Telephone: +32 (02) 707 8335

NCIA/ACQ/2019/13065 19 December 2019

## Notification of Intent to Invite Bids Project Title:

Ballistic Missile Defense
Integration Test Bed (ITB) Build 6 Open Framework Services (OFS)
Serials: 2018/0VA03020

IFB-CO-14974-BMD

Estimated Value: € 10,891,477

The NCI Agency hereby notifies the Nations of its Intent to Call for Competitive Bidding for the provision of functional and performance enhancements over the current open framework services of Ballistic Missile Defense Integrated Test Bed (BMD ITB). The BMD ITB was designed and built to support the original Active Layered Theatre Missile Defense (ALTBMD) Programme.

The BMD ITB supports test and exercise events at both the system and architecture level. In its primary role conducting technical verification and integration, the BMD ITB ensures that technical requirements are met and that operational interoperability with other NATO and National systems is assured.

The BMD ITB laboratory hosts three different categories of components:

- a. First, NATO C2 systems that are systems under test.
- b. Second, representations of National BMD contributions (National C2, sensor and shooter).
- c. Thirdly, the ITB test environment itself also called ITB Open Framework Services, which provides scenario preparation support, threat injections, recording, visualization and analysis tools, as well as network connectivity and monitoring.

The ITB OFS project scope concerns only the third part (test environment) and includes both functional and performance enhancements over the current ITB Build 5. Build 5 was designed and built to support the original Active Layered Theatre Missile Defense (ALTBMD) Programme's Theatre Missile Defense (TMD) focus. Hardware (HW) upgrade is out of scope and will be delivered by the Purchaser as PFI, as will the ITB Build 5 software.

The ITB OFS will be delivered to NCIA BMD ITB Lab, located in The Hague.

**NCI Agency Point of Contact (POC):** 

Mr. Martin Steenwege

**Senior Contracting Officer** 

E-mail: IFB-CO-14974-BMD@ncia.nato.int

Closing Date for Nominations of Firms by their national delegations is 03 February 2020



NATO Communications and Information Agency

Agence OTAN d'information et de communication

Avenue du Bourget 140 1110 Brussels, Belgium

www.ncia.nato.int

NCIA/ACQ//2019/13065 19 December 2019

To : Distribution List

Subject : Notification of Intent (NOI) to Invitation For Bids (IFB) for the implementation of

the Project 'Integration Test Bed (ITB) Build 6 Open Framework Services (OFS)

IFB-CO-14974-BMD

Reference(s) : A. AC/4-2261 (1996 Edition)

B. AC/4-D/2261-ADD2 (1996 Edition)

C. AC/4-D(2008)0002-REV1 and AC/4-D(2008)0002-REV2

D. AC/4(PP)D/28107 (INV)E. AC/4-DS(2019)0032

F. NATO Security Policy C-M(2002)49

- 1. The NATO Communications and Information Agency (NCI Agency), acting as a Host Nation (HN) responsible for implementing the subject Project, intends, in accordance with paragraphs 5 and 6 of Reference A, to issue an Invitation For Bids (IFB) for the procurement of ITB OFS.
- 2. The evaluation method used for the selection of the successful bidder under this solicitation will follow NATO's Best Value Procedures set forth in Reference B and C. The successful bid pursuant to this IFB will be that bid which is evaluated as offering the best value for money in accordance with predefined bid evaluation criteria, which will be detailed in the IFB as prescribed by the Best Value Procedures. Agreed Top Level criteria are 40% Price and 60% Technical. The second level Technical sub-criteria are Engineering (25%), Supportability (20%) and Management (15%).
- 3. In accordance with Reference B, the not-to-exceed investment cost for bids submitted shall be €13.614.346,25 (125% of the estimated value as stated in the cover page), or the equivalent expressed in any other allowed currency calculated in accordance with the currency conversion prescriptions that will be expressed in the IFB.
- 4. The successful Bidder will be required to handle and store classified information up to the level of NATO SECRET. In addition, execution of the proposed contract may require, in accordance with Reference F, personnel of the successful bidder to be required to hold individual security clearances of "NATO SECRET". Only companies maintaining such cleared facilities and the appropriate personnel clearances will be able to perform the resulting contract.
- 5. A summary of the requirements of the IFB is set forth in Annex A attached to this letter. These requirements may be subject to revision as a result of the Investment Committee authorization and will be refined and detailed as part of the preparation of the Invitation for Bid.
- 6. The reference for the IFB is IFB-CO-14974-BMD, and all correspondence concerning the IFB should reference this number.
- 7. The overall scope of work and funds for this Project have been screened and detailed as recommended by Reference D and E.
- 8. The NCI Agency anticipates the use of "Optional Preliminary Bidding Procedures" as described in Annex II to Reference A. Therefore, a Request for Bidders' View (RFBV), which provides the draft IFB documentation to nominated Bidders for comments, will precede the IFB.

