/OCM03117) is included in Capability Package (CP) 9A0130 "Satellite Communication (SATCOM) Transmission Services", approved by the North Atlantic Council at C-M(2016)0013-AS1. This project will provide UHF TACSAT radio terminals to support the war-fighter with a mix of static, on-the-pause (OTP) and on-the-move (OTM) capabilities in all battle-space environments. A new generation of radios will be required to replace the current inventory which is becoming obsolete as new UHF waveform technologies, such as the Integrated Waveform (IW), become available. Additionally, because of their persistent long-term use in support of recent and ongoing NATO operations, most of the current inventory is now beyond economic repair.

The formal Invitation for Bid is planned to be issued in August 2018 with a Bid Closing Date in October 2018 and Contract Award in June 2019.

NCI Agency Point of Contact (POC):

Ms. Viktorija NAVIKAITĖ – Senior Contracting Assistant

E-mail: viktorija.navikaite@ncia.nato.int

To : Distribution List

Subject : Notification of Intent (NOI) to Invite Bids for International Competitive Bidding (Limited Competition)
Project 'Replace Ultra High Frequency Tactical Satellite Radios'
IFB-CO-14390-TACSAT

References : A. AC/4-2261 (1996 Edition)
B. AC/4(PP)D/27633-ADD1
C. AC/4-DS(2017)0026
D. Market Survey - Questionnaire NCIA/ACQ/2016/1723 dated 7 October 2016
E. Market Survey – Request for additional information NCIA/ACQ/2017/901 dated 24 January 2017
F. AC/322-D/0047-REV1, AC/4-D(2009)0006

Dear Sir / Madam,

1. The NATO Communications and Information Agency (NCI Agency), acting as a Host Nation responsible for implementing the subject Project, intends, in accordance with paragraph 6 of Reference (A), to issue an Invitation for Bid (IFB) for the procurement of Ultra High Frequency Tactical Satellite Radios. Note that the issuance of the IFB is subject to prior authorisation of the Project by the Investment Committee.
2. A summary of the requirements of the Project is set forth in Annex A attached to this letter. These requirements are being refined and detailed as part of the preparation of the Invitation for Bid.
3. The reference for the Invitation for Bid is **IFB-CO-14390-TACSAT**, and all correspondence concerning the IFB should reference this number.
4. The scope of work and funds for this Project have been authorised as recommended by Reference (B). The estimated investment cost for the services and deliverables included within the scope of the intended Contract is **€ 40,000,000**. This does not include Operating and Maintenance (O&M) costs for hardware.
5. The evaluation of the bids will be undertaken on the basis of the investment cost. Life-cycle support will be an Option to the Contract which will undergo technical evaluation. However, the priced optional O&M services will not be part of bid price evaluation.
6. The NCI Agency was authorised to use the **International Competitive Bidding limited to known providers of the secure UHF radios that can protect NATO classified information at the required level**, as explained in the paragraphs below and Annex A to this letter. Lowest Priced Technically Compliant Bid procedures will be followed for source selection.
7. Annex B to this letter provides the initial Prospective Bidders List generated through the Market Survey under References (D) and (E). National authorities however have the opportunity, in response to this NOI, to nominate bidders in addition to the firms included in the attached list, subject to their products meeting the security requirements detailed under Annex A, as per paragraph 19 below.

