



Acquisition
Boulevard Léopold III
B-1110 Brussels, Belgium

NCIA/ACQ/2023/06854
5 May 2023

To: Bidders List and Distribution List

Subject: Invitation For Bid IFB-CO-115791-DEMETER Amendment 4
Provision of a Land Command and Control (C2) Application Software (DEMETER)

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. NCI Agency NOI NCIA/ACQ/2022/07326, dated 19 December 2022
- D. NCI Agency IFB-CO-115791-DEMETER; NCIA/ACQ/2023/ 06536 dated 03 March 2023
- E. NCI Agency IFB Amendment 1; NCIA/ACQ/2023/06695 dated 17 March 2023
- F. NCI Agency IFB Amendment 2; NCIA/ACQ/2023/06756 dated 31 March 2023
- G. NCI Agency IFB Amendment 3; NCIA/ACQ/2023/06786 dated 14 April 2023
- H. NCI Agency IFB Amendment 3; NCIA/ACQ/2023/06845 dated 03 May 2023

Dear Prospective Bidders,

1. The purpose of this Amendment 5 is to:
 - a. Publish Release 4 of IFB Bidders' questions and NCI Agency responses.
 - b. Issue revised IFB documents:
 - IFB_CO-115791-DEMETER-AMD5 Book-II-Part-IV-Statement of Work (SOW)
 - IFB-CO-115791-DEMETER-AMD5 Book I-Bidding Instructions
 - IFB-CO-115791-DEMETER-AMD5_Book II-Part II Special Provisions
 - IFB-CO-115791-DEMETER-AMD5 Book I - Annex E - Eval Criteria Matrix
 - IFB-CO-115791-DEMETER-AMD5 Book I - Annex D – TVCRM
2. NCI Agency responses to Bidders' questions are hereby published with this IFB Amendment 5. Requests for Clarification (RfC) and their respective answers that were released in previous IFB Amendment have been greyed out for your convenience.
3. The Contracting Officer responsible for this solicitation is Mr. Radu Munteanu, and all correspondence regarding this IFB should be sent via email to CO115791DEMETER@ncia.nato.int.

FOR THE CHIEF OF ACQUISITION:

//Original Signed//
Radu Munteanu
Contracting Officer



NATO Communications
and Information Agency
Agence OTAN d'information
et de communication
Avenue du Bourget 140
1110 Brussels, Belgium
www.ncia.nato.int
Page 1 of 3

Attachments:

- 1) Responses to Clarification Requests, Release Number 4
- 2) IFB_CO-115791-DEMETER-AMD5 Book-II-Part-IV-Statement of Work (SOW)
- 3) IFB_CO-115791-DEMETER-AMD5 Book I - Bidding Instructions
- 4) IFB_CO-115791-DEMETER-AMD5_Book II-Part II Special Provisions
- 5) IFB_CO-115791-DEMETER-AMD5 Book I - Annex E - Eval Criteria to Reqt Matrix
- 6) IFB_CO-115791-DEMETER-AMD5 Book I - Annex D – TVCRM
- 7) DEMETER EPA Calculation Example

Distribution List for IFB-CO-115791-DEMETER Amendment 4

All Nominated Prospective Bidders

NATO Delegations (Attn: Infrastructure Adviser):

- ALBANIA
- BELGIUM
- BULGARIA
- CANADA
- CROATIA
- CZECH REPUBLIC
- DENMARK
- ESTONIA
- FRANCE
- GERMANY
- GREECE
- HUNGARY
- ICELAND
- ITALY
- LATVIA
- LITHUANIA
- LUXEMBOURG
- MONTENEGRO
- THE NETHERLANDS
- NORTH MACEDONIA
- NORWAY
- POLAND
- PORTUGAL
- ROMANIA
- SLOVAKIA
- SLOVENIA
- SPAIN
- TÜRKIYE
- UNITED KINGDOM
- UNITED STATES

NATO HQ

NATO Office of Resources (NOR)

- CIS and Cyber Capabilities Branch (CCC) Branch Head
- NOR Secretariat Section (RPPB, IC, BC)

NCI Agency – NATEXs

NCI Agency – Internal Distribution

INVITATION FOR BID

IFB-CO-115791-DEMETER

PROVISION OF LAND C2 SYSTEM (DEMETER)



BOOK I BIDDING INSTRUCTIONS

TABLE OF CONTENTS

SECTION 1	INTRODUCTION	1
1.1.	Purpose	1
1.2.	Scope	1
1.3.	Overview of the Prospective Contract.....	1
1.4.	Governing Rules, Eligibility, and Exclusion Provisions	3
1.5.	Best Value Evaluation Method.....	3
1.6.	Security.....	3
1.7.	Documentation.....	4
SECTION 2	GENERAL BIDDING INFORMATION	5
2.1.	Definitions.....	5
2.2.	Eligibility and Origin of Equipment and Services.....	6
2.3.	Bid Delivery Time and Bid Closing.....	6
2.4.	Requests for Extension of Bid Closing Date	7
2.5.	Purchaser's Point of Contact	8
2.6.	Request for IFB Clarifications	8
2.7.	Requests for Waivers and Deviations.....	9
2.8.	Amendment of the Invitation for Bid.....	9
2.9.	Modification and Withdrawal of Bids	10
2.10.	Bid Validity.....	10
2.11.	Bid Guarantee.....	11
2.12.	Cancellation of Invitation for Bid	13
2.13.	Electronic Transmission of Information and Data	13
2.14.	Supplemental Agreements	13
2.15.	Notice of Limitations on Use of Intellectual Property Delivered to the Purchaser	13
2.16.	Receipt of an Unreadable Electronic Bid	14
SECTION 3	BID PREPARATION INSTRUCTIONS	15
3.1.	General.....	15
3.2.	Bid Package Content and Labelling.....	16
3.3.	Volume I: Bid Administration.....	18
3.4.	Volume II: Price Quotation.....	19
3.5.	Volume III: Technical Proposal Package	20
SECTION 4	BID EVALUATION AND CONTRACT AWARD	25
4.1.	General.....	25
4.2.	Best Value Award Approach and Bid Evaluation Factors	26
4.3.	Evaluation Procedure	27
4.4.	Evaluation Step 1 – Administrative Compliance	28
4.5.	Evaluation Step 2A – Technical Evaluation	29
4.6.	Evaluation Step 2B – Price Evaluation	29
4.7.	Evaluation Step 3 – Calculation of Best Value Scores.....	32
4.8.	Post Evaluation Test Drive	33
Annex A:	Bidding sheets	36
Annex B:	Prescribed administrative forms and certificates	39