- 9. The RFBV release is planned for February 2020, with a closing date for the provision of comments in March 2020.
- 10. Participation to RFBV is not mandatory. Bidders who chose not to participate may still participate to the IFB. The NCI Agency will review the comments provided by Bidders on the RFBV and conduct a series of meetings with responding firms. The Agency will incorporate feedback and findings from the RFBV, if and where appropriate, into the formal IFB documentation.
- 11. The findings of RFBV for ITB OFS will also help determine whether the International Competitive Bidding (ICB) for ITB OFS and the ICB for the new System Engineering & Integration competition should be merged into a single solicitation package.
- 12. The Agency plans to issue the formal IFB in Q3 2020 with contract award anticipated in Q2 2021. These dates are subject to confirmation.
- 13. The Investment Committee "at 29B", has funded this Project. Firms from all the 29 NATO Member Nations may respond to this RFBV/IFB. Firms that wish to participate in this procurement must be nominated to the NCI Agency through their national delegation to NATO. The nomination must be accompanied by a "Declaration of Eligibility" executed by their national authorities. The Agency will not consider requests for participation received directly from firms.
- 14. The closing date for additions/nominations to the Bidders List of qualified and certified firms which may be interested in receiving an Invitation for Bid for this Project is <u>03 February</u> <u>2020</u> Each nominated firm shall include the <u>NAME of the FIRM, the TELEPHONE</u> <u>NUMBER, E-MAIL-ADDRESS and POINT OF CONTACT</u>.
- 15. Delegations are requested to provide the prospective bidders list to the NCI Agency Point of Contact (POC) at the following address:

**NCI** Agency

**Acquisition Directorate** 

Boulevard Léopold III

1110 Brussels, BELGIUM

POC: Mr. Martin Steenwege, Senior Contracting Officer

TEL: +32 2 707 8335

E-mail: IFB-CO-14974-BMD@ncia.nato.int

- 16. National Authorities are advised that the overall security classification of this Invitation for Bid is NATO RESTRICTED. Excluding the Bidders Library, the security classification of the IFB is "NATO UNCLASSIFIED".
- 17. Your assistance in this procurement is greatly appreciated.
- 18. FOR THE DIRECTOR OF ACQUISITION:

Mr. Martin Steenwege Senior Contracting Officer

Enclosures: Annex A (Summary of Requirements)

## **ANNEX A: Summary of Requirements**

## CP OA1303REV1 - PROJECT SERIAL 2018/0VA03020

Purpose / Background

In operation since 2007, the BMD ITB has proven to be an essential and unique enabler for the integration, verification and validation of BMD Programme capabilities. By providing an environment that supports both simulated entities and live BMC3I systems, the ITB has proven essential to verifying BMD functions implemented in NCI Agency-developed services and interoperability between NATO and National BMD systems.

With its unique ability to simulate and stimulate various national BMD weapon, sensor and BMC3I systems, the ITB has demonstrated the viability of TMD solutions such as the Air Command and Control System (ACCS) TMD1 and the Bi-Strategic Command Automated Information Services (Bi-SC AIS). Connected to forces through both NATO and National networks, the BMD ITB has established its value through participation in various national tests and exercises, including live BMD firing exercises.

As the BMD Programme Implementation Projects delivered their first increments, the BMD ITB supported successive Ensemble Tests (ETs) to verify BMC3I's technical requirements. The ITB also supported integration tests as BMD systems were deployed to NATO Command Structure (NCS) sites. All these activities culminated with ITB simulation, data collection and analysis support during test events that supported the declarations of the BMD Interim Capability at the Chicago Summit in 2012 and of BMD IOC at the Warsaw Summit in 2016.

