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NCIA/ACQ/2018/1232
17 May 2018

Notification of Intent to Invite Bids
Project Title:
'Replace Ultra High Frequency Tactical Satellite Radios'
Serial 2016/0CM03117
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 (2016/0CM03117) 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) – Extension of the Closing Date
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
G. Notification of Intent letter NCIA/ACQ/2018/1010 dated 18 April 2018

Dear Sir / Madam,

1. As stated in the Notification of Intent (NOI) under Reference (G), the closing date for nominations to the Bidders List of qualified and certified firms which may be interested in receiving the Invitation for Bid (IFB) for the subject Project was 16 May 2018.

2. Due to complexity of the requirements, the NCI Agency hereby extends the closing date for Declarations of Eligibility (DoE) until **31 May 2018**.

3. The Delegations are reminded that the DoEs shall include the following information:

a) Contact details of the firms that have the products meeting the technical and security requirements detailed under Annex A of this letter;

b) A statement that the nominated firm will possess a Facility and Personnel clearances of "NATO SECRET" at the time of the planned Contract award;

c) A formal confirmation that the nominated company has already obtained SECAN and MC approvals. 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 SECAN evaluation process has been initiated for 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.

d) The DoEs for the companies nominated by The United States of America (USA) shall also include a confirmation that the respondent to the IFB will be directly the company and not the Foreign Military Sales (FMS). The NCI Agency recognizes the fact that Type 1 equipment must be purchased through FMS as per USA Government cryptographic security regulations, but the Delegations are requested to confirm whether the firms may submit their proposals directly to the NCI Agency, even if eventually the purchase would have to be done through FMS (in the event the firm results as lowest price technically compliant).

4. The reference for the Invitation for Bid is **IFB-CO-14390-TACSAT**, and all correspondence concerning the IFB should reference this number.

5. 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.

6. 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

7. 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)

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

Distribution for information (Blind to Potential Industrial Suppliers):

NATO HQ

NATO Office of Resources

Management and Implementation Branch
Attn: Deputy Branch Chief 1

SACTREPEUR
Attn: Investment Assistant 1

SACEUREP

Attn: Investment Assistant 1

Strategic Commands (*as applicable to funding source*)

HQ SACT Attn: ACOS C4ISR 1

ACO Attn: SPT CIS Director 1

NATO Agencies (*as applicable*)

NCI Agency:

DACQ (Mr. P. Scaruppe through Ms. D. Cani) 1
Deputy DACQ (Ms. A. Szydelko) 1
ACQ PCO (Ms. T. Pezzi) 1
ACQ Senior Contracting Assistant (Ms. V. Navikaitė) 1
ACQ ILS (Mr. R. Proietto) 1
CAB Secretary (Ms. M.L. Le Bourlot) 1
Legal Adviser (Ms. S. Rocchi through Mr V. Roobaert) 1
SStrat NLO (Mr. X. Desfougeres) 1
FMU (Ms. I. Nechelput) 1
DSO (Mr. E. Lesbaupin) 1
NSII SATCOM Service Area Owner (Mr. G. B. Durando) 1
NSII Project Manager (Mr. M. Margiel) 1
GS SEC (Mr. C. Buckland) 1

Registry (for distribution) 1

NATEXs

All NATEXs (except Montenegro) 1 Each

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 hall 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 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, HAIPE (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.