



**ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ**  
Μόνιμη Αντιπροσωπεία της Ελλάδος  
στο ΝΑΤΟ

**ΑΔΙΑΒΑΘΜΗΤΟ**  
**ΕΠΕΙΓΟΝ**

**Αρμόδιος:** Ασχος (ΜΕ) Δημήτριος Κανταρτζόγλου Βρυξέλλες, 29 Απριλίου 2021  
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**ΠΡΟΣ:** ΥΠΕΘΑ/ΓΔΑΕΕ/ΔΑΕΤΕ (μ. η.)

**ΚΟΙΝ.:** ΥΠΕΞ/Δ' Γεν. Δ/ντη  
ΥΠΕΞ/Δ2 Δ/νση  
ΓΕΕΘΑ/Γ2 (μ. ΓΕΕΘΑ)  
Υπουργείο Ανάπτυξης  
/Γενική Γραμματεία Εμπορίου (μ.η.)  
Πλ.Κάνιγγος  
Υπουργείο Ανάπτυξης  
/Γενική Γραμματεία Βιομηχανίας (μ.η.)  
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/Δνση Ε Επαγγελματικής Δραστηριότητας, (μ.η.)  
Νίκης 4

**ΘΕΜΑ:** 12<sup>η</sup> Τροποποίηση Πρόσκλησης Υποβολής Προσφορών IFB-CO-14873-INTELFS2, Διαγωνιστικής Διαδικασίας Έργου: «Intelligence Functional Services (INTEL-FS) - Spiral 2 and BMD functions in INTEL-FS»

1. Διαβιβάζεται, συνημμένος, 12<sup>η</sup> Τροποποίηση Πρόσκλησης Υποβολής Προσφορών (Invitation for Bids/IFB) για διαγωνισμό εν θέματι έργου, εκ μέρους ΝCΙΑ, ως φιλοξενούντος έθνους.
2. Καταληκτική ημερομηνία υποβολής προσφορών παραμένει η 10<sup>η</sup> Μαΐου 2021, 12:00 τ.ώ.
3. Ενδιαφερόμενες εταιρίες αναζητήσουν πληροφορίες μέσω καθοριζομένου σημείου επαφής (Point of Contact/ΠΟC, βλ. παρ. 8 τροποποίησης).
4. Παρακαλούμε για τις ενέργειές σας.

**ΛΑΜΠΡΙΔΗΣ**

Συν. Σελ: 34

**ΑΚΡΙΒΕΣ ΑΝΤΙΓΡΑΦΟ**

Η υπάλληλος της Μ.Α. ΝΑΤΟ  
Αικατερίνη Νικάκη  
ΠΕ ΕΠ&ΠΛ Α'

**ΑΔΙΑΒΑΘΜΗΤΟ**



NATO UNCLASSIFIED

Acquisition Directorate

Boulevard Léopold III  
B-1110 Brussels, Belgium

NCIA/ACQ/2021/6825  
26 April 2021

To: All Nominated Bidders and Distribution List

Subject: Invitation For Bid IFB-CO-14783-INTELS2 Amendment 12

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

- References:
- A. AC/4-D/2261(1996 Edition), Procedures for International Competitive Bidding
  - B. AC/4-D(2008)0002-REV2, International Competitive Bidding Using Best Value Evaluation Methodology, dated 15 July 2015
  - C. IFB-CO-14783-INTELS2 NCIA/ACQ/2020/6369, dated 22 December 2020
  - D. IFB-CO-14783-INTELS2 Amd. 1, NCIA/ACQ/2021/6475, dated 29 January 2021
  - E. IFB-CO-14783-INTELS2 Amd. 2, NCIA/ACQ/2021/6574, dated 11 Feb. 2021
  - F. IFB-CO-14873-INTELS2 Amd. 3, NCIA/ACQ/2021/6587, dated 22 Feb. 2021
  - G. IFB-CO-14873-INTELS2 Amd. 4, NCIA/ACQ/2021/6624, dated 24 Feb. 2021
  - H. IFB-CO-14873-INTELS2 Amd. 5, NCIA/ACQ/2021/6660, dated 05 March 2021
  - I. IFB-CO-14873-INTELS2 Amd. 6, NCIA/ACQ/2021/6673, dated 11 March 2021
  - J. IFB-CO-14873-INTELS2 Amd. 7, NCIA/ACQ/2021/6697, dated 15 March 2021
  - K. IFB-CO-14873-INTELS2 Amd. 8, NCIA/ACQ/2021/6734, dated 25 March 2021
  - L. IFB-CO-14873-INTELS2 Amd. 9, NCIA/ACQ/2021/6746, dated 2 April 2021
  - M. IFB-CO-14873-INTELS2 Amd. 10, NCIA/ACQ/2021/6787, dated 12 April 2021
  - N. IFB-CO-14873-INTELS2 Amd. 11, NCIA/ACQ/2021/6795, dated 14 April 2021

Dear Prospective Bidders,

1. The purpose of this Amendment 12 is to publish Release 10 of Bidders' questions and NCI Agency responses.
2. Clarification Requests (CR) and their respective responses that were released with previous IFB Amendments have been greyed out for your convenience.
3. None of the IFB documentation is changed as a result of this amendment.
4. Therefore, all IFB documents remain unchanged from their original version as issued on 22 December 2020 (Reference C), unless updated in Amendments 1 – 11 (References D – N).
5. The Bid Closing Date remains unchanged at 12h00 / 12pm (Central European Time) on Monday, **10 May 2021**. No further extensions to the Bid Closing Date will be issued.



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6. Any further Clarification Requests must be received by 28 April, and must be limited to clarifications resulting from this Amendment 12.
7. Prospective Bidders are advised that the NCI Agency reserves the right to cancel this IFB at any time in its entirety and bears no liability for bid preparation costs incurred by firms or any other collateral costs if bid cancellation occurs.
8. The Contracting Officer responsible for this solicitation is Dan Gaertner, and all correspondence regarding this IFB should be sent via email to IFB-CO-14873-INTELS2@ncia.nato.int.

FOR THE DIRECTOR OF ACQUISITION:

**Daniel  
Gaertner** Digitally signed by  
Daniel Gaertner  
Date: 2021.04.26  
22:04:58 +02'00'

Daniel K. Gaertner  
Senior Contracting Officer

**Attachment:**

Responses to Clarification Requests, Release Number 10



**Distribution List for IFB-CO-14783-INTELS2 Amendment 12**

**NATO Delegations (Attn: Infrastructure Adviser):**

Albania  
Belgium  
Bulgaria  
Canada  
Croatia  
Czech Republic  
Denmark  
Estonia  
France  
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Greece  
Hungary  
Iceland  
Italy  
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Poland  
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Romania  
Slovakia  
Slovenia  
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Turkey  
United Kingdom  
United States

**NATO HQ**

NATO Office of Resources, Management and Implementation Branch – Attn: Deputy  
Branch Chief

Director, NATO HQ C3 Staff, Attn: Executive Co-ordinator

SACTREPEUR, Attn: Infrastructure Assistant

SHAPE, Attn: J3 & J2

**Strategic Commands**

HQ SACT Attn: R&D Contracting Office

ACO Liaison Office

**All NATEXs**

Attachment 1: Responses to Clarification Requests, Release Number 10

Index no. NCI Agency	IFB Ref.	Bidder's Question	NCIA Response
CR1	N/A	Is it possible to download into the web site INTELF5-1 Spiral 1 SRS, User Manuel, SDD, etc. or any suitable project document to be able to understand the scope/coverage of the Spiral 1.	The <i>INTEL-FS_User_Manual</i> , the <i>INTEL-FS_Administrator_Manual</i> , and the <i>INTEL-FS_-_System_Design_Specification_-_62789015_424_-_V0.14</i> are available under the IFB Portal/Supporting Documents
CR2	N/A	Should be key personnel employee of the bidder or is it possible to be a sub-contractor employee?	It is acceptable for Key Personnel to be employees of either the prime contractor or subcontractors. However, for any Key Personnel that are subcontractor employees, the bid shall (as specified in SOW section 2.5.2.1) clearly explain their responsibilities and their authority within the prime contractor's organization.
CR3	N/A	Do all possible sub-contractor's employees need to possess NATO-SECRET status also?	Yes, all resumes/CVs submitted with the bid for the PMO and Technical Team (SOW 2.1.1 and 3.1) must demonstrate a NATO SECRET clearance.
CR4	N/A	What is the expected number of deployments/servers? Some of the 3rd party COTS could be licenced per CPU, how should it be reflected in price?	The solution shall be running on the SOA Platform as a PaaS and ITM as IaaS. There should not be any license constraints linked to servers.
CR5	N/A	Are the licenses of operating systems on the server-side in the scope of the BID?	The solution must run on the SOA Platform (the PaaS) so as long as the OS is supported by the SOA Platform there will be no need to include OS costs in the bid.
CR6	N/A	Who and how will be the final authority for an interface between UE and BE especially in the case that both projects will be implemented by different bidders?	An initial API will be provided by NCIA that will be an automatic forward transformation from the information model, and will be baselined as a configuration item for the initial version of the API. This initial API will be provided to both I2UA and I2BE Contractor at Contract Award. The BE contractor will in the contract period be responsible for the evolution, improvement, and maintenance of the API, but NCIA will be the approving authority for changes to the API.
CR7	N/A	According to [FBE-201]: AEDP-17 defines CORBA and WS interface for CSD. Which one should be used for NATO CSD IPL integration?	For the information going from INTEL-FS to the NATO CSD neither of the AEDP-17 interfaces will be used. The NATO CSD implements a REST API dedicated for INTEL-FS to use to share information with coalition through the NATO CSD (see NATO CSD documentation on the IFB portal). For import of data from the NATO CSD IPL to INTEL-FS, the Contractor is free to chose which interface in the NATO CSD to use.
CR8	N/A	Which edition and baseline of STANAG 4559 NSILI (CSD) implement NATO CSD IPL?	The NATO CSD is contracted to be implemented in accordance with STANAG 4559 Edition A Version 1, March 2018.

CR9	N/A	Is it possible to reuse some existing algorithm or even existing implementation e.g. for The Terrain & Mobility Analysis [FBE-159]	NCIA is not in the possession of any such algorithms/ implementation. However, the Bi-SC AIS CoreGIS system, which is implemented on the ESRI ArcGIS platform, may have built-in functions that can be used for implementing these functions. The resulting solution shall as stated in the SRS [FBE-160] be implemented, and the solution should be hosted on the CoreGIS (i.e. in the ESRI ArcGIS platform). It will be the bidder's responsibility to evaluate what existing support in ESRI ArcGIS that can be used for these services.
CR10	N/A	Which operating system is used on the backend side?	See answer to CR5
CR11	N/A	Is FMN compliancy expected in the scope of the project? If yes, which Spiral and which services?	The integration services to be implemented are defined by Backend SRS. FMN compliance is not a direct requirement in the contract (the SRS defines the contractual deliverables).
CR12	N/A	Is GeoView component responsible for rendering APP-6 symbols according to given code, both point and line symbols?	Yes.
CR13	N/A	Is [INTEL-FS2-InformationModel] doc for SOW I2UA, SRS I2UA, SOW I2BE and SRS I2BE fully covered by doc 14a et 14b of IFB package?	The document 14a and 14b is a documentation extract from the IBM Rational Software Architect (RSA) implementation of the information model using the IBM BIRT tool to auto-generate a PDF view of the model. The full IBM RSA information model (in UML) will be provided to the Contractor at Contract Award.
CR14	N/A	1. [IPIWG] doc as file is empty 2. [MARIX] doc as link seems to not be accessible 3. [OASIS Odata OAS 1.0, 2016] doc as there is no file neither link associated	1. The [IPIWG] documentation is downloadable as a Zip file from the IFB portal. The zipped file when downloaded can be extracted into a folder which contains 7 XML scheme documents. There are no PDF documentation of IPIWG.  2. The [MARIX] URL works, but to access the site you will need to have a user account for the NATO ACT TIDE portal. An account can be requested using this URL: <a href="https://tide.act.nato.int/request">https://tide.act.nato.int/request</a>  3. The documentation identified under [OASIS Odata OAS 1.0, 2016] can be found on the internet using a Google search (e.g. at <a href="http://docs.oasis-open.org/odata/odata-openapi/v1.0/odata-openapi-v1.0.html">http://docs.oasis-open.org/odata/odata-openapi/v1.0/odata-openapi-v1.0.html</a> )
CR15	General	If the same contractor wins both bids, will the execution of the two projects be totally independent? i.e. Different Purchaser personnel, Different Contractor key personnel, separate kick-off and WP meetings etc.	Purchaser's personnel does <u>not</u> have to be different. However, the bid needs to demonstrate that the Contractor's Team is sufficiently resourced according to a resource plan that realistically can deliver the project in accordance with the contracted schedule. All meetings under project execution (Kick-Off, WP meetings etc.) will have to be run separately.
CR16	Part II - Part IV - SOW I2BE	What is meant by "documented expert knowledge" mentioned in the Personnel Qualifications? Is a certificate expected which covers the topics mentioned? There may not be any certifications for some of the topics in the qualifications.	The CV must detail the work experience for the required skill. I.e. to describe when were the skills required, what was the context of how the skill was acquired (what work was done), what was the level of involvement and duration of the person in the work in the skill area.
CR17	General	What is planned "Effective Date of Contract" approximately?	It is estimated that EDC will be Q4 2021.