To accomplish the current NATO BMD Programme mission to protect all NATO European populations, territory and forces, additional BMC3I projects and supporting Communications services have been initiated, including:

- a. ACCS BMD;
- b. Air Command and Control Information Services (AirC2IS);
- c. BMD Communications;
- d. Education, Training, Exercise and Evaluation (ETEE);
- e. Chemical Biological Radiological and Nuclear Functional Service (CBRN FS);
- f. Intelligence Functional Services (Intel FS);
- g. NATO Common Operational Picture (NCOP);
- h. Tool for Operational Planning, Force Activation and Simulation (TOPFAS);
- i. NATO Communications.

To enable the verification and integration of these NATO BMC3I systems, the BMD ITB must itself be upgraded.

This project will provide the sixth version or "Build" of the BMD ITB to provide the BMD Programme capability with the ability to both verify BMD-related NATO C2 system upgrades and support their integration into the NATO BMD Architecture.

As the NCI Agency acquires Battle Management Command, Control, Communications and Intelligence (BMC3I) systems, individual projects verify that their systems meet BMD requirements. The BMD Programme verifies that the BMD components are interoperable with NATO and national systems and integrates these BMD systems within NATO and with Alliance Nations. The BMD

Programme uses the BMD ITB Laboratory as the main environment in which to perform test planning, test execution and results analysis to support verification of NATO BMD capabilities. In addition, the BMD ITB Laboratory supports stimulation of exercises to enable the military operators to conduct BMD operational validation exercises. With its unique modelling, simulation and verification assets, the BMD ITB laboratory provides a unique and essential NATO asset that links together NATO and national BMD systems over experimental and operational networks.

The ITB provides an environment where C2 system requirements, esp. the ones involving interfaces are tested in end-to-end workflows. The ITB provides a test environment where the systems are not tested in isolation (like in a FAT for instance), but in a representative functional multiple systems environment.

## 1.1 System Description

The BMD ITB laboratory hosts three different categories of components:

- First, NATO C2 systems, which are the systems under test. The ITB includes NATO C2 clients, while the NATO C2 servers are hosted in the datacentre under the responsibility of the BMD implementation Projects.
- Second, representations of National BMD contributions (National C2, sensor and shooter. These representations are used to generate a simulated scenario environment to test the NATO C2 and to test the interoperability of National contributions with NATO C2 systems. National systems simulations, or remote access to National HWIL are available in the ITB.
- Thirdly, the ITB test environment itself also called ITB OFS, which provides scenario
  preparation services, threat injections, recording, visualisation and analysis tools, as well
  as network connectivity and monitoring.

The scope of this bidding is 6th version of ITB OFS which concerns only the third part (test environment) and limited to ITB OFS part of the ITB Build 6. The scope of the bid also includes the integration of the new Build 6 with Build. ITB OFS will run on both CFBLNet and NSWAN and the scope of the work includes demonstration in two real test events on CFBL and NSWAN.

ITB OFS scope includes both functional and performance enhancements over the current ITB Build 5 and maintenance of ITB OFS, which was designed and built to support the original Active Layered Theatre Missile Defence (ALTBMD) Programme's Theatre Missile Defence (TMD) focus.

Hardware (HW) upgrade is out of scope and will be delivered by the Purchaser as PFI, as will the ITB Build 5 software.

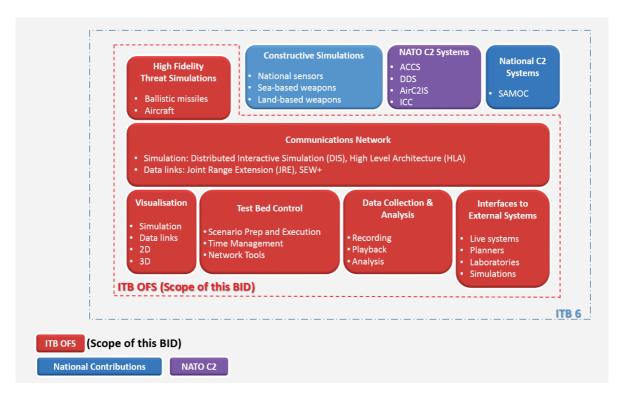


Figure 1 ITB OFS in BMD Integration Test Bed