B-1.	Certificate of Legal Name of Bidder.....	39
B-2.	Acknowledgement of Receipt of IFB Amendments and Responses to Clarification Requests.....	41
B-3.	Certificate of Independent Determination	42
B-4.	Certificate of Bid Validity.....	43
B-5.	Certificate of Exclusion of Taxes, Duties and Charges	44
B-6.	Comprehension and Acceptance of Contract Special and General Provisions	45
B-7.	Disclosure of Requirements for NCI Agency Execution of Supplemental Agreements	46
B-8.	Certificate of Compliance AQAP 2110 or ISO 9001:2015 or Equivalent..	47
B-9.	List of Prospective Subcontractors	48
B-10.	Bidder Background IPR	49
B-11.	List of Subcontractor and Third Party IPR	50
B-12.	Certificate of Origin of Equipment, Services, and Intellectual Property....	51
B-13.	Certificate of Price Ceilings.....	52
B-14.	Disclosure of Involvement of Former NCI Agency Employment	53
B-15.	NCI Agency AD. 05.00, Code of Conduct: Post Employment Measures .	54
Annex C: Bid guarantee – Standby letter of credit		55
Annex D: Technical Volume Cross Reference Matrix (TVCRM)		57
Annex E: Evaluation criteria to requirements traceability matrix		58
Annex F: List of acceptable banks to issue bid guarantees.....		59
Annex G: Clarification request form		60

SECTION 1 INTRODUCTION

1.1. Purpose

1.1.1. The NATO Communications and Information (NCI) Agency has been authorized to invite bids and award a contract for the procurement of new Land C2 Software.

1.1.2. The name of this project is DEMETER. It is authorised under NATO Security Investment Programme (NSIP) Project 2021/OIS03211 and originates from the Capability Programme Plan (CPP) 5A1201 "Future Land Command and Control Information Capability". DEMETER will replace the existing NATO Land C2 system Land Command and Control Information Services (LC2IS).

1.1.3. All of the technical details and requirements of the project are explained in Book II, Part IV, Statement of Work (SOW) and the SOW annexes.

1.2. Scope

1.2.1. The scope of this Invitation for Bid (IFB) is for services to provide the users with the **best available Commercial-Off-The-Shelf (COTS)** software product.

1.2.2. The key capabilities to be delivered are:

- Provide the material part of the FLC2 capability (DEMETER). DEMETER will be the primary C2 software product supporting future NATO land operations and will be used across the full spectrum of NATO operations and missions to support the C2 needs of the NATO Command Structure (NCS) across strategic and operational levels.
- Address initial training aspects of the capability with the provision of the training to the NATO trainers and support personnel. Initial user training will be provided to personnel participating in the activities to declare Initial Operational Capability (IOC).
- Migrate from LC2IS to DEMETER by preparing a detailed Transition Plan, including secure data migration.

1.3. Overview of the Prospective Contract

1.3.1. Book II of this IFB provides the Prospective Contract that will require the selected Contractor to deliver the DEMETER capability. This will be achieved by means of performance of Work Packages (WPs) further defined in the SOW and summarized hereinafter as follows:

1.3.2. Work Package 1 (WP1): Implement initial sites

1.3.2.1. WP1 covers the configuration and implementation of DEMETER in authorized locations (SOW, Table 4.2) inclusive of licenses and all the required activities, such as tests, site surveys and deployments.

1.3.2.2. WP1 also addresses initial training aspects of the capability with the development and provision of the training to the NATO trainers, support personnel and users.

- 1.3.2.3. WP1 includes the migration from LC2IS to DEMETER by preparing a detailed Transition Plan, and performing secure data migration.
- 1.3.2.4. At the successful completion of WP1, the Partial System Acceptance WP1 (PSA^{WP1}) milestone is reached.
- 1.3.3. **Work Package 2 (WP2): Implement remaining sites**
 - 1.3.3.1. WP2 covers the configuration and implementation of DEMETER in the remaining authorized locations, inclusive of licenses, as well as all the required activities, such as tests, site surveys and deployments.
 - 1.3.3.2. WP2 also includes (repeating) the migration from LC2IS to DEMETER.
 - 1.3.3.3. The Contractor will perform the maintenance and support of DEMETER and any follow-on deployed baseline releases or patches to all authorised locations.
 - 1.3.3.4. At successful completion of WP2, the Partial System Acceptance WP2 (PSA^{WP2}) milestone is reached.
 - 1.3.3.5. Final System Acceptance (FSA) will be granted when the Purchaser has verified completeness of the entire scope and has determined that it meets the requirements of the Contract. Subsequently, on successful achievement of the FSA, the warranty period will commence.
 - 1.3.3.6. Starting on the date of the FSA, the Contractor will provide one year warranty for all deliverables and services furnished under this Contract.
- 1.3.4. **Work Package 3: Optional Interoperability Adaptations**
 - 1.3.4.1. This optional WP3 will cover the specified interoperability requirements that require adaptations in order to fully meet the selection criteria.
 - 1.3.4.2. Also adaptations needed for other requirements are included in this WP3.
 - 1.3.4.3. The adaptations in this WP3 will be deployed to production as part of WP2.
 - 1.3.4.4. Any additional costs when this WP3 is exercised should be included in WP3 and not in WP2.
 - 1.3.4.5. At successful completion of WP3, the PSA WP3 milestone is reached (PSA^{WP3}).
 - 1.3.4.6. The Purchaser may decide to exercise any part of this WP3 at any moment before 6 months after contract award.
- 1.3.5. **Work Package 4: Optional Maintenance and Support Services**
 - 1.3.5.1. The optional WP4 specifies the Contractor furnished services for the maintenance and support of DEMETER for ten (10) years, starting from FSA with the first year being concurrent with the warranty period.
- 1.3.6. The Contract will be governed by Book II, Part II (Contract Special Provisions) and Part III (Contract General Provisions). Note that the SOW - Annex A SRS is provided for guidance, as it reflects the Purchaser's interpretation of the foreseen comprehensive requirements scope. It will be updated during the Pre-award discussions to reflect the selected COTS

capabilities and further refined at the time of WP3 implementation, if that option is exercised.

1.4. Governing Rules, Eligibility, and Exclusion Provisions

1.4.1. This solicitation is an IFB and is issued in accordance with the procedures for International Competitive Bidding (ICB) set forth in NATO document AC/4-D/2261 (1996 Edition) and its Annex X, dated 24 July 2009, with the exception explained in Section 4.3.3 as authorized by the Investment Committee.

1.4.2. Pursuant to these procedures, bidding is restricted to companies from participating NATO member nations for which a Declaration of Eligibility and a Certification of solution capability qualifications have been issued by their respective government authorities.