CR18	N/A	How and when will the Purchaser provide INTEL-FS Spiral 1 source code and relevant documents? Will there be a handover from the Contractor of INTEL-FS Spiral 1 project?	The INTEL-FS Spiral 1 source code will be made available to the contractor through the NSF at contract award.
CR19	Book I-Bidding Sheets I2B	Does the distribution of price to the requirements affect the price bid evaluation or technical bid evaluation? Is it used as an indication of the level of understanding of the Bidder for the requirements?	The technical bid evaluation is done without any knowledge of any price information. As part of the price evaluation, if the distribution of price to requirements appears to be intentionally unbalanced, NCIA may ask the contractor to clarify.
CR20	General	Is there any limitation or preference of the Purchaser for the programming language for development of BE?	See backend SRS section 2.1.2 for SOA & IdM Platform compliancy. .Net and/ or Java are both supported by the SOA & IdM Platform
CR21	Book I-Bidding Instructions - 3.7 & 4.5.2.2.14. & 3.6.4.2.	Is Draft Delivery Plan for all WPs is the part of the Part-I Engineering Package or Part-II Management Package. In the table 3.7 it seems to be Management Pacakge, but in the other sections, it is in the Engineering Package.	It is part of the Enginering package. The table in Section 3.7 of the Bidding Instructions is corrected by IFB Amendment 1.
CR22	Book II-Part IV-SOW I2UA Annex A SRS	How will the non-functional requirements (i.e. Response time, Capacity) be verified for only UA without taking the BE into consideration? (I2UA SRS: NFR-2, NFR-3, NFR-4)	The BE NFRs are defined by the BE SRS and those can be verified through testing against the BE API. That means the BE performance will be known, and the UA performance can then be assessed (relative to the BE performance).
CR23	N/A	In Bidding Instructions, Draft Delivery Plan is included in Management Section of Volume-3 but is recommended to be moved to Engineering Section.	That was an error; the Delivery Plan is part of the Engineering package. The table in Section 3.7 of the Bidding Instructions is corrected by IFB Amendment 1.
CR24	13_CO-14873-INTELF52-Book-II-Part IV SOW I2BE Annex A SRS section 5.4.1	Req ID: NFR-15 & NFR-16 Q// how verification analyze can be performed? There will be no "idealized" network conditions for latencies as stated in [127] and [128].	The purpose of <i>Inherent</i> is to take all factors that are not related to the quality of the delivered SW out of the equation for calculating availability. The deployed solution will then be observed under operation and the <i>Inherent</i> availability can be assessed.
CR25	13_CO-14873-INTELF52-Book-II-Part IV SOW I2BE Annex A SRS section 5.4.2	Req ID: NFR-17 Q// is term "without loss of data" relates to persistent data only? Or also includes transient or session data at time of failure as well?	Persistent data only. The SRS in Amendment 1 clarifies this.
CR26	13_CO-14873-INTELF52-Book-II-Part IV SOW I2BE Annex A SRS section 4.1.15	Req ID: FBE-294 & FBE-295 Q// ICD for assets of AirC2IS is required to be able to make a cost estimation on requirements	The AirC2IS ICD is available in the Referenced Documents folder on the IFB portal (see file AirC2IS_SDS_Annex_04_ICD)

<p>CR27</p>	<p>N/A</p>	<p>In WP1.1, 1.2 and 1.3 sheets of SSS I2UA (and Bidding Sheets I2UA) and WP2.1 sheet of SSS I2BE (and Bidding Sheets I2BE), the price is required to be broken down into the given requirements (capabilities). In addition to the capability development, there are other activities (requirements) to be performed in this project. Some examples are listed below. We consider distributing the prices of those activities into the SSS requirements proportionally. If some of those SSS requirements are needed to be deleted throughout the execution of the project, the total price from the below activities will decrease by an amount which is equal to the price portion distributed to the deleted SSS requirements. We assess that the total effort/price of the below activities should not change linearly according to SSS requirements changes. Please advise how to formulate this subject in the price calculations.</p> <ul style="list-style-type: none"> <li>• Contractor support to Purchaser IV&amp;V as given in I2UA SOW [84] and I2BE SOW [80]</li> <li>• Contractor attendance to UAT as given in I2UA SOW [SOWG-223] and I2BE SOW [SOWG-223]</li> <li>• Contractor attendance to Deliverable Acceptance Review I2UA SOW [SOWG-224] and I2BE SOW [SOWG-224]</li> <li>• Contractor support to Purchaser's accreditation activities as given in I2UA SOW [SOWG-227], [SOWG-228] and [SOWG-230], and I2BE SOW [SOWG-227], [SOWG-228] and [SOWG-230]</li> <li>• Contractor support site installation as given in I2UA SOW [SOWG-378] and [SOWG-379], and I2BE SOW [SOWG-376] and [SOWG-377]</li> <li>• Training material development and training delivery to Purchaser and /or End User Personnel as given in I2UA SOW Section 2.3.5 and I2BE SOW Section 2.3.5</li> </ul>	<p>* IV&amp;V: Contractor should maximize the use of test automation as indicated in the SOW (BDD and ATDD) with integration with IV&amp;V test recording system. IV&amp;V resources will participate in the SOW defined events. The Contractor will have to respond to enquiries from IV&amp;V.                  * UAT: As each increment results in a deliverable that can be submitted in a UAT, i.e. the expected number of UATs are known.                  * Deliverable Acceptance Review: Same as for UAT, the expected number of DARs are known.                  * Support to RFC: The RFC process will be mostly handled by NCIA. If the Contractor delivers SW (by increments) that is easily installed, has no major defects, and is documented in accordance with the Contract, then the Contractor's involvement with the RFC process will be low. The assistance will be required in the case when there are problems (e.g. with installation and with SW issues)                  * The training requirement is for the purchaser's O&amp;M team, and training material needs to be delivered for each increment. No end user training is required, beyond what is defined for the Learnability Tests</p> <p>The bidder needs to estimate the costs of the non-developmental activities and factor them into the cost of individual implementation requirements. It is not anticipated that any potential deletion of requirements would significantly impact the non-developmental activities.</p>
<p>CR28</p>	<p>Book I – Bidding Instructions Annex B-C-D</p>	<p>Can you provide bidders with an editable document templates for all of these annexes B1-16 + C + D ?</p>	<p>Appendix B through D from the Bidding Instructions has been uploaded to the IFB portal in the Supporting Documents folder</p>
<p>CR29</p>	<p>N/A</p>	<p>What measures do you have in place to prevent the builder of SPIRAL 1 to benefit from its current incumbent provider position and ensure transparency of competition ?</p>	<p>There is no Contractor currently working on INTEL-FS Spiral 1. Since the handover and end of the warranty, INTEL-FS Spiral been maintained by NCIA.                  All bids will be evaluated against the criteria stated in the IFB, and will only be made available for review to the NCIA evaluators.                  The source code of INTEL-FS Spiral 1 will be provided to the contractor at contract award.</p>
<p>CR30</p>	<p>N/A</p>	<p>By reading the documentation and analyzing the functional requirements and user stories, we understand that our software is able to fulfill an important amount of these requirements and to integrate with specialized third parties for the parts that are not covered. Since our user interfaces are based on Angular and HTML5, would it be acceptable for NATO to be proposed highly configurable COTS (commercial off the shelf software, out of the box) products instead of bespoke development?</p> <p>By using software that is covering both AU and BE in an integrated manner, implementation risks are lowered, time to market shortens and maintenance is more efficient.</p>	<p>There is no restriction preventing a contractor from proposing highly configurable COTS, as long as all of the requirements are fulfilled. However, please note that:                  1. It is important the back-end is separated from the front-end, and that the only interaction between the two happens through the BE API.                  2. The bids for the back-end and front-end must be submitted separately from one another, with no caveats that NCIA must accept both bids together.                  A bid that deviates from these two points will be considered non-compliant.</p>

CR31	N/A	Is NATO providing the infrastructure to meet the non-functional requirements (performance, recovery time, up time, concurrency, etc.) ?	The Purchaser will provide the infrastructure to meet the NFR. However when not ideal, the NFR measurements/ assessment will remove/ subtract the impact of the NATO infrastructure.
CR32	N/A	If T2 (above) answer is yes, is NATO open to receive our recommendations regarding the types, sizing, etc. of the hardware, operating system and possible virtualization layers?	This is a pure SW acquisition project that will rely on NATO PaaS and IaaS. The proposed solution will have to work with existing NATO PaaS and IaaS.
CR33	N/A	Can NATO indicate which of the requirements are already met in Spiral 1 and current technology used for it ?	The functionality that exists in Spiral 1 can be seen from the INTEL-FS Spiral 1 User Manual and Administrator Manual that is available under 'Supporting Documents' on the IFB portal. Also, the IFB Information model (document 14a and 14b) documents the information model for what has been implemented in Spiral 1 (see section on NATO:: Conventions and Migration:: INTEL-FS Spiral 1 Reference). However, as Spiral 1 does not meet the implementation requirements as defined by this IFB (neither for frontend, nor backend), the potential for code reuse from Spiral 1 in Spiral 2 will be limited. An "exception" to the limited SW reuse is identified in the I2UA SRS paragraph [49]: <i>"Note: NCI Agency is already in possession of a software (SW) tool, and its source code, that has implemented functionality in Angular 9 that interfaces with a REST abstraction layer in INTEL-FS Spiral 1 as depicted Figure 1-1. This UI software (that is also compliant with [HMI-C4ISR]) fulfils many of the acceptance criteria of several of the user stories below including [US-18], [US 21], [US 23], [US 24], [US 25], [US 26], and [US 27]. This source code will be available with the INTEL-FS Spiral 1 software "</i> .
CR34		Are the mentioned technologies fixed or contractor can provide technology recommendations e.g. Angular, Neo4J has been mentioned as the framework?	NCIA is striving towards SW reuse and componentization across applications and functional area services (FAS). In this effort Angular should be the UI framework chosen by most new FASes, and Angular will be the preferred framework INTEL-FS. The IFB specifies backend functional and nonfunctional requirements like advance graph queries (with fast response times) and link analysis / social network analysis and a solution including a graph database should be able to fulfil those requirements. The choice of a graph database (e.g. Neo4J) is not fixed and the Contractor can propose a different databases with graph support, or a different solution architecture that can fulfill the functional and non-functional requirements of the IFB. Note: Angular and Neo4J are both already used with the INTEL-FS SW.
CR35		NSF is recommended as the foundation toolchain (DevOps based) for custom software development lifecycle. Does this toolchain need to be leveraged both for Application and Backend Service development and deployment as a standard?	Yes
CR36		Please confirm the deployment preference for both I2UA (Application) and I2BE (Backend) systems viz. on-premises / private secured cloud	As stated in the I2BE SRS, the backend services shall run on the SOA & IdM Platform. The I2UA shall be able to run in a browser on any computer connected to the NATO network.

CR37		<p>Per our understanding, there will be an transient / intermediate release for new application pointing to old backend and then a following release for new application with new backend services:</p> <p>a. Are the migration timelines flexible and what is the business impact in case of delays?</p> <p>b. There is a mention of existing REST Abstraction /API services layer (section 1.3 of I2UA SRS) which can be leveraged to support the transient state (I2UA Phase 1). Please provide the REST API, business logic and system architecture documentation.</p>	<p>a. The roll-out for the new backend that involves migration, will be done incrementally for a limited number of users at the time. The legacy capability will need to be available until the new capability is deemed robust and stable. The impact to the business must be minimal/ zero.</p> <p>b. This is still work in progress with an expected deployment to production in Q2 this year, the abstraction layer API is not stable and available yet. INTEL-FS Spiral 1 architecture information is provided through the INTEL-FS Spiral 1 System Design Specification that has been uploaded to the IFB portal under Supporting Documents.</p>
CR38		<p>We can see that some parties on the bidders list have been involved in INTEL-FS Spiral 1 and/or in the design of Spiral 2. Will these parties be excluded from bidding? If not, in what way will NATO guarantee a level-playing field?</p>	<p>No bidders will be excluded from bidding.</p> <p>The INTEL-FS Spiral 2 solution will architecturally be very different from Spiral 1. No Industry has been involved in the design of Spiral 2; the design of the Spiral 2 solution is solely done by NCIA.</p>
CR39		<p>Could you please provide the details (documentation reference) covering INTEL-FS Spiral 1 application system architecture and technology landscape</p>	<p>The INTEL-FS Spiral 1 System Design Specification has been uploaded to the IFB portal (file name: <i>INTEL-FS_-_System_Design_Specification_-_62789015_424_-_V0.14</i> )</p>
CR40		<p>How many business domains, processes, services and workflows are in scope of the target state application landscape?</p>	<p>The number of services can be enumerated from the IFB I2BE SRS in the sections listing the Functional Services and the Integration Services. It should be noted that some of the services are intended to perform migrations from Spiral 1 - these are identified as "xxxx Migration Service". There are four principal processes/ workflows: Dissemination, Colation, Request and Task.</p> <p>In terms of Business Domains (and depending on the interpretation of "Business Domain") the target application state will provide support to the standard Intelligence Procedures found in the Allied Joint Doctrine AJP-2.1. At the highest level, these include all phases of the Intelligence Cycle; Intelligence Requirements Management; Collection Management; Intelligence Support to Targetting; The JISR Cycle; Support to Ballistic Missile Joint Intelligence Preparation of the Operating Environment; Support to Electronic Order of Battle Management; Support to IED Incident Mangement. All of these higher level procedures are supported by some or more of the services defined in the I2BE SRS.</p>
CR41	VC-ICD 1-3	<p>Section 3 of VC-ICD 1-3 document provides an overview of Geo-View Visualization Components (GIS, File Import/Export, NMAPI for user applications, Media services, GeoView online help, Symbology service). Please provide the approx. number of visualization component services and users for the new application platform?</p>	<p>NCIA foresees one VC to be used with each instantiation of the Web Client (i.e. the different UI applications as defined in the I2UA SRS will share the one instantiation of the VC). The main reason for that is that each instance of the VC will require a high amount of memory.</p> <p>The number of users will be several thousand.</p>
CR42		<p>14 loosely coupled applications are mentioned in scope. Are there any dependencies in terms of data and domain services across these applications?</p>	<p>There should be no need for any intra-client dependencies between these User Applications beyond the sharing of a single VC.</p>

CR43	INTEL-FS User Manual	In the INTEL-FS User Manual (INTEL-FS 1.5.0 build cb0514b) there is a mention of IIE (Intelligence Information Entity) management workflows supported by the front end application. How many business subject areas/Intelligence Information Entity domains are in scope?	From the INTEL-FS Spiral 2 information model, in documents 14A and 14B, it can be seen that there are 172 Intelligence Information Entities in the Spiral 2 <i>Domain of Discourse</i> . There are four principal processes/ workflows: Dissemination, Colation, Request and Task. All IIEs are subject to the Dissemination Workflow. <i>ProductIIEs</i> in conjunction with <i>BattlespaceIIEs</i> are subject to the Colation workflow. Within the IRMCM staff function, RFIs and ISRRs are the subjects of <i>Request</i> workflows; CollectionTasks and ExploitationTasks are the subject of <i>Task</i> workflows.
CR44	I2UA SRS document	Section 2.1.1 – I2UA SRS document : “[INTEL-FS2-InformationModel] implicitly includes the information managed by Spiral 1 because it extends from the principal components of Spiral 1.” Please provide the Intelligence Information Entity data model documentation as per INTEL-FS2-InformationModel	IFB Documents 14A and 14B contain a complete specification of the INTEL-FS Spiral 2 Information Model. These documents both contain a section <i>_Conventions and Migration::INTEL-FS Spiral Reference</i> which shows the principal information aspects of Spiral 1: Battlespace Object Management (including support to Counter-IED); Intelligence Requiements Magament (including RFIs and Indicators); Intelligence Support to Targetting and ISR Product catalogue Management.
CR45		<p>Could we have more information on GeoView?</p> <ul style="list-style-type: none"> <li>• On what software is this build?</li> <li>• If needed can an alternative be proposed or is GeoView the basis that should be used?</li> <li>• is GeoView an “as is” and the basis that should be used?</li> </ul>	<p>Information on the usage of GeoView is provided through the ICD that has been provided in the Reference Document section on the IFB portal (see document <i>VC ICD 1-3</i> ). The 2D parts of the VC (which is what will be used in INTEL-FS) is implemented in OpenLayers.</p> <p>An alternative GeoView solution is not an option. The VC GeoView is a standardized component that will be used in multiple FASes to lower overall CAPEX and OPEX to NATO.</p> <p>The aim is to use the GeoView "as is", no feature gap has yet been identified in the VC.</p>
CR46		The overall project is split in 2 contracts that can be under the leadership of 2 separate companies. Who is responsible of the overall integration and the entire function?	As defined in the I2BE SRS, the Backend Contractor is responsible for delivering backend services that support the User Stories through the API. An initial API will be provided by NCIA as a configuration item, it will be maintained and improved by the backend contractor. NCIA will be the approving authority for changes to the API (see also answer to CR6)
CR47		Can you define what is an “Apparent Successful Bidder” . Is there an additional step to go from the status of “Apparent Successful bidder” to “successful bidder”	The term "apparent" successful bidder is used, as the contract award will not be made until: a) the debrief period for unsuccessful bidders has been completed; and b) a successful pre-award meeting has been held with apparent successful bidder. The purpose of the pre-award meeting is to ensure a complete understanding of the technical requirements, schedule and contract terms and conditions, and to clarify any minor ambiguities that remain following the evaluation phase.
CR48		Can you disclose the Spiral 1 ICD document.	The Spiral 1 ICD has been uploaded to the IFB portal under Supporting Documents.
CR49		Where do the Acceptances take ? Can it be done virtually?	As stated in SOW section 2.4.5.2.6 on the Delivery Acceptance Review <i>"If agreed between Purchaser and Contractor, the meeting could be done as a video-conference meeting"</i> .