8. Award of the Contract will be made on a **Firm Fixed Price Basis to the lowest price technically compliant Bidder**. It is planned to place a single Contract for the entire scope of work, no partial bidding will be allowed.
9. The IFB is planned to be issued by the end of August 2018 with a Bid Closing Date in October 2018. The Contract Award is expected in June 2019. Contract Award is subject to funding priority and availability as determined by the NATO Investment Committee. The NCI Agency reserves the right to amend the dates above according to new requirements.
10. The Project is expected to be completed after 2 years from the Effective Date of Contract (EDC). The Contract will include optional 2 years life-cycle support services associated with this Project.
11. Bidders will be required to declare a bid validity of twelve (12) months from closing date for receipt of bids, supported by a Bid Guarantee of Euro 300,000 (three hundred thousand Euro and zero cent). Should the selection and award procedure exceed the twelve (12) months after Bid Closing Date, firms will be requested to voluntarily extend the validity of their bids and Bid Guarantee accordingly. Bidders may decline to do so, however they shall withdraw their bid and excuse themselves from the bidding process without penalty.
12. Funding for this Project is provided by the Investment Committee “at 28E”, thus firms from all NATO Member Nations except Montenegro may respond to future solicitation once issued.
13. Firms that wish to participate in this procurement, including firms listed under Annex B to this letter, must be nominated to the NCI Agency through their national delegation to NATO. Requests for participation received directly from firms shall not be considered.
14. Pursuant to paragraph 5 of Reference (A), national responsible authorities are kindly requested that the NCI Agency be provided with “Declarations of Eligibility” of qualified and certified firms which are interested in bidding for this Project. In addition to the certification of the firm’s security clearance required under this NOI, the Declarations of Eligibility should include the following information for each of the nominated firms: **Name of the Firm, Telephone number, Fax number, E-mail address and Point of Contact**. This information is critical to enable prompt and accurate communication with prospective Bidders.
15. The Declarations of Eligibility for the companies nominated by The United States of America shall also include a confirmation that the respondent to the IFB will be directly the company and not the Foreign Military Sales.
16. The closing date for additions/nominations to the Bidders List of qualified and certified firms which may be interested in receiving the IFB for this Project is **16 May 2018**.
17. Delegations are requested to provide the prospective bidders list to the NCI Agency Point of Contact (POC) at the following address:

NATO CI Agency
Acquisition Directorate
Boulevard Leopold III
1110 Brussels, BELGIUM
POC: Ms. Viktorija NAVIKAITĖ – Senior Contracting Assistant
TEL: +32 2 707 8210, FAX: +32 2 707 8770
E-mail: viktorija.navikaite@ncia.nato.int

18. The participating National Authorities are advised that the IFB package will only contain "NATO UNCLASSIFIED" material. However, the resulting Contract will require the Prospective Contractor handling, processing and storing material classified "NATO SECRET". The Contractor shall be required to possess a Facility and Personnel clearances of "NATO SECRET" at the time of Contract award.
19. As it was anticipated in the Market Survey under References (D) and (E), the procurement in subject is restricted to the companies having products evaluated by the Security and Evaluation Agency (SECAN) and approved by the Military Committee (MC), in accordance with the INFOSEC Technical and Implementation Directive on Cryptographic Security and Cryptographic Mechanisms (Reference (F)).
20. Along with the Declaration of Eligibility the Delegations are requested to provide a formal confirmation that the nominated company has already obtained SECAN and MC approvals.
21. In case the product of the nominated company is currently under the process of SECAN evaluation, the Delegations are requested to attach a copy of the document demonstrating that the firm has already requested for SECAN/MC approval of the products in question. In such a case, the Declaration of Eligibility shall also state that the SECAN evaluation and MC approval will be obtained before the planned Contract award date or provide a forecasted date of SECAN evaluation and MC approval.
22. The NCI Agency Point of Contact for all information concerning this IFB is Ms Viktorija Navikaitė, email viktorija.navikaite@ncia.nato.int.
23. Your assistance in this procurement is greatly appreciated.

ON BEHALF OF DIRECTOR OF ACQUISITION:



Ms Tiziana Pezzi

Principal Contracting Officer

Enclosures:

Annex A (Summary of Requirements)

Annex B (Prospective Bidders List)

**Distribution List for Notification of Intent (NOI) to Invite Bids
IFB-CO-14390-TACSAT**

NATO Delegations (Attn: Investment Adviser):

Albania	1
Belgium	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1
Estonia	1
France	1
Germany	1
Greece	1
Hungary	1
Iceland	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Netherlands	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
The United Kingdom	1
The United States of America	1

Belgian Ministry of Economic Affairs 1

Embassies in Brussels (Attn: Commercial Attaché):

Albania	1
Belgium	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1
Estonia	1
France	1
Germany	1
Greece	1