1.5. Best Value Evaluation Method

1.5.1. The evaluation method to be used in the selection of the successful Bidder under this solicitation will follow the Best Value Procedures set forth in AC/4-D/2261, Annex X, dated 24 July 2009, and AC/4(2008)0002-REV2 dated 15 July 2015 unless otherwise noted.

1.5.2. The Bid evaluation criteria and the detailed evaluation procedures are described in SECTION 4.

1.5.3. Please note that the technical and price evaluations will be conducted in parallel by different evaluation teams.

1.5.4. In the event any information contained in this IFB conflicts with other information in this IFB, the bidder shall refer to the Purchaser all queries for resolution in accordance with the procedures set forth in paragraph 2.6.

1.6. Security

1.6.1. This IFB is classified as NATO UNCLASSIFIED (NU).

1.6.2. Contractor personnel will be required to possess a security clearance of "NATO SECRET" (NS) for the performance of the Contract.

1.6.3. Contractor will be required to handle and store classified material to the level of "NATO SECRET" (NS)

1.6.4. The Contractor shall have the appropriate facility and personnel clearances at the date of Contract Signature. Should a 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 can 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.

- 1.6.5. Contractor personnel working at NATO sites are required to possess a security clearance of "NATO SECRET". Contractor personnel without such a clearance, confirmed by the appropriate national security authority and transmitted to the cognisant NATO security officer at least fourteen (14) days prior to the site visit, will be denied access to the site. Denial of such access by the Purchaser may not be used by the Contractor as the basis for a claim of adjustment or an extension of schedule nor can the denial of access be considered a mitigating circumstance in the case of an assessment of Liquidated Damages or a determination of Termination for Default by the Purchaser.
- 1.6.6. Bidders are advised that Contract signature will not be delayed in order to allow the processing of security clearances for personnel or facilities and, should the otherwise successful Bidder not be in a position to accept the offered Contract within a reasonable period of time, due to the fact that its personnel or facilities do not possess the appropriate security clearance(s), the Purchaser may determine the Bidder's Offer to be non-compliant and offer the Contract to the next ranking Bidder. In such a case, the Bidder who would not sign the Contract may be liable for forfeiture of the Bid Guarantee.
- 1.7. **Documentation**
- 1.7.1. All documentation, including the IFB itself, all applicable documents and any reference documents provided by the Purchaser are solely to be used for the purpose of preparing a response to this IFB. They are to be safeguarded at the appropriate level according to their classification and reference documents are provided "as is, without any warranty" as to quality or accuracy.

SECTION 2 GENERAL BIDDING INFORMATION

2.1. Definitions

2.1.1. In addition to the definitions and acronyms set forth in the Contract Special Provisions (Part II) and Contract General Provisions (Part III) of the prospective Contract, the following terms and acronyms, as used in this IFB shall have the meanings specified below:

- 2.1.1.1. "Bidder": a firm, consortium, or joint venture which submits an offer in response to this solicitation. Bidders are at liberty to constitute themselves into any form of Contractual arrangements or legal entity they desire, bearing in mind that in consortium-type arrangements a single judicial personality shall be established to represent that legal entity. A legal entity, such as an individual, Partnership or Corporation, herein referred to as the "Principal Contractor", shall represent all members of the consortium with the NCI Agency and/or NATO. The "Principal Contractor" shall be vested with full power and authority to act on behalf of all members of the consortium, within the prescribed powers stated in an irrevocable Power of Attorney issued to the "Principal Contractor" by all members associated with the consortium. Evidence of authority to act on behalf of the consortium by the "Principal Contractor" shall be enclosed and sent with the Bid. Failure to furnish proof of authority shall be a reason for the Bid being declared non-compliant.
- 2.1.1.2. "Compliance": strict conformity to the requirements and standards specified in this IFB and its attachments.
- 2.1.1.3. "Contractor": the awardee of this solicitation of offers, which shall be responsible for the fulfilment of the requirements established in the prospective Contract.
- 2.1.1.4. "Firm of a Participating Country": an eligible firm legally constituted or chartered under the laws of, and geographically located in, or falling under the jurisdiction of a Participating Country.
- 2.1.1.5. "Participating Country": any of the following 30 NATO nations (in alphabetical order): ALBANIA, BELGIUM, BULGARIA, CANADA, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FRANCE, GERMANY, GREECE, HUNGARY, ICELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MONTENEGRO, THE NETHERLANDS, NORWAY, NORTH MACEDONIA, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, TÜRKIYE, THE UNITED KINGDOM and THE UNITED STATES.
- 2.1.1.6. "Purchaser": The Purchaser is defined as the current NCI Agency or its legal successor.
- 2.1.1.7. "Quotation" or "Bid": a binding offer to perform the work specified in the attached prospective Contract (Book II).
- 2.1.1.8. "NATO Enterprise":
- The NATO Command Structure (NCS);

- The NATO Headquarters (NATO HQ);
- The NATO Agencies: NATO Communication and Information Agency(NCI Agency), NATO Support Agency (NSPA), and Science and Technology Organisation (STO);
- NFS supporting NATO operations or exercises as well as NCI Academy
- NATO Signal Battalions (NSBs);
- Non-located Deployable CIS Module (DCM) Sites;
- Elements of the NATO Force Structure, including the NATO Airborne Early Warning and Control (NAEW&C) and the NATO Alliance Ground Surveillance (AGS) in Sigonella; and
- The NATO training schools: NATO Defence College (NDC), NCI Academy, and NATO School Oberammergau (NSO).

2.2. **Eligibility and Origin of Equipment and Services**

- 2.2.1. All Contractors, sub-Contractors and manufacturers, at any tier, must be from Participating Countries.
- 2.2.2. None of the work, including project design, labour and services shall be performed other than by firms from and within Participating Countries.
- 2.2.3. No materials or items of equipment down to and including identifiable Sub-assemblies shall be manufactured or assembled by a firm other than from and within a Participating Country.
- 2.2.4. Unless otherwise authorised by the terms of the prospective Contract, the Intellectual Property Rights to the solution design, related documentation and operating software shall reside in NATO member countries, and no license fees or royalty charges shall be paid by the Contractor to firms, individuals or governments other than within the NATO member community.

