

NCIA/ACQ/2020/6859  
31 July 2020

**Notification Of Intent to Invite Bids**

**Intelligence Functional Services (INTEL-FS) - Spiral 2  
and BMD functions in INTEL-FS**

**IFB-CO-14873-INTELFS2**

Total Estimated Value: EUR 31,500,000

The NCI Agency is planning to issue an Invitation for Bids (IFB) for Spiral 2 of the NATO INTEL-FS capability.

The NCI Agency will award two contracts, each with a separate and distinct scope:

- One for the "Front-end", or User Applications, for the Intel-FS capability;
- One to deliver the "Back-end" data management and integration with other systems.

Bidders are free to bid on either one, or on both. The evaluations will be conducted separately, so a bidder who submits a bid for both contracts may be selected for only one of them.

The estimated Values for each contract, including five years of O&M support following final acceptance, are:

User Applications / Front-End System:	EUR 13,400,000
Data Management / Back-End System:	EUR 18,100,000

The NCI Agency expects to issue the formal Invitation for Bid (IFB) in **Q4 2020** with an anticipated contract award in **Q4 2021**.

**NCI Agency Point of Contact**  
Dan Gaertner, Senior Contracting Officer

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To : See Distribution List

Subject : Notification of Intent to Invite Bids  
Intelligence Functional Services (INTEL-FS) - Spiral 2 and BMD  
functions in INTEL-FS  
**IFB-CO-14873-INTELFS2**

Reference(s) : A. AC/4-D/2261 (1996 Edition), Procedures for International Competitive Bidding  
B. AC/4-D(2008)0002-REV2, dated 15 July 2015, Best Value Evaluation Methodology  
C. NCIA/ACQ/2019/12562, NOI dated 27 August 2019

1. In accordance with Reference A, the NCI Agency, as the Host Nation, hereby gives notice of its intent to issue an Invitation for Bid (IFB) for Intelligence Functional Services (INTEL-FS) – Spiral 2 and BMD functions for INTEL-FS.
2. A high-level summary of the technical requirements of the Invitation for Bid is set forth in Annex B of this letter. This has been updated since the initial NOI was released. The NCI Agency will include all of the technical details in the Invitation for Bid.
3. The NCI Agency will award two contracts to cover the entire scope of work: one for the “Front-end” of the system, the User Applications; and one for the “Back-end” data management and integration. Bidders are free to bid on either one or on both. The evaluations will be conducted separately, so a bidder who submits a bid for both contracts may be selected for only one of them.
4. The reference for the Invitation for Bid is **IFB-CO-14873-INTELFS2**, and all correspondence concerning this IFB should reference this number. Please note that the Front-end system is referred to by IFB-CO-14873-INTELFS2-UA; the Back-end system is referred to by IFB-CO-14873-INTELFS2-BE.
5. For the purpose of planning, the estimated cost of the first contract (to deliver the Front-end or User Applications for the INTEL-FS capability) is EUR 13.4M, and the estimated cost of the second contract (to deliver Back-end data management and integration with other systems) is EUR 18.1M.
6. For planning purposes, the period of performance of both contracts is expected to be approximately three years until FSA, followed by five years of O&M support.
7. The NCI Agency will use the International Competitive Bidding (ICB) Procedure, best value (BV) evaluation, for both of the contracts. The successful bid for the Front-end Contract and the successful bid for the Back-end Contract, pursuant to the IFB following this NOI, will be the bids which are deemed to offer the **best value** in accordance with predefined bid evaluation criteria, which for each contract will be detailed in the IFB. The top-level criteria weightings for both contracts will be 40% Price and 60% Technical.

8. The interim bidders list, including those companies for which a Declaration of Eligibility (DoE) has already been received, is included at Annex C. All of these companies will receive the IFB; no further nomination is required.
9. National Responsible Authorities are kindly requested to provide DoEs to the NCI Agency, **not later than 04 September 2020**, of any additional qualified and certified companies that may be interested in receiving an Invitation for Bid for this project. In addition to the information required by Section 5, *Eligibility*, of the procedures at Reference A, the DoE should include the following information for each of the nominated companies:
  - a) Official company name and address that would be included on a contract.
  - b) The mailing address, if different from the corporate address above, that would be used in the event CDs/DVDs or other materials need to be sent by mail.
  - c) Company point of contact, telephone number and e-mail address.
  - d) The DoE should also state for which of the contracts the bidder is being nominated:
    - IFB-CO-14873-INTELF2-A, Front-end.
    - IFB-CO-14873-INTELF2-B, Back-end.
    - Both contracts.