CR50	Book I Bid Instruction Section 1.2.2	Could you provide clarification or the concept, with examples, in regards to Book I Bid Instruction Section 1.2.2 "... on a fixed Price Incentive Fee (FPIF) basis" as to what would constitute the eligible targets to receive the Incentive?	The incentive fee is described in Book II, Part II, Contract Special Provisions, Section 6. There are two incentive milestone dates for each contract (CSP, Section 6.3). If all Applications/Services have passed the Initial Acceptance by this milestone date, the earned incentive will be 5% of the value of the Applications/Services for which <u>all</u> Requirements have been accepted.
CR51	Book I Bid Instruction Section 1.2.3	Could you define what you consider as an "Agile Methodology" in Book I Bid Instruction Section 1.2.3 and provide amplification as to what a contractor can expect during the contract period. For example how would changes in design and/or delivery using this "Agile Methodology" from the as bid FFP baseline be funded?	What some might consider as "fully agile" - a high level scope with significant room for ongoing changes - will not be implemented on INTEL FS 2. The elements of Agile methodology that apply to these contracts are defined by the DSDM principles in the SOW. Primarily, this involves frequent deliveries and acceptances, based around sprints and increments; frequent payments; and the ability to reprioritize requirements. The scope is fixed; any minor changes that are required later in the project could be partially managed by removing some of the lower priority requirements if they're no longer necessary.
CR52		With your FPIF and Agile delivery methodology, what are the Key Metrics that NATO will be using in order to measure that the Contractor has met the requirements and met the Acceptance Criteria?	The delivery acceptance requirements are defined through the SOW and SRS, see also answer to CR above.
CR53		Are the User Stories going to be sufficient for a contractor to use for Acceptance Criteria?	The acceptance criteria are defined in the SOW. User Stories are not by themselves sufficient. General functional requirements, specific functional requirements, and non-functional requirements as specified in the applicable SRS are also included in the deliverable acceptance criteria.
CR54	I2BE SRS	<p>[GBE-6] of section 2.1.2.1 of I2BE SRS document states "All I2BE services (taken to mean the full set of Phase I, Phase II and integration services specified herein) shall be hosted upon the SOA &amp; IdM Platform, and re- use and/ or integrate with the SOA &amp; IdM Platform services". [15] of section 1.7 of I2BE SRS document: "...the bulk of the Spiral 2 effort concerns itself with technology refresh, migration and 're-platforming' (see [18]) of existing back end, full stack capabilities to the SOA &amp; IdM Platform". Fig 8 – Interoperability Landscape in section 5.1 of NU_SOAIMD_Wave1and4_ICD_v8.0 document provides a logical interoperability view of SOA &amp; IdM platform.</p> <ul style="list-style-type: none"> <li>• Please provide the details (documentation reference) of SOA and IdM platform covering: end to end physical system architecture (with supporting technologies) and ETL (Extract, Transform and Load) framework services to populate Intelligence</li> </ul>	The documentation of the SOA and IdM Platform that is currently available has been provided on the IFB portal in the Referenced Documents section.
CR55	IFS1-ICD	Section 2 of IFS1-ICD document provides an overview of the implemented INTEL-FS Spiral 1 system. The scope covers intelligence requirements management and processing, information collection and processing and intelligence dissemination. Is the scope same for target INTEL-FS (New) backend system or there will be new functionalities/enhancements?	The scope of INTEL-FS Spiral 2 is defined through the IFB SOWs and annexes. INTEL-FS Spiral 2 will have more functionality and will have increased interoperability and integration with other Bi-SC AIS FASEs.

CR56	IFS1-ICD	Section 3 of IFS1-ICD document provides an overview of INTEL-FS External Interfaces (inbound and outbound). a. How many of these interfaces are in the impact analysis scope of re-platforming? b. Are there any re-usable components (utilities, API definitions etc.) which can be leveraged for re-platforming?	Bidders should expect all interfaces to be affected by the re-platforming. The WSDL files for the SOAP services defined in Chapter 5 of the ICD should be reusable; these WSDL files will be applicable for the deliverable defined in section 4.2.4 in the Backend SRS.
CR57	IFS1-ICD	Section 4 & 5 of IFS1-ICD document provides the overview and definitions of INTEL-FS services. a. How many of these services are in the impact analysis scope of re-platforming? b. Are there any re-usable components (utilities, information data models etc.) which can be leveraged for re-platforming?	See answer above. Additionally, note that the Spiral 2 information model incorporates the Spiral 1 information model.
CR58	I2BE SRS	[14] of section 1.7 of I2BE SRS document: "The significant part of the Initial Information Model [INTEL-FS2-IM] is based on existing production systems (IRM, CM, BSO, Products, EOB, etc.) that these I2BE services will be replacing". Please provide the details (documentation reference) of Initial Information Model as per [INTEL-FS2-IM].	The Information Model is provided in document 14a_ and 14b_ of the IFB: - 14a_CO-14873-INTELS2-Book-II-Part IV SOW I2BE Annex B Information Model - Battlespace Partition - 14b_CO-14873-INTELS2-Book-II-Part IV SOW I2BE Annex B Information Model - Staff Partition )
CR59	N/A	Please provide the details (documentation reference) for Spiral 1 INTEL-FS backend data sources (description, quantity etc.) and data collection interface types (Event based, API based etc.). How many Spiral 1 data sources and interfaces are in scope of target INTEL-FS backend platform (New)?	The main data sources for INTEL-FS Spiral 1 are the CCC, MIDB, JTS, and organically created data. The CCC source/ interface is in the scope of Spiral 2 (see BE SRS section 4.1.1 and 4.2.1). The MIDB source is also in scope of Spiral 2 (see BE SRS 4.1.14). JTS (now N-JTS) will continue to be a source for INTEL-FS Spiral 2 (see BE SRS section 4.1.13)
CR60	N/A	How much data history (volume and period) needs to be migrated from Spiral 1 to the new backend platform?	There will be data from approximately 3 million information entities collected over many years that will have to be migrated. Note that the Spiral 2 information model builds upon, and incorporates, all of the Spiral 1 information model; this should ease the migration effort.
CR61	Book I-Bidding Sheets I2BE Annex B-13.	If the contractor will submit bid for both of the BE and UA, can proposed Key Personnel be the same personnel for both of the bid IFB-CO-14873-INTEL-FS2-BE and IFB-CO-14873-INTEL-FS2-UA? Or Should contractor propose different key Personnel (PM, QAM, CM, TL, TD, etc.) for both of the bid?	Contractor Key Personnel do not have to be different for each contract. However, the bid needs to demonstrate that the Contractor's Team is sufficiently resourced according to a resource plan that realistically can deliver the project in accordance with the contracted schedule. All meetings under project execution (Kick-Off, WP meetings etc.) will have to be run separately.
CR62	Book II – Part II – Contract Special Provisions - 4.4	Where are the priorities of the requirements (Must-have, Should-have or Could-have) given in the IFB? Will these priorities be decided during project execution by Purchaser?	The priorities will be provided to the Contractor as part of the pre-award discussions prior to Contract Award.
CR63	Book II – Part II – Contract Special Provisions - 7.5.3	In relation to the article 7.5.3 and 7.5.4 of the "Special provisions" could you please clarify whether the Contractor, may invoice at once the 100% of the value of the accepted Requirements but wait for the warranty payment of 10% of the total value of the accepted Requirements in four quarterly payments, or, Contractor is expected to invoice separately each time? (e.g; 90% for acceptance, 10%*0,25 four times in the warranty period)"	The contractor will invoice 90% of the value of the accepted Requirements. The remaining 10% will be invoiced during the Warranty period. As an example, if the total value of the accepted Requirements from EDC to FSA = EUR 5,000,000, then 4,500,000 would be invoiced/paid following the Incremental acceptances; and 500,000 would be allocated to the warranty period. For this 500,000, four quarterly invoices of 125,000 would be submitted/paid during the 1-year warranty.

CR64	Book II - Part IV - SOW I2BE - 1.5 PFI	Will Contractor pay any price to the Purchaser for the NR laptop to be used for sharing of NR material?	The NR laptop will be lent to the Contractor as PFI; the Contractor does not need to pay for this.
CR65	Reserved		
CR66	Book II - Part IV - SOW I2UA	Which NATO site INTELF52 will be deployed? How many locations? Which countries? Will be the deployment and system activation activities under the responsibility of the Contractor or Contractor will only support the Purchaser (on-site support and/or remote support)? To be able to make detailed schedule and plan the travel for these deployment activities, it's needed to know the location of sites.	INTEL-FS Spiral 2 will be deployed to the NATO IT Modernization (ITM) data centres. The NCIA INTEL-FS Support Staff will be responsible for the deployment; the Contractor will be required to support the NCIA Support Staff. For the initial deployment(s), on-site support (at NCIA premises in Belgium or the Netherlands) will be required, for subsequent deployment (pending how successful and easy the initial deployment was) remote support should suffice.
CR67	Book I-Bidding Instructions	Will Contractor deliver Test Plan/Master Test Plan in the Volume III Technical bid package?	Bidders shall provide details on the bidders approach to testing in the Solution Description Document, which is part of the Technical Volume (Volume III) (see also BI section 4.5.2.2.9 and 4.5.2.2.10).
CR68	Bidding Instructions	The document « 02_IFB-CO-14873-INTELF52-Book I-Bidding Instructions” mentions that 2 distinct proposals and contracts must be considered by the bidders. Can you detail how NCIA will manage the consistency and the coordination between the two parts on the final system which are linked technically and in terms of functionalities ?	Consistency and coordination will be achieved through the Contract First Development/ Approach (i.e. the API).
CR69		For “COTS” included in the solutions (Front or Back) is the annual maintenance included in the option of level 2 and 3 of maintenance ?	The IFB, for both contracts, specifies a work package of optional 3rd and 4th level support and maintenance. Maintenance costs of COTS (i.e. 4th level) must be included in the cost of the optional 3rd and 4th level Support and Maintenance WP.  Please note Section 22.3 of the Contract Special Provisions, <i>Software Licenses</i> . The Purchaser may exclude from the contract the purchase of software licenses which may be procured by the Purchaser through centralized contracts.
CR70	Bidding Instructions	In “02_IFB-CO-14873-INTELF52-Book I-Bidding Instructions” it is mentioned that “The proposed solution describes a sound approach to eventual consistency in a distributed (multi-instance) environment configuration (i.e. in a high availability and robustness configuration)”. Will NCIA intend to provide high level specifications for the infrastructure which will support the Intel FS Applications (Back end and Front End) (Network bandwidth, latency, recovery points...) between implementation sites ?	NCIA requires a solution that implements eventual consistency between instances of I2BE running in availability zones of a cloud-based solution. The Contractor is not responsible for any infrastructure components.
CR71	General Provisions	In “08_CO-14873-INTELF52-Book-II-Part III General Provisions” it is mention that : “The Contractor shall ensure the design of the system includes sufficient redundancy and other Reliability, Maintainability, Availability and Testability measures to ensure the RAM requirements in this Contract are achieved and attained at an optimal Total Cost of Ownership (TCO), minimizing preventive maintenance, manpower requirement and usage of special-to-type tools and test equipment”. Can NCIA specify the infrastructure KPI underlying those applications measurement (RTO/RPO, SLA, ...) ?	The RAM assessments will be done on the software's inherent qualities focusing solely on the design-related failures. Effects of the infrastructure will be excluded/ subtracted from the RAM assessments.
CR72	SOW I2UA and SOW I2BE And Contract Special provisions	The program is composed of 2 separate contracts. One for I2UA one for I2BE . We understand that for I2UA we will have either to connect to legacy BE or emulate new functions or Interface with new I2BE for BE we will have to emulate Interfaces for each “system” and then Integrate and tests with new I2UA . We can then consider the development of two Independent Subsystems. Then who will be responsible for system Integration ?	Both the I2UA and I2BE contracts will be implemented using a Contract First Development (CFD) approach through the API. When both the I2UA and I2BE are complying with the API there is no system integration (the I2UA and I2BE are "pre-integrated" through the API).