2.3. **Bid Delivery Time and Bid Closing**

- 2.3.1. All bids shall be in the possession of the Purchaser at the address given hereafter before **14h00 (Central European Time) on 03 April 2023** at which time and date bidding shall be closed. If necessary, extension(s) of the Bid Closing Date will be notified with the issuance of formal Amendments to the IFB.
- 2.3.2. Bids shall be delivered to the following address:

By Post:

NATO Communications and Information Agency
ACQ (ATTN: Mr. Radu Munteanu)
Oude Waalsdorperweg 61
2597 AK The Hague, Netherlands

Hand Carried Service or courier:

NATO Communications and Information Agency
ACQ (ATTN: Mr. Radu Munteanu)

Oude Waalsdorperweg 61
2597 AK The Hague, Netherlands

- 2.3.3. Bids forwarded by electronic means are not permitted and will not be considered. Bidders shall note that bid package shall consist of 2 identical copies of USB drive containing required Bid Contents (Ref. paragraph 3.2), accompanied by a Cover letter containing a list of all the files on the USB drives.
- 2.3.4. Bidders are advised that security or other personnel remaining on the premises outside of normal business hours will decline to sign or issue receipts for delivered items. It is the responsibility of the Bidder to ensure that delivery of the bid is performed during duty hours and days.
- 2.3.5. Bids which are submitted to the Purchaser after the specified time and date set forth above for Bid Closing are "Late Bids" and shall not be considered for award. Such Bids will be returned unopened to the Bidder at the Bidder's expense unless the Purchaser can determine that the Bid in question meets the criteria for consideration as specified below.
- 2.3.5.1. *Consideration of Late Bid* – The Purchaser considers that it is the responsibility of the Bidder to ensure that the Bid submission arrives by the specified Bid Closing time. A late Bid shall only be considered for award under the following circumstances:
- 2.3.5.1.1. A Contract has not already been awarded pursuant to the IFB, and
- 2.3.5.1.2. The Bid was sent to the address specified in the IFB and the delay was solely the fault of the Purchaser.
- 2.4. **Requests for Extension of Bid Closing Date**
- 2.4.1. Bidders are informed that requests for extension to the bid closing date for the IFB shall be submitted by the Bidder only through its respective country's NATO Delegation or Embassy to the Purchaser point of contact indicated in paragraph 2.5.1 below.
- 2.4.2. Any request for extension by a NATO Delegation or Embassy shall reach the Purchaser no later than fourteen (14) calendar days prior to the established Bid Closing Date. The Purchaser is under no obligation to answer requests submitted after this time.
- 2.4.3. Bidders are advised to submit their request to their respective NATO Delegation or Embassy in sufficient time as to allow for delivery of the formal request to the Purchaser within the above time limit.
- 2.4.4. Extension(s) of the Bid Closing Date will be notified through issuance of formal Amendments to the IFB.

2.5. Purchaser's Point of Contact

2.5.1. The Purchaser point of contact for all information concerning this IFB is:

Mr Radu Munteanu, Contracting Officer, Acquisition

NATO Communications and Information Agency

Oude Waalsdorperweg 61

2597 AK The Hague, Netherlands

Tel: +31 (0) 70 374 3015

Questions/clarifications: CO115791DEMETER@ncia.nato.int

Bid delivery: All bids shall be delivered as stated in paragraph 2.3.2.

2.6. Request for IFB Clarifications

2.6.1. Bidders, at the earliest stage possible during the course of the solicitation period, are encouraged to query and seek clarification of any matters of a contractual, administrative and technical nature pertaining to this IFB.

2.6.2. All questions and requests for clarification shall be forwarded to the Purchaser via email using the Clarification Request Form provided at Annex G: Clarification request form of this Book I. Such questions shall be forwarded to the point of contact specified in paragraph 2.5.1 above and shall be received not later than fourteen (14) calendar days prior to the stated Bid Closing Date. The Purchaser is under no obligation to answer questions submitted after this time.

2.6.3. Requests for clarification must address the totality of the concerns of the Bidder for any given area, as the Bidder will generally not be permitted to revisit areas of the IFB for additional clarification except as noted in paragraphs below.

2.6.4. Additional requests for clarification are limited only to the information provided as answers by the Purchaser to Bidder requests for clarification. Such additional requests shall arrive not later than fourteen (14) calendar days before the established Bid Closing Date.

2.6.5. It is the responsibility of the Bidders to ensure that all Clarification Requests submitted bear no mark, logo or any other form or sign that may lead to reveal the Bidders' identity in the language constituting the clarification itself. This prescription is not applicable to the means used for the transmission of the clarification (i.e. email or form by which the clarification is forwarded).

2.6.6. The Purchaser declines all responsibilities associated to any and all circumstances regardless of the nature or subject matter arising from the Bidders' failure or inability to abide to the prescription in paragraph 2.6.5.

2.6.7. The Purchaser may provide for the removal of any form of identification in the body of the clarification request in those instances in which such practice is feasible as well as providing for a re-wording of the clarification request in those cases in which the original language submitted is deemed

ambiguous, unclear, subject to different interpretation or revelatory of the Bidders identity.

- 2.6.8. Bidders are advised that subsequent questions and/or requests for clarification included in a Bid shall neither be answered nor considered for evaluation and may be considered by the Purchaser as grounds for a determination of non-compliance.
- 2.6.9. Except as provided above, all questions will be answered by the Purchaser and the questions and answers will be issued in writing to all prospective Bidders. The Bidders shall immediately inform the Purchaser in the event that submitted questions are not reflected in the answers published.
- 2.6.10. Where the extent of the changes implied by the response to a clarification request is of such a magnitude that the Purchaser deems necessary to issue revised documentation, the Purchaser will do so by issuing a formal IFB amendment in accordance with paragraph 2.8 below.
- 2.6.11. The Purchaser reserves the right to reject clarification requests clearly devised or submitted for the purpose of artificially obtaining an extension of the bidding time (i.e. clarifications re-submitted using different wording where such wording does not change the essence of the clarification being requested).
- 2.6.12. The published answers issued by the Purchaser shall be regarded as the authoritative interpretation of the IFB. Amendment to the language of the IFB included in the answers shall be incorporated by the Bidder in his offer.

2.7. **Requests for Waivers and Deviations**

- 2.7.1. Bidders are informed that requests for alteration to, waivers or deviations from the terms and conditions of this IFB and attached Prospective Contract (Book II) will not be considered after the request for clarification process. Requests for alterations to the other requirements, terms or conditions of the IFB or the Prospective Contract may only be considered as part of the clarification process set forth in paragraph 2.6 above. Requests for alterations to the specifications, terms and conditions of the Contract which are included in a Bid as submitted may be regarded by the Purchaser as a qualification or condition of the Bid and may be grounds for a determination of non-compliance.

2.8. **Amendment of the Invitation for Bid**

- 2.8.1. The Purchaser may revise, amend or correct the terms, conditions and/or specifications and provisions of the IFB at any time prior to the date set for the Bid Closing. Any and all modifications will be transmitted to all Bidders by an official amendment designated as such and signed by the Contracting Authority. This process may be part of the clarification procedures set forth in paragraph 2.6 above or be an independent action on the part of the Purchaser.