This information is critical to enable prompt and accurate communication with prospective bidders. The DoE should be sent by email to the following point of contact:

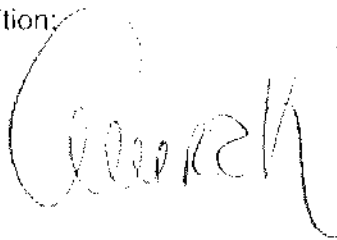
NATO Communications and Information Agency  
Attention: Dan Gaertner – Senior Contracting Officer  
E-mail: [daniel.gaertner@ncia.nato.int](mailto:daniel.gaertner@ncia.nato.int)

10. Please note that requests for participation in this competition received directly from individual companies cannot be considered.
11. The NCI Agency plans to issue the IFB for each contract in Q4 2020 with a bid closing date 84 days following the release of the IFB. Contract awards are planned for Q4 2021.
12. Bidders, for both contracts, will be required to declare a bid validity of twelve (12) months from closing date for receipt of bids. All bids for the Front-end contract must be supported by a bid guarantee of €130,000; all bids for the Back-end contract must be supported by a bid guarantee of €170,000. If the selection and award procedure exceed the bid closing date by more than twelve (12) months, the NCI Agency may request firms voluntarily extend the validity of their bids and the bid guarantee accordingly. Bidders may decline to do so, withdraw their bid and excuse themselves from the bidding process without penalty.
13. The National Authorities are advised that most of the IFB package will be NATO UNCLASSIFIED; a small set of technical diagrams will be NATO RESTRICTED.

14. Execution of each contract will require, in accordance with NATO Security Policy C-M(2002)49, personnel of the successful bidder to hold individual security clearances of "NATO SECRET".
15. Please note, that in order to ensure bids are received from qualified companies, it is anticipated that the IFB will contain provisions requiring bidders to clearly demonstrate in their bid their technical capability and years of relevant experience in the field of web application programming and / or implementation of performant and scalable Back-end services and implementation of RESTful Application Programming Interfaces (API).
16. The NCI Agency point of contact for this IFB is Dan Gaertner, who can be reached at e-mail: [daniel.gaertner@ncia.nato.int](mailto:daniel.gaertner@ncia.nato.int).
17. Your assistance in this procurement is greatly appreciated.

For The Director of Acquisition:

*FOR*  
Daniel Gaertner  
Senior Contracting Officer



**Attachments:**

- Annex A – NOI Summary Information
- Annex B – Summary of the Requirements
- Annex C – Interim Bidders List

**ANNEX A – Summary Table**

Reference #	IFB-CO-14873-INTELF2-UA	IFB-CO-14873-INTELF2-BE
Description	Front-End, User Applications	Back-End, Data Management and Integration
Duration of O&M Support following FSA	5 years	5 years
Estimated Value, including O&M	13.4M	18.1M
IFB Release	Q4 2020	Q4 2020
Proposal Phase	84 days	84 days
Contract Award	Q4 2021	Q4 2021
Best Value Evaluation Weightings	60% Technical / 40% Price	60% Technical / 40% Price
Bid Guarantee	€ 130,000	€ 170,000
Please note that if a bidder submits a bid for both contracts, the total bid guarantee required is € 300,000.		

## **ANNEX B – Summary of Requirements**

### **1. Background**

- 1.1. Delivery of the functionalities of the Intelligence Functional Services (INTEL-FS) capability has been planned to be done in spirals (where each spiral could consist of multiple increments).
- 1.2. INTEL-FS Spiral 1/ Increment 1 was delivered in Q2 of 2016. This first INTEL-FS Spiral/Increment delivered the following functionalities:
  - Initial (All-Source) Analysis Functionality
  - Imagery Management & Reporting
  - Locally-Employed Personnel (LEP) Management
  - Enemy Battlespace Object (BSO) Management
  - Intelligence Requirements Management (IRM), including Request For Information (RFI) Management
- 1.3. INTEL-FS Spiral 2 augmented with ballistic missile defence (BMD) functions and collection management (CM) functions will be delivered through the contracts referenced in this NOI. The deliverables of INTEL-FS Spiral 2 is defined in *Scope* below.

### **2. Estimated Schedule**

- 2.1. It is expected that both the Front-end contract and the Back-end contract will be awarded and effective by Q4 2021.
- 2.2. For the Front-end contract, the first incremental delivery to operations is expected within a year. Applying agile methodologies, the aim will be to deliver several incremental releases to operations. A final operational delivery is estimated to take place in Q4 of 2024.
- 2.3. For the Back-end contract, the first incremental delivery to operations is expected in Q2 of 2023, and as for the Front-end, with the aim to deliver additional incremental releases to operations. A final operational delivery is estimated to take place in Q4 of 2024.
- 2.4. Final Systems Acceptance, for both contracts, will occur approximately three years after contract award.