CR73	Special Clauses §10	FSA acceptance of each sub system :Please confirm that only requirements of respective SSS documents will be used to conduct FSA on each sub system	NCIA confirms that only the Requirements listed in the I2UA Front-end SSS will be used to conduct FSA for the I2UA Front-end contract, and only the Requirements listed in the I2BE Back-end SSS will be used for the FSA for the I2BE Back-end contract.
CR74	Special Clauses §10	FSA : Please confirm that there is only one FSA ( Not one for each Increment) and it corresponds to the system Acceptation ( system meaning either UA either BE sub system)	There will be only one FSA for each contract, and the FSA for the I2UA is independent of the FSA of I2BE and vice versa.
CR75	Special Clauses §10	FSA What is the planned duration of the FSA	Unless there are unforeseen issues that haven't previously been resolved, the FSA should not require more than a day to conduct.
CR76	SOW I2UA SOWG 155	What happens if Covid remains and we cannot invite NCIA?	All the implementation work shall be conducted using the NATO Software Factory, and meetings can be done virtually/ remotely.
CR77	SOW I2UA [97] (2)	IV&V :“Run additional tests. These additional tests may use different data sets, and may include extended system-to-system integration tests; “. Those tests are not part of the Test Plan?	The IV&V tests are not part of the Contractor's Test Plan.
CR78	SOWG I2BE SOW-361	Technical personnel qualifications : NATO Secret Clearances. When we have the requirement [SOWG-70] The Contractor shall ensure that all software implementation activities in the NSF is kept at NATO UNCLASSIFIED level and when secure software engineering environment is at NATO RESTRICTED LEVEL . “Please clarify which profiles really need to be NATO SECRET Level and for which task?	All software will be implemented in the NSF at NATO UNCLASSIFIED level. NATO SECRET level will be required for any on-site work at any of NCIA's premises. Such work will include testing implemented software with operational data.
CR79		Location : SOW I2BE [60] :We understand that the development will have to be done on the DevSecOps Platform (the NSF) . NCIA providing remote connection facilities to Contractor(s) . Could you please provide more details	Details on the NSF is provided in the SOW in section 2.4.1. Access to the NSF is provided through a VPN connection.
CR80	SOW I2BE Reference documents :	Reference documents : CO-14873-INTELS2, INTEL-FS SPIRAL 2 – Information Model Book II -Part V, NCI Agency. We don't have this document in the ones provided with IFB	The files (14a_CO-14873-INTELS2-Book-II-Part IV SOW I2BE Annex B Information Model - Battlespace Partition and 14b_CO-14873-INTELS2-Book-II-Part IV SOW I2BE Annex B Information Model - Staff Partition ) were too big to send by email. The files are available to the bidders through the IFB portal.
CR81	SOW I2BE [28]	The Purchaser will provide the Contractor with the current INTEL-FS Spiral 1 software. Does it include Source code. When will it be provided ? Is it possible to have it during Bid phase?	The software, including source code, will be provided at Contract Award.
CR82	SOW I2BE [11] (4)	Sentence :“Integrating with the new backend solution into the new service-oriented architecture (SOA) as native hosted services;” Please clarify this sentence	In the updated SOW provided with this IFB Amendment, the sentence has been corrected to “(4) Implement the new backend solution as services to be hosted on the service oriented architecture (SOA) and IdM Platform ” (only the integration services will have to be native hosted).
CR83	SOW I2BE [12]	The delivered SW at the end of each increment will have to have a quality at the level of being ready for deployment to production. The deployment of new software modules will be lead by the Purchaser with support from the Contractor. There might be multiple deployments to production of incrementally delivered functionality, e.g. deployment in support of the BMD tranche 25, and a final deployment prior to final system acceptance (FSA)” . The warranty starts after FSA . Does it means that Modules delivered at the end of one Increment are not supported? Or shall we include in the price the support of the first delivery until one ear after FSA ?	While incrementally delivered software to production will be supported operationally by NCIA staff, the Contractor will be responsible for correcting any software bugs found in the delivered software (see [SOWG-181] [SOWG-181] <i>The Sprint Work Plan shall include: ...</i> (2) <i>Tasks to implement bug-fixes in the case bugs has been discovered in software functionality previously delivered by the Contractor under this contract;..</i> ”

<p>CR84</p>	<p>IFB-CO-14873-INTELS2 Book I - Bidding Instructions</p>	<p>IFB-CO-14873-INTELS2 Book I - Bidding Instructions states: 1.5.3. The Contractor will be required to handle and store classified material to the level of "NATO RESTRICTED". and 1.5.4. The Contractor shall have the appropriate facility and personnel clearances at the date of Contract Signature. Should the Contractor be unable to perform the Contract due to the fact that the facility/security clearances have not been provided by their respective national security agency, this lack of clearance cannot be the basis for a claim of adjustment or an extension of schedule, nor the lack of clearance be considered a mitigating circumstance in the case of an assessment of Liquidated Damages or a determination of Termination For Default by the Purchaser under the Prospective Contract.  but CO-14873-INTELS2 Book II - Part II - Contract Special Provisions states:  16.10 The Contractor's facilities and personnel shall meet NATO security regulations to permit handling and storage of information classified up to and including NATO SECRET.  so: which is it for the Contractor's facilities, NATO RESTRICTED or SECRET?</p>	<p>Contractor's facilities shall be able to handle material up to NATO RESTRICTED. Article 16, <i>Security</i>, of the Contract Special Provisions has been updated to reflect this correction by deleting paragraph 16.10. Paragraph 16.2 is correct in stating that <i>"the Contractor's premises shall be able to handle up to NATO Restricted."</i></p>
<p>CR 85 start CR Release 3 here - do not include with CR Release 2</p>	<p>Book I-Bidding Sheets I2BE</p>	<p>Should Contractor deliver any HW or HW Components to any NATO deployment site of INTELS2? Or Will Contractor deliver only SW Applications with COTS? For COTS products, how many (running) license will be delivered to the Purchaser by Contractor?</p>	<p>The contractor will not deliver any HW or HW components. The contractor will deliver only SW.  COTS components being part of the INTEL-FS solution should not have any run-time licenses. If run-time licenses are unavoidable, then the licenses will have to be tailored for a Cloud-based environment with users accessing INTEL-FS through Web-browser. The bidder should then assume 3 data centres serving 2000 concurrent users with horizontal scaling elasticity to fulfil the INTEL-FS non-functional requirements.  For any Development Licenses; 10 developer licenses will suffice.</p>
<p>CR86</p>	<p>N/A</p>	<p>Please describe the operational perspective of the platform: who will be using it, where (HQ, field, etc.), and when is it planned to be operationally deployed?</p>	<p>The solution will be deployed to the ITM data centers. Users in a number of organizations will be connecting using the NATO Communication System (NCS).</p>
<p>CR87</p>	<p>N/A</p>	<p>What are the main gaps of Spiral 1 solution this solution willing to solve?</p>	<p>As described in the Bidders Conference presentation slide 14, the primary objectives of the project are the "re-platforming", adding new capabilities, and implementing a number of integration cases with other Bi-SC AIS capabilities.</p>

CR88	N/A	In terms of design and development - Please explain your expectations from a vendor which provides an existing intelligence platform (COTS) with high customizability to user workflows and data models?	The solution must comply with the requirements as defined in the IFB, which include: * The full Information Model must be realized; * An Odata REST API for accessing the information entities must be delivered; * The Odata REST API is forward transformed from the information model (i.e. for any API changes these are first done in the model and then forward transformed to an API specification); * The workflow models as specified in the information model is realized; in particular supporting a seamless mediation with the STANAG 4559 workflow services; * The information platform is hosted on the SOA & IdM Platform; * There is full support for, and integration with, the IdM mechanism of the SOA & IdM Platform (to include dynamic policy based IAM through ABAC Decision Points, XACML,etc.).
CR89	N/A	Please provide some examples of the common sources to be integrated with the I2BE. Is there a central DB to integrate with?	The integration cases are defined in Chapter 4 in the Backend SRS.
CR90	N/A	Our intelligence platform's User Interface is being developed using REACT libraries and can be integrated with external components written in Angular framework. Can this be considered as an appropriate solution for the I2UA requirements, or would this fail the key requirements?	A solution that includes existing REACT libraries could be considered appropriate (although this obviously depends on the entire Technical Volume submitted). There is nothing specific about using REACT libraries that would render the bid technically non-compliant. For implementation of new UI functionality, Angular shall be used (see Front End SRS [GUA-15]).
CR91	CR6	it is stated (CR6) that the initial API provided by NCIA will be an automatic forward transformation from the information model. Considering that is is far from being enough to define the API that will be necessary to support all US and AC from the I2UA, how will the I2UA contractor be involved in the further development of the API, which seems to be performed solely by the I2BE contractor with approval by NCIA?	The Front-end contractor's Scope and Requirements Analysis (see [SOWG 170]) at the start of each Increment Startup will need to identify potential shortcomings in the API and the API's ability to provide the backend support for the delivery of the front-end deliverables. NCIA will assess the Front end Contractor's API input and if an API change is deemed necessary, engage with the Back end Contractor to facilitate the change. As the API is mainly an OData API (SQL on URL) over a stable information model only minor refinements of the API should be expected.
CR92	Bidding Instructions 3.7.1 Bidding instructions 3.3.3.3 CR1	According to "Responses to Clarification Requests #1" Draft Delivery Plan is part of the Engineering package. This aspect is clear.  Bidding Instructions 3.7.1 indicates the Draft Delivery Plan and the Solution Description Document to be part of only one PDF document.  Bidding instructions 3.3.3.3 about package Making indicates the Delivery Plan to be and independent document from SDD: - 14873-UA/BE-Company Name-Vol III-Tech1-SDD - 14873-UA/BE-Company Name-Vol III-Tech4-DelPlan  From our point of view it would be more clear to keep both documents separately. Therefore, we recommend to update Bidding instructions 3.7.1 to indicate Engineering package to contain 2 documents for SDD and DelPlan.	Book I, Bidding Instructions, Section 3.7.1 in IFB Amendment 3 has been updated to reflect the requirement to provide the Solution Description Document and the Draft Delivery Plan as separate documents. Section 3.3.3.3 has also been modified to update the names of the individual files submitted as part of the bid.

CR93	Bidders Conference	With the evals being done simultaneously can responses (tech and financial) be submitted together or do they still need to be submitted separately?	Yes, the technical, administrative and price volumes should all be submitted together. Please review Section 3.3.1 of Book I, Bidding Instructions: "The bid shall be consolidated into one email..." Only in the event the size of the email exceeds the limit should multiple emails be submitted. Later in Section 3.3, the names of the individual files that make up the bid are provided. Please note that the size limit of the emails in Section 3.2.2 has been increased to 15 MB.
CR94	Bidders Conference	when does the Initial acceptance takes place in this scheme	The term "Initial Acceptance" means the delivery of all Must Have requirements for any given Deliverable. Those Requirements which must be accepted in order to achieve "Initial Acceptance" will be designated in the SSS prior to contract award.
CR95	Bidders Conference	Many front end apps are using .NET so using Angular imply complete re-write?	INTEL-FS Spiral 1 will be re-written as a result of the "re-platforming", so the assumption of a complete re-write is correct.
CR96	Bidders Conference	Do you think it is possible to be more specific about the support of the contractor for the IV&V and UAT?	The SOWs in IFB Amendment 3 have been updated with the additional information provided below. The support to IV&V includes: <ul style="list-style-type: none"> <li>* Presenting test plans and test cases at Increment startup meeting</li> <li>* Present and report on test results at sprint review meetings</li> <li>* Support ad hoc discussions on test results (e.g. in case IV&amp;V identifies potential bugs)</li> <li>* Support NCIA in getting additional installations (on the NSF) setup (the expectation here is that the SW is easily installable and that NCIA personnel will be able to do this without contractor support)</li> <li>* Provide answers to question the Change Manager may have to the software submitted into the RFC process</li> </ul> The support to UAT includes: <ul style="list-style-type: none"> <li>* Participating in person for the first UAT. This first event is expected to last between 3-5 days. For this first UAT the first "production environment" will be installed and personal presence will be required.</li> <li>* For subsequent UATs, as long as the released software can be installed and operated by NCIA personnel Contractor's support can be provided remotely. Such remote assistance includes: Phone-support for any technical issues and Ad Hoc video/teleconference meetings to discuss UAT findings.</li> </ul>

CR97	Bidders Conference	Bidders are encouraged to re-use existing NATO solutions. To support this, the IFB states that COTS may be provided as Purchaser Funded Items. To satisfy Intel FS 2 geospatial requirements (ie: Terrain & Mobility Analysis Service, Geospatial and Features Service), could Core GIS COTS tools (Esri ArcGIS) be provided as PFI?	<p>* The Terrain &amp; Mobility Service shall be implemented as OGC Web Processing Services (WPS) (see [FBE-160] in BE SRS) and it should be implemented for being hosted within the NATO CoreGIS system (see BE SRS [82]). This means that the solution should be hosted on CoreGIS (i.e. ESRI ArcGIS) instances in the Bi-SC AIS/ ITM environment. The inclusion of the WPS service in Bi-SC AIS CoreGIS instances is not expected to require additional licenses for these services in the Core GIS. However if the Contractor sees the need for any additional products/licenses the Contractor shall identify and cost them in the bid. As stated in paragraph 22.1 of the Contract Special Provisions, the Agency reserves the right to provide these licenses as PFE later on in the project.</p> <p>* The Geospatial and Feature service are services for managing Intelligence Information Entities, they are not geo-spatial services (even if the name could suggest so)</p>
CR98	Bidders Conference	What AJP's are relevant for considering the process from the User perspective conducting INTEL business? AJP 2?	<p>AJP-2.1 INTELLIGENCE PROCEDURES AJP-2.7 ALLIED JOINT DOCTRINE FOR RECONNAISSANCE AND SURVEILLANCE STANAG 4559 AEDP-19 ISR Workflow Architecture</p>
CR99	Bidders Conference	STANAGs that need to be consider?	<p>This question was asked within the context of the Information Model. The INTEL-FS model refers to the STANAGs listed below. Please be advised that the INTEL-FS model does not require the entirety of these other models. The INTEL-FS model imports some concepts/ types from these models.</p> <p>STANAG 5643 Multilateral Interoperability Programme Information Model STANAG 4559 AEDP-17, 18 &amp; 19 STANAG 6545 Common Electronic Order of Battle Exchange Format STANAG 4774/ 4778 Confidentiality Labelling STANAG 7149/ APP-11 NATO Message Catalogue</p>
CR100	Bidders Conference	Are these technical doctrines harmonized with the process one (AJP, AIntPs)?	<p>AJP-2.1 INTELLIGENCE PROCEDURES AJP-2.7 ALLIED JOINT DOCTRINE FOR RECONNAISSANCE AND SURVEILLANCE STANAG 4559 AEDP-19 ISR Workflow Architecture</p>
CR101	Bidders Conference	Do you have total number of attributes for IntelFS 1? Is this in the order of 100,000+ attributes or more like 20,000+ attributes?	<p>The Information Model for Spiral1 has approximately 300 classes and approximately 3000 attributes. It should be noted that this is across the set of Intelligence Information Entities and it is not the total number of classes in the application. The total number of classes in the application contains also all of the framework and implementation code.</p>
CR102	Bidders Conference	JIPOE the new IPB (Intelligence preparation of the battlespace/-ground)?	<p>The term "JIPOE" replaces the former term "IPB".</p>
CR103	Bidders Conference	Could we assume IntelFS 1 applications are mostly standalone and do not have online interfaces among each other as well as other Bi command systems?	<p>Web Service interfaces INTEL-FS Spiral 1 are being consumed by other Bi-SC AIS system like TOPFAS and NCOP.</p>

CR104	Bidders Conference	From your presentation we understand that INTEL-FS Spiral1 UI provides good UX and only requires technology refresh and not full re-design. Is this statement correct?	The INTEL-FS Spiral 1 UI originated in the NITB UI around 2005-2007 and was designed to look like Microsoft Outlook. The UX understanding has evolved a lot since then, and the UI needs modernization so that it looks more like modern Web Applications, e.g. similar to modern Web sites like Amazon.com etc. This means that the a full redesign of the UI will be required.
CR105	Bidders Conference	Work description document includes availability target value and mentions MIL-STD-1388 as a reference document. In addition to these, MTBF and MTTR values of system units/components are demanded. All of these remind us of hardware units/LRUs; however, not the software configuration items -- either developed or COTS. The answer given for CR-32 says that "This is a pure SW acquisition Project." Therefore; is it true that no hardware analysis will be needed? Secondly, do you suggest/dictate any other NATO reference document/procedure to follow for this Project, for software reliability analysis?	No HW analysis will be needed. All of the LSA and RAMT related activities will be performed on the SW product as these activities are not limited to HW components. Additional NATO standards are not mandated, so the Contractor can use the industry best practices to build the reliability models for the SW components.
CR106	Bidders Conference	During the technical evaluation i've heard that the vendors' name is stripped from al pertinent documents. true?	This is not correct. It is not feasible to remove all vendor names (including company logos, header/footer information, etc.) in the received bid documentation, so this will not be done.
CR107	Bidders Conference	There is a mistake in the last slide #96 about the weight of technical subvolumes. In the slide it said:  M = Management Weighted Score (50 %); E = Engineering Weighted Score (30 %); S = Supportability Weighted Score (20%);" Shouldn't it be Management = 30% and Engineering 50% instead? According to bidding instructions "4.2. Best Value Award Approach and Bid Evaluation Factors"	Yes, this was a mistake in the presentation. The updated version of the presentation uploaded to the IFB portal under Supporting Document has corrected this mistake.
CR108	N/A	What's expected time period between Contract Award and EDC of project?	The current schedule foresees approximately two months from the notification of the successful bidder until contract award. EDC is expected within two weeks of contract award.
CR109	N/A	What configuration of Atlassian Jira tool is provided by NSF? Is it expected that Jira will be used as Configuration Management tool?	For SW configuration control GitLab will be used. The CMDB solution is for the contractor to design. The NSH Jira configuration includes: * JIRA DataCentre * Plugins: Links Hierarchy, SumUp, Misc Workflow Extensions * Jira is currently integrated with TestRail – but Testrail will most likely be replaced by (or at least augmented with) Zephyr Scale (used to be called Test Management for JIRA) (and is delivered as JIRA plugin) * Integrated with NSF GitLab (so that git commits are linked to JIRA issues and the JIRA has links to the related git commits) * Project Teams will get project admin rights on their own projects. Workflows/item types etc can be customized, but may require support from the NSF team to implement these.
CR110	N/A	Is there a set of automated tests for the current solution? Is it expected to reuse it?	In terms of automated tests, unfortunately there exists very little that could be reused.