2.8.2. The Purchaser will consider the potential impact of amendments on the ability of prospective Bidders to prepare a proper Bid within the allotted time. The Purchaser may extend the "Bid Closing Date" at its discretion and such extension will be set forth in the amendment document.

2.8.3. All revision or amendments issued by the Purchaser shall also be acknowledged by the Bidder in its Bid by completing the Annex B-2. Failure to acknowledge receipt of all amendments may be grounds to determine the Bid to be non-compliant.

2.9. **Modification and Withdrawal of Bids**

2.9.1. Bids, once submitted, may be modified by Bidders, but only to the extent that the modifications are in writing, conform to the requirements of the IFB, and are received by the Purchaser prior to the exact time and date established for Bid Closing paragraph 2.3. Such modifications shall be considered as an integral part of the submitted Bid.

2.9.2. Modifications to Bids which arrive after the Bid Closing Date will be considered as "Late Modifications" and will be processed in accordance with the procedure set forth above concerning "Late Bids", except that unlike a "Late Bid", the Purchaser will retain the modification until a selection is made. A modification to a Bid which is determined to be late will not be considered in the evaluation and selection process. If the Bidder submitting the modification is determined to be the successful Bidder on the basis of the unmodified Bid, the modification may then be opened. If the modification makes the terms of the Bid more favourable to the Purchaser, the modified Bid may be used as the basis of Contract award. The Purchaser, however, reserves the right to award a Contract to the apparent successful Bidder on the basis of the Bid submitted and disregard the late modification.

2.9.3. A Bidder may withdraw its Bid at any time prior to Bid Opening without penalty. In order to do so, an authorised agent or employee of the Bidder must provide an original statement of the firm's decision to withdraw the Bid and remove the Bid from the Purchaser's premises.

2.9.4. Except as provided in paragraph 2.10.4.2 below, a Bidder may withdraw its Bid after Bid Opening only by forfeiture of the Bid Guarantee.

2.10. **Bid Validity**

2.10.1. Bidders shall be bound by the term of their Bids for a period of twelve (12) months starting from the Bid Closing Date specified in paragraph 2.3.1 above.

2.10.2. In order to comply with this requirement, the Bidder shall complete the Certificate of Bid Validity set forth in Annex B-4. Bids offering less than the period of time referred to above for acceptance by the Purchaser may be determined to be non-compliant.

- 2.10.3. The Purchaser will endeavour to complete the evaluation and make an award within the period referred to above. However, should that period of time prove insufficient to render an award, the Purchaser reserves the right to request an extension of the period of validity of all Bids which remain under consideration for award.
- 2.10.4. Upon notification by the Purchaser of such a request for a time extension, the Bidders shall have the right to:
- 2.10.4.1. Accept this extension of time in which case Bidders shall be bound by the terms of their offer for the extended period of time and the Bid Guarantee and Certificate of Bid Validity extended accordingly; or
- 2.10.4.2. Refuse this extension of time and withdraw the Bid, in which case the Purchaser will return to the Bidder its Bid Guarantee in the full amount without penalty.
- 2.10.5. Bidders shall not have the right to modify their Bids due to a Purchaser request for extension of the Bid validity unless expressly stated in such request.
- 2.11. **Bid Guarantee**
- 2.11.1. The Bid Guarantee shall be submitted by:
- email either directly by the banking institution or the Bidder to the email address in paragraph 3.3.1, plus
 - mail the original copy to the address in paragraph 3.3.2.
- 2.11.2. The Bidder shall furnish with its bid a guarantee in an amount equal to Three Hundred Thousand Euro (€300,000).
- 2.11.3. The Bid Guarantee shall be substantially similar to Annex C: Bid guarantee – Standby letter of credit as an irrevocable, unqualified and unconditional Standby Letter of Credit (SLC) issued by any of the banks (used interchangeably with “financial institution”) listed in Annex F: List of acceptable banks to issue bid guarantees or issued by a different financial institution and confirmed by any of the banks listed in Annex F: List of acceptable banks to issue bid guarantees. In the latter case, signed original letters from both the issuing institution and the confirming institution must be provided. The confirming bank shall clearly state that it will guarantee the funds, the drawing against can be made by the NCI Agency. Bid Guarantees shall be made payable to the Treasurer, NCI Agency.
- 2.11.4. "Standby Letter of Credit" or "SLC" as used herein, means a written commitment by a financial institution listed in Annex F: List of acceptable banks to issue bid guarantees either on its own behalf or as a confirmation of the Standby Letter of Credit issued by a different bank not listed in Annex F: List of acceptable banks to issue bid guarantees to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Purchaser of a written demand therefore. Neither the

financial institution nor the Contractor can revoke or condition the Standby Letter of Credit.

- 2.11.5. Alternatively, a Bidder may elect to electronically make a cash deposit of the required Guarantee directly to the bank account of the NCI Agency (no cheques). The NCI Agency's bank account details will be provided separately upon request.
- 2.11.6. If the Bid Closing Date is extended after a Bidder's financial institution has issued a Bid Guarantee, it is the obligation of the Bidder to have such Bid Guarantee (and confirmation, as applicable) extended to reflect the revised Bid Validity date occasioned by such extension.
- 2.11.7. Failure to furnish the required Bid Guarantee in the proper amount, and/or in the proper form and/or for the appropriate duration by the Bid Closing Date may be cause for the bid to be determined non-compliant.
- 2.11.8. The Purchaser will make withdrawals against the amount stipulated in the Bid Guarantee under any of the following conditions:
 - 2.11.8.1. The Bidder has submitted a bid and, after Bid Closing Date (including extensions thereto) and prior to the selection of the successful bid, withdraws its bid, or states that it does not consider its bid valid or agree to be bound by its bid;
 - 2.11.8.2. The Bidder has submitted a successful bid, but the Bidder declines to sign the Contract offered by the Agency, such Contract being consistent with the terms of the solicitation documents;
 - 2.11.8.3. The Purchaser has offered the Bidder the Contract for execution but the Bidder has been unable to demonstrate compliance with the security requirements of the Contract at the date of contract signature;
 - 2.11.8.4. The Purchaser has entered into the Contract with the Bidder but the Bidder has been unable or unwilling to provide the Performance Guarantee required under the terms of the Contract within the time frame required.
- 2.11.9. Bid Guarantees will be returned to Bidders as follows:
 - 2.11.9.1. To non-compliant Bidders forty-five (45) days after notification by the Purchaser of a non-compliant bid (except where such determination is challenged by the Bidder; in which case the Bid Guarantee will be returned forty-five (45) days after a final determination of non-compliance);
 - 2.11.9.2. To all other unsuccessful Bidders within thirty (30) days following the award of the Contract to the successful Bidder;
 - 2.11.9.3. To the successful Bidder upon submission of the Performance Guarantee required by the Contract or, if there is no requirement for such a Performance Guarantee, upon Contract execution by both parties.
 - 2.11.9.4. pursuant to paragraph 2.10.4.2 above.