### **3. Agile Methodology**

- 3.1. It is planned that both contracts will follow an agile methodology, using sprints and increments to provide regular deliveries of working software. Generally speaking, it is expected that each sprint will last approximately one month, with three sprints in each increment. Each increment will conclude when one or more applications are delivered and accepted.
- 3.2. To enable the Front-end work of modernizing the user interface (technology refresh) to commence immediately after contract award without having to wait for the new Back-end services being made available, the first phase of the Front-end user interface work (UI) will be programmed against the current INTEL-FS Spiral 1. The modernizing of the UI will result in the UI being organized as a set of applications (or "Apps") where each agile increment is expected to deliver one or more of these UI "Apps".

- 3.3. The Back-end work will entail a complete re-factoring of the current INTEL-FS Spiral 1 Back-end where the Back-end logic will be decomposed in a set of logically coherent services exposed through RESTful application programming interfaces (API). Each of the agile increments will deliver one or more of these services with restful API. In addition to the implementation of these Back-end services, the Back-end work will include implementation of a number of integration services where agile increments will be tailored for delivering one or more of these integration services per agile increment.

#### **4. Scope**

- 4.1. INTEL-FS Spiral 2 aims to augment the capabilities delivered in INTEL-FS Spiral/Increment 1 with new functionalities that include:
- Joint Intelligence, Surveillance and Reconnaissance (JISR) Collection Management;
  - Signal Intelligence (SIGINT) Processing, Analysis, and Dissemination;
  - Interoperability with other NATO functional services and with national systems;
  - Improved (All-Source) Analysis Functionality;
  - Initial Joint Intelligence Preparation of the Operational Environment (JIPOE) functionality in support of Ballistic Missile (BM) Defence (BMD) to include Opposing Forces (OPFOR) BM Course of Action (COA) Development, OPFOR BM COA Comparison, OPFOR BM COA Monitoring, and BM Technical Intelligence (TECHINT) Management.
- 4.2. INTEL-FS Spiral 2 will also deliver a technology upgrade that addresses obsolescence issues, that delivers a performant and scalable solution, and that will increase re-use of core Bi-Strategic Command Automated Information System (Bi-SC AIS) software.

#### **5. Key Personnel**

- 5.1. It is expected that the IFB will include requirements for the following Key Personnel:
- Project Manager
  - Scrum Master
  - Technical Lead
  - Software Architect (only for the Back-end contract)
  - Lead Software Developers
  - Test Director
  - Quality Assurance Manager

#### **6. Technical Constraints**

- 6.1. INTEL-FS Spiral 2 shall be able to execute in the NATO virtualized environment either on MS Hyper-V Server 16 (and later) or VMWare ESXi 5.5 (and later) on a 64-bit operating system that is currently available for NATO virtualized servers.

- 6.2. INTEL-FS Spiral 2 shall make use of the new NATO Identity Management services for the user management.
- 6.3. INTEL-FS Spiral 2 shall make use of the new NATO Service Oriented Architecture (SOA) platform and its integration capabilities (using WS-Notification and the Apache Camel framework) for integration with other external systems.
- 6.4. The User Interface in the Front-end shall be implemented in the Angular web application framework and conform to the NCI Agency developed Human Machine Interface (HMI) Style Guide.
- 6.5. The common NATO geographical viewer (C4ISRviz) shall be integrated into the Front-end user interface.
- 6.6. The Back-end shall expose an REST-based application programming interface (API) to the INTEL-FS information repository. The REST API shall comply with the Open Data Protocol (OData) Protocol.
- 6.7. The entire INTEL-FS Information Model shall be modelled in a Model-driven Architecture (MDA) tool (IBM RSA), and the API should be fully, or partly, auto-generated by transformations from the information model.
- 6.8. The Back-end solution shall be designed for scalability such that INTEL-FS Spiral 2 can manage trillions of reports while at the same time provide user-acceptable search and retrieval response times. To the maximum extent possible, INTEL-FS Spiral 2 is expected to make use of the SOA Platform and its services (including self-healing services) to deliver the required performance and reliability qualities
- 6.9. The software implementation work shall take place in the NATO software factory (NSF) environment; continuous integration shall be established early and practised throughout the execution of the project. A modern Configuration Management Database (CMDB) solution that can support DevOps will be expected to be delivered in the project.
- 6.10. The contractors may be required to use the NCI Agency software factory environment for the software development.
- 6.11. If not otherwise specified, all the existing functionality from INTEL-FS Spiral/ Increment 1 shall be maintained and ported over to the new Spiral 2 technical platform.

## **7. Warranty and O&M Support**

- 7.1. Following acceptance of the final operational delivery in Q4 of 2024, each contract will require a one-year warranty for any software delivered.
- 7.2. Each contract is expected to include, as options to be exercised annually, five years of O&M support following acceptance of the final operational delivery in Q4 of 2024.