CR111	N/A	The design of automated tests is fully in the responsibility of the Contractor?	Yes, design and implementation of automated tests is a Contractor responsibility.
CR112	N/A	There is mentioned that Purchaser will provide source code of STANAG 4609 video conditioner in "12_CO-14873-INTELS2-Book-II-Part IV SOW I2BE Amd 1". In which language is that video conditioner?	It is written in C# as a wrapper around other off-the-shelf libraries (e.g. FFMPEG).
CR113	N/A	What is the volume of the data migrated using ETL processes? All data processed when Spiral 1 was used?	There are around 3 million information entities in INTEL-FS Spiral 1. A significant amount of that data pre-dates the INTEL-FS Spiral 1, but was migrated into Spiral 1 when this Spiral 1 was deployed to production.
CR114	N/A	ETL processes are expected to run in specific increment or until Spiral 1 services are retired?	The Spiral 1 migration services needs to be able to handle a situation of new data appearing in Spiral 1 after initial migration has taken place, i.e. until Spiral 1 services are retired.
CR115	N/A	The document „09_CO-14873-INTELS2-Book-II-Part IV SOW I2UA Amd 1“ says in point [11] „To support the BMD ORBAT functionality the Contractor will have to implement some interim backend logic“. This interim backend logic will be implemented in current Spiral 1 implementation?	The backend logic to support BM OPFOR ORBAT function for early delivery to BMD Tranche 23 does not necessarily have to be implemented in the Spiral 1 legacy code. If feasible, the BM OPFOR ORBAT functionality could be implemented outside of the Spiral 1 code. The important aspect of the work is to provide BM OPFOR ORBAT management functionality in the user interface.
CR116	N/A	We understand that current implementation is .NET based but why Technical Lead needs documented expert knowledge in C# and .NET when the scope is reimplementation in Angular?	The .Net/ C# expertise will be required in Phase 1 of work. The Technical Lead needs to be able to understand how the Spiral 1 SW works.
CR117	N/A	Are Service Specifications (SOWG-292 - SOWG-295) as a part of SDD relevant for UA which is a consumer of services and does not define services?	Service Specifications are not relevant for the UA work. As stated in [SOWG-290] "The SDD shall include annexes that documents implemented server-side services (if any), ..." As the UA is not implementing server side services, no service specifications will need to be produced.
CR118	N/A	A major version of Angular framework is released in about one year period, so we can expect two or three major releases during project implementation. Is it expected that all applications will use the same version of Angular (actual in the project start), or they will be upgraded to actual version so at the end of the project all UAs will use the most actual version of Angular?	The non-functional requirements of the IFB does not mandate a common version of Angular, nor that it has to be the latest version by the end of the project.
CR119	N/A	Requirement FUA-20 says "in case ... based on Windows operating system ". Should we consider other than Windows Operating systems? What is used instead of Active Directory in such case?	NATO Bi-SC AIS environment is a Windows environment and there is no need to consider any other operating systems.
CR120	N/A	There are several requirements (such as FUA-867, FUA 369, FUA-890, FUA-891) related to calculations of Launch Point error ellipse, salvotime etc. Will Purchaser provide formulas/algorithms for such calculations?	The launch point ellipses are not calculated within INTEL-FS, this information is received through the BM Firing Event Import Services (see BE SRS section 4.1.17). The salvotime calculation is very simple: the salvos are simple groupings of launch events based on a user definable salvo "time out value".
CR121	N/A	<i>A question was received regarding contractor eligibility, summarized as follows:</i> The prime contractor would be from a NATO Nation; its parent company is also based in a NATO Nation. A portion of the work, however, would be performed by a fully-owned subsidiary that is not based in a NATO nation.	The NATO eligibility rules are strict. The Agency does not have the authority to grant a waiver to the eligibility rules for a situation such as this.  If a company submits a bid described in this situation, with a subsidiary from a non-NATO nation performing a portion of the work, they would not be able to sign Annex B-12 as part of the Bid Administration volume. This would render the bid non-compliant.

CR122	N/A	[GUA-49] requirement seems to indicate than 'an implementation of the eXtensible Access Control Markup Language (XACML) version 3 architecture' should be implemented within I2UA. However it seems to us than the implementation should be place within SOA & IdM services and I2UA should use it rather than implement itself. Please clarify if the XACML implementation will be in the SOA & IdM and I2UA will use it, or I2UA shall implement another XACML architecture.	XACML will be implemented within a SOA&IdM Platform's Policy Decision Point (PDP) called by a Policy Enforcement Point (PEP) in the I2UA. The I2UA SRS in IFB Amendment 5 has been updated with a new paragraph [229] that explicitly states this.
CR123	N/A	We would like to know if it is permitted to act as subcontractor for different consortia? We would like to offer our expertise via different proposal consortia. The offered expertise will be practically the same in all proposals, because we intend to bid only on 1 part. In the past there have been Invitations to Tender (from other customers) where we were only allowed to bid 1 time with 1 consortium. Does that apply for the INTELS2 bid as well?	From the NCI Agency's perspective, companies are free to act as a subcontractor for multiple prime contractors. Any exclusivity/non-exclusivity arrangements are between the companies, and are not NCI's responsibility. Therefore, if Company A and Company B are both submitting competing bids as prime contractors, Company Z is free to act as a subcontractor to both of them.
CR124	CSP	19 SYSTEMS WARRANTY 19.2 Following FSA, the Contractor shall provide a one-year warranty for the supplies and services delivered under this Contract in accordance with the terms and conditions stipulated in Part IV - Statement of Work, Section 13, and Clauses 27 and 31 of the Contract General Provisions There is no section 13 in SOW for I2BE . Please Indicate which part of the SOW we shall refer to	In the updated Contract Special Provisions provided with Amendment 6, Section 19 has been corrected to refer to "Statement of Work, Section 2.3.7".
CR125	SOW I2BE 1.5	In answer to CR6 it is indicated that "an Initial API will be provided by NCI....". Could you please add this PFI in chapter 1.5 of SOW I2BE	Section 1.5 of the I2BE SOW provided with Amendment 6 has been updated to reflect this.
CR126	SOW I2BE 1.5 and 2.4.1	[25] an d NCI will provide user accounts on NSF. Could you please confirm - that all necessary development tools will be accessible on NSF . - that We just have to provide development Computers in our premises . - No specific SW ( for instance for security reasons )will have to be installed on these computers	The development tools that will be provided are listed in SOW 2.4.1. The NSF will not provide the integrated development environment (IDE).
CR127	SOW I2BE [SOWG-133]	The Contractor shall ensure that the warranty conditions remain valid even if the software is relocated/ redeployed to an equivalent platform during the warranty period . Could you please explain what could be an equivalent platform	An equivalent platform will have the same amount, or better, computing resources (CPU, memory, and storage capacity), the same operating system, and a version of the Platform as a Service (PaaS) that is the same or backward compatible with the previous version of the PaaS. This clarification has been added to [SOWG-133] in the SOWs with Amendment 6.
CR128	[SOWG-135]	"The Contractor shall provide 3rd Level maintenance, when requested by the Purchaser, to define the solution to a problem (corrective maintenance) or to maintain up to date software configuration (adaptive maintenance following changes to the underpinning hardware, firmware and software environment) e.g. security patches, operating system upgrades, minor software configuration changes due to operational/interface needs" It seems that for example Operating system upgrades can not be included in 3rd level maintenance . It should be preferable that SOWG-135 shall be managed under a change Order . Please confirm that you want the Contractor to include the price of this SOWG without any detailed assumption.	There is no Change order/request foreseen for this requirement, the scope is clear and that scope is expected to be priced by the Contractor in the bidding phase already. The Contractor is expected to provide all necessary Level 3 maintenance and support to keep the SW operational in case the Purchaser makes changes in the underlying infrastructure (such Purchaser changes can be to HW, FW or SW environment and examples are given as security updates, operating system upgrades, etc.). [SOWG-135] has been updated in the SOWs in Amendment 6 to reflect that changes to the underpinning hardware, firmware and software environment will be done by the Purchaser.
CR129	[SOWG-373]	« The Contractor shall at the Deliverable Acceptance Review demonstrate that the any API implemented as part of the deliverable is fully documented " Please confirm this sentence is correct and that no word is missing	The requirement has in the I2BE SOW in Amendment 6 been rephrased to " <i>The Contractor shall at the Deliverable Acceptance Review demonstrate that API changes (if any) are fully documented</i> ".

CR130	CO-14176-SOA-IDM	Are only Docker and Kubernetes Pods deployment supported on the SOA&IdM Platform or also Virtual Machines?	The SOA Platform is based on the use of containers. The Platform Foundation, which provides the Container and Kubernetes infrastructure, sits on Virtual Machines provided by the underlying Infrastructure as a Service (IaaS). Therefore the platform itself does not support VMs, but the IaaS will support the deployment of VMs. "External Services" running on VMs can still take advantage of some of the Platform Services, but will not get the full benefit of deployment on the Platform. The Bidder should note the requirements in section 2.1.2.1 and the expectations for the solution to be hosted on the SOA & IdM platform.
CR131	CO-14176-SOA-IDM	Is JWT also supported by the IdM Platform?	Yes, the platform supports the Open ID Connect (OIDC) specification, which uses JWTs. There will be an IdP that will be able to issue JWTs.
CR132	CO-14176-SOA-IDM	How do the services contribute to (access) logging and audit? Which interface and schema has to be supported?	Services hosted on the platform have to implement an Observability contract to allow the platform to retrieve observability data. This is defined in the SOA Platform ICD. External Services will be monitored using the Beats family of components.
CR133	CO-14176-SOA-IDM	Is an API Gateway provided by the SOA IDM Platform?	No, an API Gateway is not provided by the platform.
CR134	CO-14176-SOA-IDM	Is the Sidecar Proxy for authorization provided by the SOA IDM Platform?	Yes, the Side Car proxy is an integral part of the Platform Foundation. Furthermore, a PEP will be provided to do authorisation for common application runtimes.
CR135	GENERAL	Is there a specific template to use for Solution Description Document(SDD)?	There is no template. The content for the SDD is described in SOW chapter 2.5.3.2
CR136	GENERAL	Solution Description Document(SDD) is expected to be single PDF file. Could extra attachments be provided for submission in case the PDF file size exceeds the specified limit?	Please note that in IFB Amendment 3, Bidding Instructions paragraph 3.2.2 increased the size limit of any emails submitted to 15 MB. It is acceptable for bidders to split the SDD (or any other document) and submit in multiple emails in case this is necessary to remain under the size limitation. Paragraph 3.3.3 of the Bidding Instructions has been updated to clarify this.
CR137	GENERAL	Could alternative solutions for the software requirements be mentioned in the Solution Description Document(SDD)?	The bidder shall propose one and only one solution.
CR138	GENERAL	What are the restrictions on using third-party javascript component libraries with paid commercial license?	There are no restrictions beyond what is stated in the IFB. The cost will need to be included in the bid, and the license shall be registered with NCIA as the end user (see SOW requirement [SOWG-124]).

CR139	SOWG-361	Is it a must for the technical leader to have documented expert experience in Angular framework? Is it acceptable to have React experience instead of Angular? Will the bid be non-compliant if some of the stated technical qualifications are not met? To be more specific, Angular, C# and .Net in paragraph 3 and social network analysis in paragraph 5?	As the I2UA contract shall be implemented in Angular (see I2UA SRS requirement [GUA-15]), expert experience in Angular will be considered a very important skill to have. If a proposed Key Personnel lacks or has inferior qualifications, this will be given a lower score without necessarily rendering the bid non-compliant. Please note paragraph 4.3.1.2.2.1.2 of the Bidding Instructions states: "Bidders are advised that any Bid whose Technical Proposal receives a score of less than 20% of the total unweighted raw score possible in any of the sub-criteria listed in Section 4.5 of this document may be determined by the Purchaser to be non-compliant and not considered for further evaluation."
CR140	SOWG-365	Is it a must for the Test Director to have all the qualifications stated in this section?	As answered above, missing or inferior qualifications may result in a lower score in that area of the bid evaluation, without necessarily rendering the bid non-compliant.
CR141	SOWG-367	Do all software developers have to have a UX design certification? Will the bid be non-compliant if some of the software developers do not meet some of the requirements in paragraphs 2,3 and 4?	No, all software developers do not need to have UX design certification. As above, for the I2UA evaluation a team that has documented strong UX experience will score better than one that does not have this documented experience and skills.
CR142	SOWG-9	Is it a must for the project manager to meet all the qualifications (i.e. having masters degree) stated in SOW ?	As answered above, missing or inferior qualifications may result in a lower score in that area of the bid evaluation, without necessarily rendering the bid non-compliant.
CR143	GENERAL	Having analyzed those four FS1 documents from the past; however, no text/evidence has been found against reliability/availability requirements of the Software. It is suspected that such analyses/measurements can be observed in one of the test procedures/reports. Is it possible that these documents/lists (samples only) are shared at this time of the bidding process?	The Agency will not share test results from previous projects at this stage.
CR144	[GUA-12], [FUA-63], [FUA-607], [FUA-224], [FUA-261], [FUA-390], [FUA-391], [FUA-392]	Will backend services be provided for PDF export operations?	Yes, see backend SRS requirement [FBE-26]
CR145	[FUA-148], [FUA-433], [FUA-474]	Will XSD schema documents be provided for XML export operations whose output will be used by external applications?	As there is no defined XML exchange formats, the purchaser cannot commit to providing such schemas. This means that the bidder needs to plan for defining the XML schemas.
CR146	[FUA-147]	Will KML import/export operations be handled by backend services? If not will any front-end library be provided?	There are no such services defined for the I2BE. However, see response to CR148 below explaining the capabilities of the C4ISR Visualization Component (VC)
CR147	[GUA-143]	Will KMZ import/export operations (zip/unzip) be handled by backend services?	There are no such services defined for the I2BE.
CR148	[GUA-143]	Will NVG import/export operations be handled by backend services? If not will any front-end library be provided?	In relation to the import/ export requirements as defined in Table 2-8 in the I2UA SRS, the C4ISR Visualization Component (VC) can import NVG and KML/ KMZ files. The VC can export NVG, KML/ KMZ, Shape, and PNG files.