2.12. Cancellation of Invitation for Bid

2.12.1. The Purchaser may cancel, suspend or withdraw for re-issue at a later date this IFB at any time prior to Contract award. No legal liability on the part of the Purchaser for payment of any sort shall arise and in no event will any Bidder have cause for action against the Purchaser for the recovery of costs incurred in connection with preparation and submission of a Bid in response to this IFB.

2.13. Electronic Transmission of Information and Data

2.13.1. The Purchaser will endeavour to communicate answers to requests for clarification and amendments to this IFB to the prospective Bidders as soon as practicable.

2.13.2. Bidders are cautioned that the Purchaser will rely exclusively on electronic mail to manage all correspondence related to this IFB, including IFB amendments and clarifications.

2.13.3. Bidders are cautioned that electronic transmission of documentation which contains classified information is not allowed.

2.14. Supplemental Agreements

2.14.1. Bidders are required, in accordance with the certificate at Annex B-7 of these Instructions to Bidders, to disclose any prospective Supplemental Agreements that are required by national governments to be executed by NATO/NCI Agency as a condition of Contract performance.

2.14.2. Supplemental Agreements are typically associated with, but not necessarily limited to, national export control regulations, technology transfer restrictions and end user agreements.

2.14.3. Bidders are cautioned that failure to provide full disclosure of the anticipated requirements and the terms thereof, to the best of the Bidder's knowledge and experience, may result in the Purchaser withholding award of the Contract or cancelling an executed Contract if it is discovered that the terms of such Supplemental Agreements contradict salient conditions of the Prospective Contract, to the extent that either key objectives cannot be accomplished or basic contract principles and Purchaser rights have been abridged.

2.15. Notice of Limitations on Use of Intellectual Property Delivered to the Purchaser

2.15.1. Bidders are instructed to review Clause 28 of the Contract Special Provisions and Clause 30 of the Contract General Provisions set forth in Parts II and III of Book II herein. These Clauses set forth the definitions as well as the terms and conditions regarding the rights of the Parties concerning Intellectual Property (IP) developed and/or delivered under this Contract or used as a basis of development under this Contract.

- 2.15.2. Bidders are required to disclose for deliverables pertaining to all Contract Work Packages, and in accordance with Annexes B-10, B-11 and B-12 , the Intellectual Property proposed to be used by the Bidder that will be delivered with either Background Intellectual Property Rights or Third Party Intellectual Property Rights. Bidders are required to identify such Intellectual Property and the basis on which the claim of Background or Third Party Intellectual Property is made.
- 2.15.3. Bidders are further required to identify any restrictions on Purchaser use of the Intellectual Property that is not in accordance with the definitions and rights set forth in the provisions of the Book II Prospective Contract concerning use or dissemination of such Intellectual Property.
- 2.15.4. Bidders are informed that any restriction on use or dissemination of Intellectual Property that conflicts with the terms and conditions of Book II or with the objectives and purposes of the Purchaser as stated in the Prospective Contract, shall render the bid non-compliant.
- 2.16. **Receipt of an Unreadable Electronic Bid**
- 2.16.1. If a bid received at the NCI Agency's facility through electronic means is unreadable to the degree that conformance to the essential requirements of the solicitation cannot be ascertained, the CO shall immediately notify the Bidder that the bid will be rejected unless the Bidder provides clear and convincing evidence:
- 2.16.1.1. of the content of the bid as originally submitted, and;
- 2.16.1.2. that the unreadable condition of the bid was caused by Purchaser software or hardware error, malfunction, or other Purchaser mishandling.
- 2.16.2. A Bid that fails to conform to the above requirements may be declared noncompliant and may not be evaluated further by the Purchaser.
- 2.16.3. If it is discovered, during either the Administrative, Price or Technical evaluation, that the Bidder has submitted an unreadable electronic bid, the Bidder may be determined to have submitted a non-compliant bid.

SECTION 3 BID PREPARATION INSTRUCTIONS

3.1. General

- 3.1.1. Bidders shall prepare and submit their Bid in accordance with the requirements and format set forth in this IFB. Compliance with all bid submission requirements is mandatory. Failure to submit a bid in conformance with the stated requirements may result in a determination of non-compliance by the Purchaser and the elimination of the bid from further consideration.
- 3.1.2. Bidders shall not simply restate the IFB requirements. A Bid shall demonstrate that a Bidder understands the terms, conditions and requirements of the IFB and its ability to provide all the services and deliverables listed in the Schedules of the prospective Contract. Furthermore, Bidders shall clearly illustrate the technology, functionalities, processes and procedures being proposed and their level of maturity in relation to the requirements to be satisfied as expressed in the Evaluation Criteria (Section 4) and the Statement of Work (SOW). To this extent, the statements and illustrations made by the Bidders in their technical submission shall be demonstrated by use of Technical Videos described at paragraph 3.5.6.5 which is part of the technical evaluation as described in paragraph 4.3.3.
- 3.1.3. Bidders are informed that the quality, completeness, thoroughness and clarity of the bid will affect the overall scoring of the bid. Although the Purchaser may request clarification of the bid, it is not required to do so and may make its determination on the content of the bid as submitted. Therefore, Bidders shall assume that inconsistencies, omissions, errors, lack of detail and other qualitative deficiencies in the submitted bid will have a negative impact on the final Best Value score.
- 3.1.4. Partial Bids and/or bids containing conditional statements will be declared non-compliant.
- 3.1.5. Bidders are advised that the Purchaser reserves the right to incorporate the successful Bidder's Offer in whole or in part by reference in the resulting Contract.
- 3.1.6. The specific format for each volume is stated in paragraph 3.2.
- 3.1.7. The level of classification of any documentation submitted as part of the Bid shall not be higher than NATO UNCLASSIFIED (NU).
 - 3.1.7.1. All notices and communications regarding this IFB shall be written and conducted in English. All documentation submitted as part of the bid shall be in English.