Hungary	1
Iceland	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Netherlands	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
The United Kingdom	1
The United States of America	1

ANNEX A

Summary of Requirements

Project ID 2016/0CM03117, CP 9A0130

1. Background

NATO requires 549 Ultra High Frequency (UHF) Tactical Satellite (TACSAT) radio terminals to support the war-fighter with a mix of static, on-the-pause (OTP) and on-the-move (OTM) capabilities in all battle-space environments. A new generation of radios will be required to replace the current inventory which is becoming obsolete as new UHF waveform technologies, such as the Integrated Waveform (IW), become available. Additionally, because of their persistent long-term use in support of recent and ongoing NATO operations, most of the current inventory is now beyond economic repair.

Another driver to replace the current inventory of UHF TACSAT radios is the planned replacement of the current generation cryptographic algorithms as part of the crypto modernisation. With the current generation of radios the internal crypto algorithms cannot be upgraded and when the current crypto algorithms are declared obsolete, the UHF TACSAT radios need to be replaced.

2. Scope

The Contract resulting from the Invitation for Bid (IFB) will acquire 549 new UHF TACSAT radios and associated terminal equipment (including spares) to meet the tactical network requirements to support NATO's Allied Operational and Missions (AOM's). The terminals shall be provided in man-portable configuration and mobile configuration.

The man portable configuration supports OTP operations, i.e. stopping to set up and point the directional antenna at the satellite before communicating. The configuration shall consist of foldable UHF TACSAT Satellite Communication (SATCOM) antenna, VHF/UHF line-of-sight (LOS) antenna, a set of batteries, battery changer and data cables.

The mobile configuration supports OTM operations including a vehicle-mounted omni-directional antenna, vehicular mount assembly, power amplifier.

The replacement UHF radios shall include a multi-band capability such that these can be used for SATCOM networks, but also for LOS Tactical radios. This will increase the radio flexibility and will avoid procuring separate radios for separate functions.

3. Key Requirements

3.1 Functional requirements

The future UHF TACSAT terminal shall operate by means of an Advanced Multiband Multichannel Man-pack Terminal to provide reliable tactical communications through enhanced secure voice and data capabilities.

The future UHF TACSAT terminal shall consist of radio transceiver itself and set of core ancillaries enabling man portable and mobile operation.

The UHF TACSAT terminal design shall be based on a fully-programmable software defined radio, which allows for easy upgrades of future waveforms and frame formats.

The UHF TACSAT terminal shall enable the function of sending and/or receiving situation awareness data.

The UHF TACSAT terminal must be capable of operating within the below modes of operation:

- 1) Single channel per carrier (SCPC). SCPC refers to using a single signal at a given frequency and bandwidth. The UHF TACSAT terminal shall be fully compliant with MIL-STD-188-181B.
- 2) Demand Assigned Multiple Access (DAMA) is a technology used to assign a channel to clients that don't need to use it constantly. DAMA systems assign communication channels based on requests issued from user terminal to a network control system. The UHF TACSAT terminal shall be fully compliant with MIL-STD-188-183 and 188-183A. The UHF TACSAT terminal should comply with Standardization Agreement (STANAG) 4231 Ed 5. The STANAG covers the Digital Interoperability between UHF Satellite Communications Terminals.
- 3) Integrated Waveforms is an enhanced method of multiplexing radios on the same channel. It uses a Time Divisional Multiple Access (TDMA) protocol to allow for more than one access on the same channel. The UHF TACSAT terminal shall be fully compliant with MIL-STD-188-183C.
- 4) Single Channel Ground and Airborne Radio System (SINCGARS) shall be compliant to MIL-STD-188-241-1 and be capable of performing HOPSET, Electronic Remote Fill (ERF) Cold Start and Over The Air Rekeying (OTAR) functions.
- 5) The UHF TACSAT terminal shall support both HAVEQUICK I and HAVEQUICK II modes of operation (with the potential to upgrade to the SATURN Waveform). The radio shall receive HAVEQUICK Time of the Day (TOD) from an internal Global Positioning System (GPS) from an easy to use front panel interface.
- 6) The UHF TACSAT terminal shall be capable of receiving input from an internal commercial GPS to support position and timing requirements of all waveforms. Additionally the UHF TACSAT shall be upgradeable to M-Code once the technology is mature.
- 7) Very High Frequency/Ultra High Frequency Line of Sight (VULOS).