CR149	[FUA-65]	[FUA-65] requires products to be exported to a file that will be used by the Joint Exercise Management Module (JEMM). Would you clarify Product export file format that will be used by the Joint Exercise Management Module (JEMM) externally?	Additional information has been added to Section 4.1.2.8 of the I2UA SRS of Amendment 6 that clarifies that the product exchange file is the product information as defined by information model exported in such a way that it can be easily re-imported using the back-end OData API. The additional clarification to requirement [FUA-65] has also been updated in the SSS and Bidding Sheet for the I2UA.
CR150	[FUA-70]	Will there be backend services for handling PDF editing and collation operations of BSO Management Application's PDF Viewer component?	There will be no PDF editing. The backend will extract the raw text from the PDF file to support the collation operations; see requirement [FBE-54] in backend SRS.
CR151	[FUA-94]	Does BSO import request function mentioned in requirement [FUA-94] involve file import?	No, I2UA will expand the graph by getting related BSOs through the I2BE API.
CR152	[FUA-135], [FUA-395]	Which file format will be used for exporting search results in the Search Application?	That will be for the contractor to define as part of the technical solution.
CR153	[FUA-155]	Is there any restriction on the file format when importing/exporting search queries?	Requirements pertaining to this is defined in I2UA SRS section 2.1.3.
CR154	[FUA-413]	Which file format will be use when exporting CR ("bag of CRs")/CRL/CTL?	This is defined in the acceptance criteria to User Story [US 79], see [AC 79-1], [AC 79-2], [AC 79-3] and [AC 79-4].
CR155	[FUA-454]	Which file format will be used when exporting Tasks ("bag of tasks") and CXP?	This is defined in the acceptance criteria to User Story [US 86], see [AC 86-1], [AC 86-2], [AC 86-3] and [AC 86-4].
CR156	[GUA-43]	Is it an expected function of the Table View component to handle pasting of tabular data with multiple rows and columns from MS Office?	This has not been defined as a requirement in the IFB.
CR157	[FUA-307]	Are the named query notifications generated when the result of the query changes (i.e. when a new item is added or removed) or when the query itself is modified?	It shall be generated when the result of a search/ query changes. See also [FBE-116] in the backend SRS.
CR158	[US 5], [FBE-172]	Does [US 5] covers with [FBE-172]? How can user management application access domain values on a specific node. Will user management application get domain values from backend services of ON's or save all domain values to its own database?	[FBE-172] will cover [US 5]. The I2UA requirement [FUA-5] is removed from the I2UA SRS in Amendment 6. Also the I2BE SRS is updated in IFB Amendment 6 to emphasise that [FBE-172] will cover [US 5]. The text changes to the requirements have also been updated in the SSS and Bidding Sheet Excel files for both I2UA and I2BE in Amendment 6.
CR159	General	Will user management application has PEP, PDP, PAP implementations for authorization and authentication requirements or will they be provided by SOA/IdM platform ?	PDP and PAP services will be provided by the SOA & IdM Platform, and a PEP will be provided to do authorisation for common application runtimes. See also answer to CR122 above.
CR160	SOW Book II-Part IV- SOW I2BE	How many main Work Pacakges will be in the I2BE Contract, WP2 only or WP2.1, WP 2.2? Will Work Package Start-up Meeting be conducted only at the begining of the project after Kick-Off Meeting? Or Will WorkPackage Startup Meeting be conducted for each phase WP2.1 and WP2.2?	For the backend there will be one WP for the implementation of the I2BE (named WP2.1) and a second WP for the Maintenance and Support work (named WP 2.2). The SOW Chapter 2 defines the work to be done within the project up until FSA, so the WP start-up meeting (as defined in the SOW) is for the I2BE only applicable for WP2.1.
CR161	SOW Book II-Part IV- SOW I2BE Annex A SRS	Geospatial Services - In which format map data will be served and processed?	The geospatial services are provided by the Core GIS system which is implemented using ESRI ArcGIS. CoreGIS (ArcGIS) supports the OGC standards (see for instance <a href="https://enterprise.arcgis.com/en/server/latest/publish-services/linux/ogc-support-in-arcgis-server.htm">https://enterprise.arcgis.com/en/server/latest/publish-services/linux/ogc-support-in-arcgis-server.htm</a> )
CR162	SOW Book II-Part IV- SOW I2BE Annex A SRS	Geospatial Services - What type of coverage data will be provided for height calculation? For what purpose? Will there be weather?	Different formats of elevation data can be made available through Core GIS, including DTED, SRTM, and LiDAR. Weather information is provided through the NAMIS system (see ICD found in the Reference Documents folder on the IFB portal)

CR163	SOW Book II-Part IV- SOW I2BE Annex A SRS	Geospatial Services - What kind of information will it be extracted from the map data?	Map data will generally only be used for displaying in the C4ISR Visualization Component (VC) where the VC does the displaying directly. The other usage of map data will be for generating terrain and mobility overlays (see BE SRS section 3.2.7.1)
CR164	SOW Book II-Part IV- SOW I2BE Annex A SRS	In the NFR-11 ,The services shall be able to receive 2 million new IIEs per day without any critical failure for at least 99.5% of its Operational time. What will be the instant maximum data entry?	The requirement is 2 million a day; there is no instant (or burst) requirement. The I2BE shall be able to manage 2000 concurrent users/ connections (see SRS requirement [NFR-10]).
CR165	Book I-Bidding Instructions 3.3 & SOW Book II-Part IV- SOW I2UA [SOWG-231]	According to the SOW, File names should be [NU NR]_[Contract number]_[Name of document]_[v0.x v1.0].[filename extension]  According to the BI, convention defined as "14873-UA/BE-Company Name-Vol III-Tech2-PMP" is only for e-mail subject line, not for filename. Filename should be according to the SOW-231. Could you please confirm this?	The SOW defines file name convention for files produced during <i>project execution</i> . The Bidding Instructions defines the file name convention for the files to be submitted for the bid in Section 3.3.3, and defines the email subject line in Section 3.3.1.
CR166	Book II – Part II – Contract Special Provisions 17.10	According to Contract Special Provisions 17.10, in our bid packages should'nt our files (e.g PMP, QAP, etc) include our company Logo in the header/footer/coverage page?	CSP Section 17.10 refers to software delivered under the awarded contract, not files submitted as part of the bid. Bidders are free to include their company logo in their bids.
CR167	SOW Book II-Part IV- SOW I2UA	How many main Work Pacakges will be in the I2UA Contract, WP1 only or WP1.1, WP 1.2, WP1.3 and WP1.4? Will Work Package Start-yp Meeting be conducted only at the begining of the project after Kick-Off Meeting? Or Will WorkPackage Startup Meeting be conducted for each phase WP1.1, WP1.2 and WP1.3?	There will be one WP Startup Meeting for each of the three work packages during the project execution (until FSA); that means a WP Startup Meeting for WP1.1, another startup meeting for WP1.2, and also a startup meeting for WP1.3. The optional WP1.4 that follows the Warranty will not require a WP Startup Meeting as defined by SOW 2.4.4.1.
CR168	INTEL-FS SPIRAL 2 - USER APPLICATIONS (I2UA) BOOK II - PART IV - SRS SYSTEM REQUIREMENT SPECIFICATION (SRS)	DATA SETS different meanings. GUA 30, GUA 31 refers to the "Global Data Set" where User Applications are connected and could be: (i.e. operational data set, training data set, exercise data set, ...) FUA 555, FUA 84 and many others refers to ADS (Application Data Sets). GUA 92, GUA 93, GUA 94, refers to "data set". Does this "data set" refers to a subset of the Application Data Set which have been filtered? Or does it refer to an Application Data Set itself? We assume that these requirements (GUA 92, GUA 93 and GUA 94) refer to a data subset. Related to this: Is it required for every application to manage several ADS (Application Data Sets) at the same time, e.g. for comparing them? We assume that there will be only one active ADS at each application to be exploited by user. When another ADS want to be used, ADS will have to be modified or replace. Please clarify whether this assumptions are correct.	The data set in [GUA 30] and [GUA 31] refers to the repository data set (in Spiral 1 these repository data set were called logical databases). The repository data set means the full set of data being used for an operation, mission, or activity. The application data set (ADS) is a subset of the repository data set where the user is in control of selecting the ADS from the repository data set. The I2UA SRS in Amendment 8 has updated [GUA 30] and [GUA 31] to explicitly state that those are repository data sets. The assumption that the data presented in Table Views (ref [GUA 92], [GUA 93], and [GUA 94] are data subsets is correct. It is not a general requirement that applications shall be able to handle multiple application data sets (ADS). The assumption that users replace or modify the ADS with new content is correct.
CR169	INTEL-FS SPIRAL 2 - USER APPLICATIONS (I2UA) BOOK II - PART IV - SRS SYSTEM REQUIREMENT SPECIFICATION (SRS) Integrated search.	Some requirements refers to applications integrated search (FUA 359, FUA 360, FUA 420, FUA 421, FUA 422, FUA 459...). For this application integrated search, shall search results be shown In every opened view components or shall these results be shown in a new table-view associated to the integrated search?	The details of the user interface (providing good UX) will be for the contractor to design. The purpose of this integrated search requirement is that the user shall not need to leave the application to go to the separate Search Application to search. The application-integrated search could be a simple and application-specialized search tool with the aim of quickly adding items to the ADS; this could be done in a dialog window.

CR170		First increment execution will start after the Kick-Off (EDC + 1 month) Meeting, and then Workpage Start-Up Meeting and then Increment Start-up Meeting. Could you please confirm this?	As defined in SOW requirement [SOWG-156], the Kick-Off meeting shall <i>not start any later</i> that one month after EDC. The WP start-up and Increment Start-Up meetings are expected to start as soon as possible after the Kick-off meeting.
CR171		What are the duration of Kick-Off Meeting, Workpage Start-Up Meetings, Increment Start-Up Meetings? Is there any foreseen duration of these meetings?	The Kick-off meeting is expected to require no more than 1 day, the WP start-up meeting is expected to require no more than 5 days, and the Increment Start-up meeting is expected to require no more than 2 days. The I2UA and I2BE SOWs have been updated in Amendment 8 to clarify this.
CR172	Book II-Part IV-SOW I2BE Annex A SRS	The following documents are referenced in some of the provided SOA & IdM documents; but not found in the "Reference Documents\SOA and IdM Platform". Can you also provide these missing documents? SOAIDM-SDS-LIFECYCLE_AUTOMATION, SOAIDM-SDS-APPLICATION_SERVICES, SOAIDM-SDS-OBSERVABILITY	The requested documents (SOAIDM-SDS-LIFECYCLE_AUTOMATION, SOAIDM-SDS-APPLICATION_SERVICES, SOAIDM-SDS-OBSERVABILITY) will be made available for the contractor at Contract Award.
CR173	Book II-Part IV-SOW I2BE Annex A SRS	Although the requirements of IIE Migration Services are very similar to the Integration Import Services, it is stated that IIE Migration Services are to be developed as Non-native Hosted Services whereas Integration Services are as Native Services. Is there a technical reason/constraint for this difference?	The intention was not to state that the IIE Migration Services should be developed as Non-native Hosted Services. The BE SRS has been updated in Amendment 8 to clarify that there is no such constraint on the migration services.
CR174	Book II-Part IV-SOW I2BE Annex A SRS	Is "Simple OData query operations" mentioned in [NFR-3] and [NFR-4] applicable to only IIE Domain Services (i.e. Products Management Service, ORBAT Management Service etc.) and not to Search Service and Data Analytics Service?	Yes, the performance requirement for the Search Service and Data Analytics Service are covered by [NFR-5], [NFR-6], [NFR-7], and [NFR-8].
CR175	Book II-Part IV-SOW I2BE Annex A SRS	In CR60, it is stated that "There will be data from approximately 3 million information entities collected over many years that will have to be migrated.". And in [NFR-11], it is stated that "The services shall be able to receive 2 million new IIEs per day". However, handling of 1 trillion entities (in requirements [NFR-3], [NFR-4], [NFR-5], [NFR-6] and [NFR-9]) does not seem to be aligned with these given and anticipated numbers. Can you confirm that it is really 1 trillion to be handled with these requirements?	NCIA can confirm that the number is 1 trillion, but only for [NFR-6]. The reason for the trillion requirement in [NFR0-6] is that INTEL-FS Spiral 2 may received automatically processed sensor data and the ingest rate can potentially be very high. These automated sensor-data will not be IIEs as defined by the information model (they will be small documents) and they will not be created through the backend services. The requirement in [NFR-6] states that the search engine must be able to efficiently search this high volume of indexed searchable data (e.g. using Elasticsearch). The other requirements stating trillions of entities have in the SRS in Amendment 8 been corrected to 100 million entities (in this case they will be IIEs as defined by information model).
CR176	Book II-Part IV-SOW I2BE Annex A SRS	Is there any constraint for selection of RDBMS? If not, how should the licensing be handled for any proposed RDBMS (such as SQL Server/Oracle)? Does NATO have license for any RDBMS that can be used in INTEL-FS2? Or is it an option that NATO provides Database Services as SaaS together with SOA & IdM Platform?	There are no RDBMS constraints. Bidders should include the costs for any licenses necessary for the proposed solution. In accordance with Section 22 of the Contract Special Provisions, the NCI Agency may choose to remove certain licenses from the contract, procure them through established enterprise agreements, and provide them as PFE to the contractor. The SOA & IdM Platform will not provide database services.
CR177	Book II-Part IV-SOW I2BE Annex A SRS	6- NATO::BMD::Battlespace package is mentioned in SRS but it is not found in the Information Model documents. Can you provide the model for NATO::BMD::Battlespace?	The BMD battlespace information is fully integrated into the battlespace package. The text in the SRS paragraph [55] referred to an older (pre IFB) organization of the information model. The SRS paragraph [55] in Amendment 8 has been updated to reflect that the NATO::BMD::Battlespace does not exist.
CR178	Book II-Part IV-SOW I2BE Annex A SRS	To meet the NFRs, is it possible to request/suggest different deployment infrastructure/model per service basis? Such as, dedicated nodes with dedicated SSD disks for cluster of search services.	The proposed solution shall make the assumption that the underlying IaaS and PaaS can deliver the required performance and scale-out capacity to support INTEL-FS in meeting the NFRs.