3.2. Bid Package Content and Labelling

3.2.1. The complete Bid shall consist of three distinct volumes as shown in the following table.

Volume/folder	Document format and quantity details	Document labelling
I: Administration	<p><u>One folder on the USB drive, which includes two pdf files:</u></p> <ul style="list-style-type: none"> • The completed, signed certificates found in Annex B: Prescribed administrative forms and certificates, provided as a single pdf file • A copy of the Bid Guarantee. Note: this shall also be delivered by email directly to: <i>NCIAFinanceTreasuryBankGuarantee@ncia.nato.int</i> <p>➤ All of the required contents are detailed in Section 3.3.</p>	<ul style="list-style-type: none"> • 115791-DEMETER-Company Name–Vol-I–Bid-Administration.pdf • 115791-DEMETER-Company Name–Vol-I–Bid-Guarantee.pdf
II: Price	<p><u>One folder on the USB drive, which includes:</u></p> <ul style="list-style-type: none"> • One Excel file, using the Bidding Sheets template provided. • One electronically signed PDF conversion of the Excel file <p>➤ All of the required contents are detailed in Section 3.4.</p>	<ul style="list-style-type: none"> • 115791-DEMETER-Company Name–Vol-II–Price.xls • 115791-DEMETER-Company Name–Vol-II–Price.pdf
III: Technical	<p><u>One folder on the USB drive, which includes:</u></p> <ul style="list-style-type: none"> ➤ Executive Summary: One PDF file. ➤ Table of Content: One PDF file. ➤ Technical Volume Cross Reference Matrix: One Excel file. <p>➤ Part I, Engineering Proposal</p> <ul style="list-style-type: none"> ○ Product Description: One PDF file. ○ Technical Videos: MP4 or PowerPoint files 	<ul style="list-style-type: none"> • 115791-DEMETER-Company Name–Vol-III–Tech001–Executive-Summary.pdf • 115791-DEMETER-Company Name–Vol-III–Tech002–Table-of-Contents.pdf • 115791-DEMETER--Company Name–Vol-III–Tech003-Technical-Volume-Cross-Reference-Matrix.xls <p>- Part I – Engineering Proposal</p>

	<ul style="list-style-type: none"> ➤ Part II, Supportability Proposal <ul style="list-style-type: none"> ○ Supportability Bidders Qualification: One PDF file. ○ Product Roadmap: One PDF file. ○ Support Package: One PDF file. ○ Training Package: One PDF file. ➤ Part III, Management Proposal <ul style="list-style-type: none"> ○ Management Bidders Qualification: One PDF file. ○ Initial Project Management Plan: One PDF file. ○ Initial Risk, Action, Issue, Decision Register: One Excel file. ○ Initial Project Master Schedule: One MS Project file. ➤ All of the required contents are detailed in Section 3.5. 	<ul style="list-style-type: none"> • 115791-DEMETER-Company Name–Vol-III–Tech004-Part I-Product Description.pdf • 115791-DEMETER-Company Name–Vol-III–Tech005-Part I-Technical-Videos-NoX.mp4 (where 'X' is number) - Part II – Supportability Proposal • 115791-DEMETER-Company Name–Vol-III–Tech006– Part II-BQS.pdf • 115791-DEMETER-Company Name–Vol-III–Tech007–Part II-Product-Roadmap.pdf • 115791-DEMETER-Company Name–Vol-III–Tech008–Part II-Support-Package.pdf • 115791-DEMETER-Company Name–Vol-III–Tech009–Part II-Training-Package.pdf - Part III – Management Proposal • 115791-DEMETER-Company Name–Vol-III–Tech010-Part III-BQM.pdf • 115791-DEMETER-Company Name–Vol-III–Tech011- Part III-Initial-PMP.pdf • 115791-DEMETER-Company Name–Vol-III–Tech012- Part III-Initial-RAID.xls • 115791-DEMETER-Company Name–Vol-III–Tech013-Part III-Initial-PMS.mpp
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- 3.2.2. None of the documentation submitted shall be password protected.
- 3.2.3. "Arial" fonts in size 12, or equivalent, shall be used for normal text, and "Arial Narrow" fonts not smaller than size 10, or equivalent, for tables and graphics.
- 3.2.4. "Company Name" – in the names of the individual files, the name of the Bidder shall be abbreviated to no more than 10 characters. For example, if a company's name is "Computer and Technology Research Company", the company name could be shorted to CTRC in the email and file names.

3.3. Volume I: Bid Administration

- 3.3.1. As explained in section 2.11, the electronic PDF file of the Bid Guarantee (paragraph 3.4.3.17) is to be submitted to:
NCIABankGuarantee@ncia.nato.int
- 3.3.2. In addition, an Original (Paper) copy of the Bid Guarantee shall be sent. This Original (Paper) shall be received no later than seven (7) business days after the Bid Closing Date (in 2.3.1). This Original (Paper) copy shall be sent to:
- ATTN: Emira Kapetanovic, Contracting Assistant
NCI Agency Boulevard Leopold III
B-1110 Brussels, Belgium Tel: +32 2 707 8303
- 3.3.3. The volume shall include the certificates set forth in the Annex B: Prescribed administrative forms and certificates to these Bidding Instructions, signed in the original by an authorised representative of the Bidder. The text of the certificates must not be altered in any way. The certificates are as follows:
- Annex B-1: Certificate of Legal Name of Bidder
 - Annex B-2: Acknowledgement of Receipt of IFB Amendments and Responses to Clarification Requests Certificate of Independent Determination
 - Annex B-3: Certificate of Independent Determination
 - Annex B-4: Certificate of Bid Validity
 - Annex B-5: Certificate of Exclusion of Taxes, Duties and Charges
 - Annex B-6: Comprehension and Acceptance of Contract Special and General Provisions
 - Annex B-7: Disclosure of Requirements for NCI Agency Execution of Supplemental Agreements
 - Annex B-8: Certificate of Compliance AQAP 2110 or ISO 9001:2015 or Equivalent
 - Annex B-9: List of Prospective Subcontractors
 - Annex B-10: Bidder Background IPR
 - Annex B-11: List of Subcontractor and Third Party IPR
 - Annex B-12: Certificate of Origin of Equipment, Services, and Intellectual Property
 - Annex B-13: Certificate of Price Ceilings
 - Annex B-14: Disclosure of Involvement of Former NCI Agency Employment

- Annex B-15: NCI Agency AD. 05.00, Code of Conduct: Post Employment Measures (Please note this annex does not need to be signed; it is referenced in Annex B-14)
- Annex C: Bid guarantee – Standby letter of credit

3.4. **Volume II: Price Quotation**

3.4.1. General Rules

3.4.1.1. Bidders are advised that the total price shall not exceed:

- the ceiling of EUR 16,837,386 for the contract CLINs 1 to 3.
- the ceiling of EUR 18,430,694 for the contract CLIN 4

3.4.1.2. Bids submitted in excess of the ceiling stated in paragraph 3.4.1.1 will be determined to be non-compliant and eliminated from further consideration.

3.4.1.3. CLIN 3 and 4 are evaluated options; CLIN 5 and CLIN 6 will not be evaluated.

3.4.1.4. Bidders shall prepare their Price Quotation by completing the Bidding Sheets, in accordance with the instructions specified in Annex A: Bidding sheets.