3.2 Performance requirements

The UHF TACSAT terminal shall be able to tune to all UHF SATCOM frequencies from UHF uplink frequencies, which range from 280 to 320 MHz, as well as downlink frequencies, which range from 243.000 to 380.000 MHz; dependent upon waveform requirements, and operating bands. The UHF TACSAT terminal shall also be able to tune to both wide-band (25 kHz) and narrow-band (5 kHz) SATCOM frequencies.

The UHF TACSAT terminal shall support minimum frequency tuning down to 1.25 kHz.

The UHF TACSAT terminal Frequency Stability shall fall within plus or minus .5 parts per millions of selected frequency.

The UHF TACSAT terminal Harmonic Suppression shall be 40 dBc or greater and adjacent channel rejection shall be a minimum of -30dB.

The UHF TACSAT terminal Squelch shall be selectable between None, Noise, Tone, or Digital (Continuous Digital-Coded Squelch System CDCSS, Continuous Tone-Coded Squelch System - CTCSS).

The UHF TACSAT terminal shall have a minimum of two channels, fully symmetrical and capable of operating in the full 30MHz to 512MHz frequency range.

3.3 Security requirements

The UHF TACSAT terminal shall enable the protection of all levels of NATO classified information.

The UHF TACSAT shall be capable of operating in DAMA and IW mode of operation while simultaneously allowing the user to operate an effective encoding algorithm for high quality voice communications with the entire circuit encrypted via the embedded Communication Security (COMSEC) device.

The UHF TACSAT shall use embedded Transmission Security (TRANSEC) to protect the control orderwire channel that controls the DAMA and IW accesses.

The UHF TACSAT shall be approved by the Military Committee as cryptographic equipment to protect NATO information up to NATO Cosmic Top Secret (CTS) level.

The UHF TACSAT shall support the following Encryption Modes: KY-57 (VINSON), FASCINATOR, KYV-5 (ANDVT), KG-84C, HAPE (PPK/FFV, APPK for NINE), AES (Type 1 & 3), and Type 3 DES.

The UHF TACSAT shall allow for future upgrades to support future tactical narrow-band waveforms and cryptographic algorithms by means of software upgrade without a need of hardware modification.

Cryptographic Security

The UHF TACSAT radio equipment to be purchased through this IFB includes cryptographic components and therefore falls under the INFOSEC Technical and Implementation Directive on Cryptographic Security and Cryptographic Mechanisms. This Directive foresees a Limited Competition amongst known providers of secure equipment with embedded crypto. And the secure equipment needs first be evaluated by the Military Committee (MC) Communications and Information Systems Security and Evaluation Agency (SECAN), and then approved by the MC for its suitability to protect NATO classified information at the required level.

The Prospective Bidders intending to respond to this IFB shall therefore meet the following criteria:

- A. The proposed UHF TACSAT radio products shall meet the technical requirements of this document and be already MC approved.
- B. Vendors that have only nationally approved product(s) shall submit a formal document proving that the SECAN evaluation has already been initiated. As part of the Bid Guarantee, the Bidder will have to warrant that the SECAN evaluation and MC approval will be obtained before the Contract award.

3.4 Physical requirements

The UHF TACSAT terminal in an operational configuration (battery, antenna, and handset) shall not exceed the current fielded AN/PRC 117F by more than 10%.

3.5 Environmental requirements

The environmental conditions that the UHF TACSAT will operate in may be extremely harsh with extreme temperature fluctuations, airborne dust particles and heavy winds. All delivered capability must be able to continue to operate effectively within these conditions for an extended period. The AM3T shall be built in a ruggedized manner to facilitate their use in the field environment, with conformance to MIL-STD-810G.