CR179	Geoview general	1- Will geoview be displayed as a background panel and all other applications open over it or geoview will be one of the widgets on the screen like relationship view ?	Geoview will run in its own browser window.
CR180	2.1.4.6 Online Help	Can online help be a standalone application? Can help content display in another tab? Do users need to authenticate to edit help contents? Do users need to authenticate to see help contents?Is the help application required to be an angular application or can it be a separate php application?Does help application need to save help contents to its backend?	There is nothing in the I2UA IFB requirements preventing the online help from being a standalone application as long as it can be activated from the I2UA (see requirement ([FUA-27], [FUA-47], etc.). There are no specific authentication requirements for the editing of help content; built-in contributor-control in Wiki solutions should suffice. The Help application does <b>not</b> need to be an Angular application. The I2UA will need to persist the help information in the Bi-SC AIS IaaS, but this is not done through the I2BE. It is solely a responsibility of the I2UA to manage the Help content.
CR181	Book I-Bidding Instructions 4.5.3.4.5	Can one of the relevant examples that will be provided by the bidder belong to the Bidder's Sub Contractor's experience? Is there any constraint about the experience Contract, such as contract price, end date of the contract, duration of the Contract? Can it be an ongoing contract?	Yes, relevant examples can include subcontractor's experience. There are no constraints for the experience, but the experience needs to provide enough details to enable NCIA to assess the relevance of the experience.
CR182	Book II - Part IV - SRS of I2BE	For the requirements related with the response times (NFR-3 to NFR-8), should the authentication and authorization processes be included in the measurement of response times? Are the expected response times only for pure search and query operations without authentication and authorization?	The response times are for pure search and query operations (i.e. measured with zero time for authentication and authorization). This is reflected in the I2BE SRS provided with Amendment 9.
CR183	Book II - Part IV - SOW of I2BE	What will be the scope of the trainings given to the Purchaser? Will only the trainings be given to the Purchaser O&M Team to maintain the system at Level 1, 2 and 3 and to test, operate and maintain the system? Or will End Users be also trained to be able to use the INTEL-FS2 Applications and Services?	As specified in the SOW, the training will only be for O&M Staff.
CR184	Book II - Part IV - SOW of I2BE	There is a tight timeline especially for the first increments since there will be additional activities and work (Kick-off, WP Startup Meeting, common development setup) overlapping with the development of the first increment scope. Will the successful bidder be allowed and supported to start working before the EDC and/or before Kick-off?	The successful bidder is free to start, but NCIA cannot provide any engineering support prior to EDC. The bidder should plan for the additional time needed for Increment 1 in the Delivery Plan as described in SOW 2.5.3.1.
CR185	Book II - Part IV - SOW of I2BE	Is it possible that the duration of the increments are adjusted by the contractor? For example, may the first two increments be extended to 4 months (4 Sprints) and 3.rd and 4.th increments be reduced to 2 months (2 Sprints), as long as the deadline of Phase 1 is not exceeded?	In the delivery plan, the Contractor will need to adjust the length of the Increment to the level of effort for that Increment. So the answer to the example in the question is Yes, the first two Increments could last 4 months each and the two following Increments could last 2 months each.
CR186	Book II - Part IV - SOW of I2BE	In the answer of CR18 in the Clarification Request Release, it's indicated, "Source code of the INTEL-FS Sprial-1 will be made available to the contractor through the NSF at contract award." In the SOW in the 2.4.3 Kick-Off Meeting Section, after successful Kick-Off Meeting Purchaser gives Contractor permission to proceed and according to [SOWG-160] "The Contractor shall verify that the Contractor's key personnel (in particular the SW developers) have access to the NSF"  When will access to the NSF be made available to the Contractor, at the contract award or after successful Kick-Off Meeting?	NCIA will provide initial NSF access at Contract Award. This initial access may not include all of the Contractor's personnel, but will allow the Contractor to access the INTEL-FS source code.

CR187	Bidding Instructions 3.6.5.3.2.	According to Bidding Instructions “The Bidder shall provide proof of the Bidder’s premises being authorized and certified to handle information (physically and electronically) at the NATO Restricted level.” How should this proof/certificate be provided? Maybe together with the PMP, inside the PDF file “14873-UA/BE-Company Name–Vol III–Tech3-PMP” to be provided as part of the Technical Offer (Volume III)?	The Bidders shall include this proof/certificate together with the Draft PMP as part of file: “14873-UA/BE-Company Name –Vol III–Tech3-PMP”.
CR188	Bidding Instructions 3.3.3.3 & 4.5.2	Bidding Instructions is not explicitly requesting to provide a Draft (Master) Test Plan as part of the Technical Offer. However, the criteria used to evaluate the Engineering Part states that the SDD must include information about testing methodology, which is usually defined in the (Master) Test Plan: “4.5.2.2.9 The draft SDD describes a sound approach to Continuous Integration (CI) and Continuous Delivery (CD) adapted for the capability to be delivered and for usage within the NATO Software Factory. The SDD describes what type of tests will be automated, and how the automated tests will be implemented, as well as how the reporting of such tests will be automated. 4.5.2.2.10. The draft SDD demonstrates an approach to the software development that will ensure a high degree of test automation (e.g. using behaviour driven development (BDD) and/ or Acceptance Test Driven Development (ATDD) methodologies).” Does the Draft SDD really need to explicitly include such testing details, or could the Draft SDD refer to the sections of the Draft (Master) Test Plan where such info is available, and the Draft (Master) Test Plan be provided along with the Draft SDD, or the Draft PMP?	A separate Master Test Plan is not asked for in the IFB, and will not be required for the contracted work. The bid will be evaluated in accordance with evaluation criteria in the Bidding Instructions and the SDD will need to include the required information to enable this evaluation. The bidder can, if desired, organize this information in a separate chapter in the SDD in the form of a Master Test Plan.
CR189	Special Provisions 16.10	What is the purpose of the section 16.10, whose only content is the word “Reserved”?	In Amendment 2, a change was made to delete paragraph 16.10 from the Contract Special Provisions (please see CR 84).
CR190	Special Provisions 10 and SOW I2BE 2.4.5.2.6	Paragraph 10.2 of the Special Provisions states: “The final contracted Increment for the Back-end BE contract shall end at EDC+36 months.” Section 2.4.5.2.6 of the SOW I2BE states: “[97] The Deliverable Acceptance Review serves as an Increment Close-out Meeting.” which can be understood as: an Increment ends with its Deliverable Acceptance Review. And therefore: - the Deliverable Acceptance Review of the last contracted BE increment (the #12) should be at EDC + 36 months, - the FSA meeting will be held some weeks after, considering the time required by the Contractor to prepare the FSA report (Special Provisions 10.4), and the time (up to 3 weeks) the Purchaser can schedule the FSA meeting after the Contractor requests it (Special Provisions 10.5). However, the slide 47 of the Bidders Conference presentation seems to indicate that the FSA is at EDC + 36 months. Could you please clarify which milestone is expected at EDC + 36 months, either the Deliverable Acceptance Review of BE Increment 12 or the BE FSA, and update the IFB accordingly if necessary?	It will be the Deliverable Acceptance Review of the final contracted BE Increment that will occur at EDC + 36 months. FSA is expected to take place within a few weeks after that.  For the UA contract, the Deliverable Acceptance Review of the final contracted Increment will occur at EDC + 32 months.

CR191	Special Provisions 6.3	<p>Paragraph 6.3.3 of the Special Provisions states:                      "The second Incentive Milestone will be four weeks prior to the respective FSA, as defined in Section 10."                      We understand the second incentive milestone for the BE contract should be at, or just after, BE Increment 12 Deliverable Acceptance Review, since this is the milestone where the fulfilment of the requirements is reviewed. Considering previous clarification request, could you please confirm whether the second BE incentive milestone is expected at EDC + 36 months, or EDC + 35 months, or &lt;any other alternative that could apply&gt;, and update the IFB accordingly if necessary?</p>	<p>The intent of Paragraph 6.3.3 of the Contract Special Provisions is to define the second Incentive Milestone as four weeks prior to the end of the final Increment (for the BE contract, this is four weeks prior to EDC + 36 months; for UA, four weeks prior to EDC + 32 months). To fix this to a specific date, this paragraph has been revised in IFB Amendment 9 to clarify that the second Incentive Milestone date is EDC + 35 months for the BE contract; and EDC + 31 months for the UA contract.</p>
CR192	Special Provisions 6.3	<p>Paragraph 6.3.2 of the Special Provisions states:                      "For the Back-end (BE) contract, the first incentive milestone will be EDC+12 months for all back-end services listed under CLIN 1 of that contract."                      Considering CLIN 1 back-end services are allocated in the SSS to Increments 1 to 4, we understand the first BE incentive milestone should be at, or just after, Increment 4 Deliverable Acceptance Review.                      Although it is requested to run the 12 BE Increments in 36 months, it could be difficult that BE Increment 4 finishes at EDC + 12 months (unless setting different durations for the different increments), since the first increment does not start at EDC. There is a series of activities to be performed before the first increment can start, i.e.: those related to the kick-off meeting (approx. EDC +1 month), the WP 2.1 start-up meeting and the Increment 1 start-up meeting. From our lessons learnt we know these initial tasks could last around 2 or 3 months, also considering the time in advance the inputs for these meetings must be provided (1 week per each). In practice this would mean that after these initial activities there would be around 33 months for the 12 increments; that is, 11 months per each 4 increments.                      Considering the above we were wondering whether running the BE Increment 4 Deliverable Acceptance Review, and the first BE incentive milestone, at EDC+12 months is a must, or otherwise whether the first BE incentive milestone can be shifted at e.g. EDC + 14 months.</p>	<p>The start-up time for an agile project should be much shorter. The first incentive milestone for the BE contract will remain at EDC+12 months.</p>
CR193	SOW I2BE 2.4.5.2	<p>According to Figure 2-5 Increment Execution, we expect the Deliverable Acceptance report can be prepared immediately after the sprint meeting of the last sprint of the Increment, and as soon as ready delivered and the Deliverable Acceptance Review be called, and then (in 1-week time) held.                      It is not clear whether the IV&amp;V and UAT activities conducted by the Purchaser, and supported by the Contractor, affect or not the date of the Deliverable Acceptance Review.                      If they do, this may not be a problem for most of the increments, because IV&amp;V and UAT of one increment could run in parallel with the next increment; however, it could be a problem for increments 4 and 12, since an incentive fee is associated to them, so fulfilling the incentive fee milestones on time could be jeopardised by these Purchaser-conducted activities, maybe having this an impact also on potential liquidate damages.                      Could you please clarify IV&amp;V and UAT impact, if any, on the Deliverable Acceptance Review date, and reflect it on IFB if deemed necessary?</p>	<p>Any delays to Purchaser acceptance of the final Increment before an Incentive Milestone (for the BE contract, these are Increments 4 and 12), solely caused by NCIA, will not cause the Contractor to miss an Incentive it would otherwise have earned.</p> <p>For a delay to be deemed the fault of NCIA, the Contractor must have enabled the Purchaser to do the IV&amp;V activity in parallel with the increment development, and the Delivery Acceptance Report provided by the Contractor must clearly document and prove that the Must Have requirements for that Increment have been met.</p>
CR194	Special Provisions and SOW I2BE 2.4.5.2.7	<p>According to Special Provisions 10.4, we expect the FSA report can be prepared immediately after the successful Deliverable Acceptance Review of the last Increment, and as soon as ready delivered and the FSA requested, and then (in max. 3-week time) held.                      It is not clear whether the Deployment to Production activities conducted by the Purchaser (and supported by the Contractor) after the Deliverable Acceptance Review of the last Increment, affect or not the date of the FSA.                      Could you please clarify the impact on FSA date, if any, of the last Increment's Deployment to Production, and reflect it on IFB if deemed necessary?</p>	<p>Any delay in the deployment to production will not impact the FSA date.</p>

<p>CR195</p>	<p>SOW I2BE</p>	<p>Jira+GitLab vs Azure DevOps:                  In SOW for I2BE there are several requirements and references to Jira:                  “[85] Note: The Purchaser is expecting to use Jira tool with a Test Event Management plugin as the test reporting tool.                  [SOWG-190] The Contractor shall manage defects in the NSF Jira tool (see [Jira]).”                  [115] The Purchaser will provide the contracted requirements as an extract from the Purchaser’s requirement management system (see [DOORS]) in a format that can be imported into Jira (see [Jira]).                  [SOWG-296] The DRTM shall be integrated with (or if feasible fully implemented in) the Jira tool (see [Jira]) on the NSF (the Jira tool will be provided as PFI in the NSF.”                  Additionally, in answer to CR109, GitLab is mentioned, although it does not appear in the SOW:                  “For SW configuration control GitLab will be used.”                  However, SOW I2BE contains some requirements and references to Azure DevOps:                  “[SOWG-38] The CMDB and CM Tools shall to the maximum extent possible integrate with, or use, the Azure DevOps tools provided within the NSF.                  [SOWG-367] The Contractor’s Test Director shall meet the following qualifications:                  (3) Have documented expert knowledge and experience with automating testing and test reporting (e.g. using the NUnit framework, Gherkin test-scenarios, SpecFlow and/ or Cucumber, etc.) for Azure DevOps;”                  It seems that a combination of Jira+GitLab and Azure DevOps will have to be used during the project:                  - Jira for requirement management, defect management and DRTM,                  - GitLab for SW configuration control,                  - Azure DevOps for configuration management,                  It is not clear why knowledge and experience in Azure DevOps is requested to the Test Director, whilst “The Purchaser is expecting to use Jira tool with a Test Event Management plugin as the test reporting tool”.                  Could you please provide a complete picture of the environment to be used?                  Could it be possible to use a single environment for all the activities, either based on Jira or based on Azure DevOps?</p>	<p>NCIA will provide information on the usage of NSF at Contract Award. The Bidder shall note the NSF does not provide an out-of-the-box CMDB solution. The Bidder shall define how the CMDB will be realized (see bidding instructions paragraph 4.5.4.3.2) either using available tooling in NSF or by identifying additional tooling as required.</p>
<p>CR196</p>	<p>SRS I2BE 5.6</p>	<p>In chapter 5.6 Maintainability, [139] and [140] state that “the MTTR/MaxTRR to be considered is the mean/maximum time needed to restore services after a failure ...”                  As far as our knowledge:                  - Mean/Max Time To Restore/Recovery is not related to Maintainability, but to Availability, in which case it would be better located in chapter 5.4.1 Availability,                  - the Maintainability-related meaning of MTTR would be “Mean Time To Repair/Resolve”.                  Could you please clarify the intended meaning of MTTR and MaxTTR, and the ISO 25010 characteristic related to it?                  In case MTTR and MaxTTR refer to mean/max time to Repair/Resolve, then the values defined in Table 5-3 of [NFR-20] do not seem to be appropriate, since they should include the time for detecting the failure, diagnosing the problem, and repairing the issue, but also the time spent ensuring that the failure won’t happen again.</p>	<p>MTTR and MaxTTR are defined in paragraphs [139] and [140] in the SRS. The intent is to use these parameters as a quality measurement of the delivered software.                  The time spent ensuring that the failure does not happen does not have any impact on the MTTR and MaxTTR assessments.</p>
<p>CR197</p>	<p>SOW I2BE 2.3 &amp; 2.5</p>	<p>In SOW requirements [SOWG-84], [SOWG-100] and [SOWG-347], the acronym “SM&amp;C” is used, but its meaning is not declared.                  We understand SM&amp;C stands for “Service Management &amp; Control”.                  Could you please confirm and update the SOW declaring the exact meaning of “SM&amp;C” acronym?</p>	<p>SM&amp;C is defined in the IFB document 15_CO-14873-INTELF52-Book-II-Part V Abbreviations and Acronyms as “Service Management and Control”. The two SOWs in Amendment 9 has been updated with an expansion of the acronym in its first usage.</p>

CR198	SOW I2BE 2.3.5.3 & 2.4.5	<p>Reading the following requirement in section 2.4.5.2.7 Supporting the release to production:          “[SOWG-229] The Contractor shall, prior to deployment to production, provide Administrator training for the Purchaser’s O&amp;M support staff, see section 2.3.5.3. “          our understanding is that the Training Course to the Purchaser must be provided only for those increments whose delivered SW is released to production, but not necessarily for all the increments.          However, the wording at the end of the following requirement in section 2.3.5.3 Training the Purchaser’s O&amp;M team:          [SOWG-119] The training of the Purchaser’s O&amp;M team shall be conducted one time before each release of new Contractor provided software to production. I.e. the Contractor shall deliver this type of training as many times as the Contractor delivered software is made ready for deployment to production.          is somehow confusing, since it is stating “as many times as the Contractor delivered software is made ready for deployment to production”, because according to the following paragraph from chapter 1.3 Scope of Work:          “[12] The delivered SW at the end of each increment will have to have a quality at the level of being ready for deployment to production.”          the SW accepted at the end of each increment will always be ready for deployment to production.          If our understanding of [SOWG-229] above is correct, then we kindly suggest to slightly reword [SOWG-119] for finishing with “as many times as the Contractor delivered software is made ready for deployment deployed to production”.</p>	<p>Requirement [SOWG-119] in Amendment 9 has been rephrased to clarify when the O&amp;M team training will take place, i.e. the Purchaser may ask for O&amp;M team training after each Increment, but will normally combine the training of multiple Increment deliverables in one combined training event.</p>
CR199	SOW I2BE	<p>NUnit is mentioned in the requirements [SOWG-187], [SOWG-208], [SOWG-318] and [SOWG-367]. Only in the first one, [SOWG-187], NUnit is a, let’s say, “strong” request (shall), to “make the output from the [automated] tests (i.e. test results) available in the NUnit report XML format”. However, the other three requirements are mentioning NUnit just as a potential option to be used.          Could you please explain the purpose of providing the automated test results in NUnit report XML format?          Can any other unit testing framework (e.g. JUnit in case of developing in Java) be used? In such case, will the requirement [SOWG-187] (providing the test results using the NUnit report XML format) still apply?</p>	<p>The purpose of the requirement is to ensure that the test results can be automatically ingested into Azure DevOps and into the Jira tool with a Test Event Management plugin and processed by these tools. The SOWs in Amendment 9 have been updated to reflect this. This means that a format other than NUnit XML can be used.</p>
CR200	In Section 2.3 of “CO-14873-INTELS2-Book-II-Part IV SOW UA Annex User Stories” [16]	<p>[16] describes “importing file” as a way of creation of product. However, there is no detail on product creation process (format of file, limitations, content etc.) via file import. Does “by importing files” mean “creating an empty form with a product file”?</p>	<p>This is referring to importing previously exported products where the export contains all details of the product (i.e. metadata and attachments). The export of such products for later import is described in the user story document in section 2.3.1.3.</p>
CR201	SOW I2UA 2.4.4	<p>Can a work package or an increment start before the previous work package or increment ends?          Can we plan overlapping intervals for work packages or increments?</p>	<p>NCIA will only be able to support a sequential execution of the Increments. To accelerate development and delivery, the Contractor is free to start the next Increment before finishing the previous, but should not expect that NCIA will be able to provide support to this advanced work.</p>
CR202	Bidding Instructions 3.6.4.2	<p>What exactly is a Delivery Plan? We understand that it is a set of documents (mentioned in SOW I2UA 2.5.3), can you please confirm? Also, will we provide 3 separate Delivery Plans for 3 work packages of UA, each containing a separate SDD for that work package?</p>	<p>The delivery plan is defined by SOW section 2.5.3.          As defined in paragraphs 3.6.4.2 and 4.5.2.2.14 in the Bidding Instructions, each work package shall have its own delivery plan. i.e. for the UA contract three (3) separate Delivery Plans shall be delivered.</p>
CR203	Geoview general	<p>Will geoview have a palette for selecting shapes of different IIE types or any kind of palette ?</p>	<p>GeoView will have drawing tool palettes that will suffice for the INTEL-FS application.</p>

CR204	BE general	Will I2BE provide combined search api for metadata search with ODATA api and free text search with faceted api ?	I2BE will provide an API that supports faceted search where free-text search can be filtered on metadata attributes. This combined search does not have to be implemented using Odata. The Odata API will be separate.
CR205	Geoview general	Will geoview have a layer management (creating, adding, hiding unhiding layers) ?	Yes, GeoView will have a proper layer management.
CR206	US 38 -> AC-38.5	Does it mean adding a matrix just like a label? And when clicking to overlay will it show the weather effect matrix ? Or is there any other process ?	GeoView implements an event channel when anything selected in the GeoView is sent as an event to the "driving application" (I2UA) which can then act on this information (e.g. to present a different view of the data selected in GeoView).
CR207	Special Provisions 6 & 13	<p>According to response to CR190, the Deliverable Acceptance Review of the final contracted BE Increment (#12) will be at EDC + 36 months.</p> <p>And according to response to CR191, the second Incentive Milestone date for BE contract is EDC + 35 months, as stated now in Contract Special Provisions Amendment 9.</p> <p>Considering that the fulfilment of the requirements is reviewed at the Deliverable Acceptance Review, should not the date for the second BE incentive milestone be EDC + 36 months (i.e., at Increment 12 Deliverable Acceptance Review)? Otherwise, the development of the deliverables scheduled for Increment 12 will still be on-going 1 month before finishing the increment (i.e., EDC + 35 months), and the requirements of such deliverables will not be fulfilled at that time and the incentive fee will be lost.</p> <p>If so, it might also be possible that chapter 13.3 needs to be updated.</p>	<p>As stated in Section 6.1 of the Contract Special Provisions, the contract will include an incentive payment "to recognize <u>early delivery</u> of all requirements of an Application/Service." Therefore, the incentive is calculated based on what has been delivered one month <u>prior</u> to the end of the final contracted Increment.</p> <p>The end of the final contracted Increment for the Front-end contract is EDC + 32 months; and for the Back-end contract it is EDC + 36 months. So the 2nd incentive milestone for each are therefore set at EDC + 31 months and 35 months, respectively.</p> <p>CR 190 clarified that FSA won't actually occur right at EDC + 32 months (Front-end) and 36 months (Back-end), but it will be the Deliverable Acceptance Review that occurs at these times. The formal FSA is expected within a few weeks after the final Deliverable Acceptance Review. Acceptance can be scheduled in advance so that Requirements and Applications/Services are accepted by the 2nd Incentive Milestone date.</p> <p>Section 13.3 remains unchanged: any Liquidated Damages are calculated one month after the Incentive Milestone dates.</p>
CR208	Special Provisions 6	Finally, we understand CLIN 5 is missing in section 6.3.2 of the Special Provisions, isn't it?	<p>Yes, when this section of the Special Provisions was updated in Amendment 7, CLIN 5 was omitted. This will be updated in the final Back-end contract.</p> <p>The Bidding Sheets and SSS for the Back-end correctly show CLIN 5 included in the 2nd Incentive.</p>
CR209	IFB-CO-14873-INTELS2 Book 1 -Bidding Sheets I2UA (Amd. 6) – Sheet "WP1.1-Upgrade"	<p>Are we right in our assumption that the CLIN number</p> <ul style="list-style-type: none"> <li>- in column B, row 118 should be 2.3.5.4 (instead of 1.4.5.4) and</li> <li>- in column B, row 272 should be 2.9.4.1 (instead of 2.9.4)?</li> </ul> <p>If yes, is the bidder allowed to correct the numbers or can we expect NCIA to provide a corrected version of the bidding sheets?</p>	Correct. Bidders may correct these typographical errors. NCIA will make the corrections prior to contract award.

CR210	IFB-CO-14873-INTELF52 Book I -Bidding Sheets I2BE (Amd. 6) – Sheet “WP2.1-Implementation”	<p>Are we right in our assumption that the CLIN numbering in column B is incorrect in following rows:</p> <ul style="list-style-type: none"> <li>- rows 220, 221, 222: same CLIN number as in row 219;</li> <li>- rows 226, 227, 228: same CLIN number as in row 225;</li> <li>- row 238: same CLIN number as in row 237;</li> <li>- rows 249, 250: same CLIN number as in row 248;</li> <li>- rows 275, 276: same CLIN number as in row 274;</li> <li>- row 294: CLIN should be 4.2.1.1 (instead of 4.1.2.1)</li> </ul> <p>If yes, is the bidder allowed to correct the numbers or can we expect NCIA to provide a corrected version of the bidding sheets?</p>	<p>Correct.</p> <ul style="list-style-type: none"> <li>- For row 220, 221, and 222 the CLIN numbers shall be: 2.6.1.2, 2.6.1.3, and 2.6.1.4</li> <li>- For row 226, 227, and 228 the CLIN numbers shall be: 2.7.1.2, 2.7.1.3, and 2.7.1.4</li> <li>- For row 238 the CLIN number shall be 3.1.3.2</li> <li>- For rows 249 and 250 the CLIN numbers shall be 3.2.1.2 and 3.2.1.3</li> <li>- For rows 275 and 276 the CLIN numbers shall be 3.4.1.2 and 3.4.1.3</li> <li>- For row 294 the CLIN number shall be 4.2.1.1</li> </ul> <p>NCIA will make the corrections prior to contract award.</p>
CR211	Book II - Part IV - SOW of I2BE	<p>For testing environment, it is mentioned in [SOWG-146] that all the testing activities shall be performed on NSF platform. Does that mean that the contractor will not have a testing environment on contractor's servers in the Contractor's Premises? Is the testing environment on NSF platform an Azure DevTest Labs environment? How close will that testing environment be to the SOA &amp; IdM platform in terms of the services provided by SOA &amp; IdM platform, such as authentication, authorization, observability services, message broker etc.?</p>	<p>[SOWG-146] does not necessarily prevent the Contractor from conducting testing also at contractor's own premises. However, to enable parallel IV&amp;V activity and to expedite the increment acceptance process, the NSF shall be the main environment for testing. Yes, the NSF is an Azure DevTest Labs environment. The SOA &amp; IdM Platform in the NSF will be identical to the production environment with the exception of the use of Calico (the NSF version uses Flannel + Calico, whereas the live version uses only Calico).</p>
CR212	Book II - Part IV - SOW of I2BE	<p>What is the role of SOA &amp; IdM Platform from the testing point of view? Will the software be deployed to SOA &amp; IdM only when it is ready to be tested by the Purchaser? Or is it also possible to use SOA &amp; IdM as a testing environment during development?</p>	<p>The developed software shall be tested on the SOA &amp; IdM Platform during development.</p>
CR213	Both 09_CO-14873-INTELF52-Book-II-Part IV SOW I2UA - Amd 9 and 12_CO-14873-INTELF52-Book-II-Part IV SOW I2BE - Amd 6, Section 3.1	<p>Although Product Owner is a crucial role in Scrum Methodology, it is not mentioned in section 3.1 of both SOW documents. The SOWs state that the requirements will be prioritized and accepted by the Purchaser. Will the Purchaser provide other day-to-day Product Owner duties such as supporting the Scrum teams in understanding the requirements, user stories, and acceptance criteria etc.?</p>	<p>The SOWs in requirement [SOWG-183] states "<i>The Contractor shall facilitate participation of the Purchaser in the daily scrum meetings (e.g. by using the Microsoft Teams tool available through the NSF).</i>" The purpose of this requirement is to ensure that there is a mechanism for the Purchaser to provide frequent guidance to the Contractor.</p>

<p>CR214</p>	<p>Reference to CR 195:  Both 09_CO-14873-INTELS2-Book-II-Part IV SOW I2UA - Amd 9 and 12_CO-14873-INTELS2-Book-II-Part IV SOW I2BE - Amd 6, Section 2.4.1 NATO Software Factory (NSF)</p>	<p>T.5 Reference to CR 195:  Both 09_CO-14873-INTELS2-Book-II-Part IV SOW I2UA - Amd 9 and 12_CO-14873-INTELS2-Book-II-Part IV SOW I2BE - Amd 6, Section 2.4.1 NATO Software Factory (NSF) [65] (UA) and [60] (BE) list some tools of the NSF toolchain. The toolchain shall be used for all software engineering, implementation work, and testing (including system integration testing).  Please share a complete list of NSF provided tools with available tool extensions / plug-ins including tools related to continuous deployment, code quality checks and testing.</p>	<p>The tools currently available in the NSF are listed in SOW section 2.4.1:</p> <ul style="list-style-type: none"> <li>• Azure DevOps service (Repos, Boards, Pipelines, Artefacts) including Test Management</li> <li>• GitLab for source control</li> <li>• Jira for work management, issue tracking and collecting feedback</li> <li>• Jira Zephyr for test management</li> <li>• Jenkins for CI/CD</li> <li>• Nexus as artefact repository</li> <li>• SonarQube for static code analysis, including OWASP dependency and vulnerability scanning</li> </ul> <p>Within both Azure pipelines and Jenkins, a variety of build tools are supported, including, but not limited to Maven, Gradle, NuGet, MSBuild, NPM and docker.</p> <p>Furthermore, for the use of configuration and infrastructure as code, the following tools are being utilized:</p> <ul style="list-style-type: none"> <li>• ARM to provide resources (Compute, Storage, Networking) on the NSF (only)</li> <li>• Terraform to provide resources (Compute, Storage, Networking) on NSF and on-premises networks</li> <li>• Ansible to provide resources (if not done through Terraform) and install the software (e.g. Intel-FS) on NSF and on-premises networks</li> </ul>
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