3.4.1.5. The structure of the Bidding Sheets shall not be changed, other than as indicated elsewhere, nor should any quantity or item description in the Bidding Sheets. The currency(ies) of each Contract Line Item and sub-item shall be shown. The prices provided shall be intended as the comprehensive total price offered for the fulfilment of all requirements as expressed in the IFB documentation including but not limited to those expressed in the SOW and Software Requirements Specification (SRS).

3.4.1.6. Bidders shall furnish Fixed Prices for all required items in accordance with the format set forth in the Instructions for preparation of the Bidding Sheets. This includes Fixed Prices for all optional CLINs.

3.4.1.7. Offered prices shall not be "conditional" in nature. Any comments supplied in the Bidding Sheets which are conditional in nature, relative to the offered prices, may result in a determination that the Bid is non-compliant.

3.4.1.8. Bidders are responsible for the accuracy of their Price Quotations. Price Quotations that have apparent computational errors may have such errors resolved in the Purchaser's favour or, in the case of gross omissions, inconsistencies or errors, may be determined to be non-compliant.

3.4.1.9. Bidders shall quote in their own national currency or in EURO. Bidders may also submit bids in multiple currencies including other NATO member states' currencies under the following conditions:

3.4.1.9.1. The currency is of a "participating country" in the project, and

3.4.1.9.2. The Bidder can demonstrate, either through sub-contract arrangements or in its proposed work methodology, that it will have equivalent expenses in that currency. All major subcontracts and their approximate anticipated value should be listed on a separate sheet and included with the Price Quotation.

- 3.4.1.10. The Purchaser, by virtue of his status under the terms of Article IX and X of the Ottawa Agreement, is exempt from all direct and indirect taxes (incl. VAT) and all customs duties on merchandise imported or exported.
- 3.4.1.11. Bidders shall therefore exclude from their price Bid all taxes, duties and customs charges from which the Purchaser is exempted by international agreement and are required to certify that they have done so through execution of the Certificate at Annex B-5.
- 3.4.1.12. Unless otherwise specified in the instructions for the preparation of Bidding Sheets in Annex A: Bidding sheets, all prices quoted in the proposal shall be on the basis that all deliverable items shall be delivered "Delivery Duty Paid (DDP)" in accordance with the International Chamber of Commerce INCOTERMS ® 2010.
- 3.4.1.13. The Bidder's attention is directed to the fact that the Price Volume shall contain no document and/or information other than the priced copies of the Bidding Sheets, and a PDF copy of the Offer Summary tab. Any other document will not be considered for evaluation.
- 3.4.1.14. All prices bid shall be clearly traceable in the detailed bidding sheets.
- 3.4.1.15. Any adjustment or discount to prices should be clearly traceable to the lowest level of breakdown in the bidding sheets and should not be aggregated or summed. Any lack of clarity or traceability may render the bid non-compliant.
- 3.4.1.16. The Bidder understands that there is no obligation under this contract for the Purchaser to exercise any of the optional line items and that the Purchaser bears no liability should it decide not to exercise the options (totally or partially). Further, the Purchaser reserves the right to order another Contractor (or the same), to perform the tasks described in the optional line items of the current contract through a new contract with other conditions.

3.5. Volume III: Technical Proposal Package

- 3.5.1. No information disclosing or contributing to disclose the bid price shall be made part of the Technical Volume. Failure to abide to this prescription shall result in the bid being declared non-compliant.
- 3.5.2. It is of utmost importance that Bidders respond to all of the technical requirements contained in the IFB Statement of Work (including all Annexes) and all the bidding instructions, not only with an affirmation of compliance but also with an explanation of how each requirement will be met.
- 3.5.3. Executive Summary
 - 3.5.3.1. Bidders shall provide an overview of the features of their technical proposal in the form of an executive summary. This summary shall demonstrate the Bidder understands the project, the implementation environment and the risks involved.

- 3.5.3.2. The Executive Summary shall not exceed 15 pages.
- 3.5.3.3. This summary shall provide a general description of the major points contained in each of the required sections of the technical proposal and shall demonstrate the depth of the Bidder's understanding of the project, implementation environment and the problems and risks of project implementation. The Bidder shall highlight the strengths of their proposal, also in terms of minimising potential problems and reducing risks while meeting the overall schedule. The Bidder shall further highlight the key points of the technical approach and solution that he believes deserve recognition under a Best Value evaluation scheme.
- 3.5.4. Table of Contents
 - 3.5.4.1. Bidders shall compile a detailed Table of Contents (no page limit) which lists not only the Section Headings but also the major sub-sections and the topic headings required set forth in these Instructions or implicit in the organisation of the Technical Proposal.
 - 3.5.4.2. Heading, section and subsection titles should be appropriately descriptive in order to permit the Purchaser's bid evaluation team to locate relevant material expeditiously.
 - 3.5.4.3. Table of Contents shall also include the reference to the location (path) of each of the Bid Package Volumes and Parts (Ref. Section 3.2) on the delivered USB drive.
- 3.5.5. Technical Volume Cross Reference Matrix (TVCRM)
 - 3.5.5.1. The Bidder shall provide a cross reference matrix to indicate how and where DEMETER evaluation criteria and sub-criteria have been satisfied within the Bid Proposal.
 - 3.5.5.2. The Bidder shall complete the TVCRM by including Bidder's mapping (reference) of each evaluation ~~criteria and~~ sub-criteria to a specific section of the Technical Bid (i.e. Product Description and/or Technical Video). Instructions are provided in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
 - 3.5.5.3. The completed Matrix serves as an index for the Purchaser's Technical Evaluation and also as an index for the Bidder to ensure that all the required information has been provided in the submitted Technical Proposal.
 - 3.5.5.4. In order to support the Bidder in populating the TVCRM, Purchaser is additionally providing Evaluation Criteria to Requirements Matrix (Annex E). This Matrix provides traceability from Evaluation criteria to Capability/Project requirements and Software Requirements Specification (SRS).
- 3.5.6. Part I - Engineering Proposal
 - 3.5.6.1. This part provides technical product information about the available capabilities and features of the proposed COTS software package and the selection criteria (defined in the TVCRM).

- 3.5.6.2. In order to evaluate how well the offered COTS meet the Engineering Selection Criteria, the Bidder shall submit the following documents as part of the Engineering Proposal Package:
- Product Description
 - Technical Videos
- 3.5.6.3. The Engineering Proposal package shall not include detailed information which is publicly available (e.g. Development Methodology).
- 3.5.6.4. Product Description
- 3.5.6.4.1. The Bidder is expected to offer a COTS software package. The Bidder shall provide a Product Description describing its COTS product. The information in the Product Description may include:
- Product overview
 - Product capabilities and the existing feature set
 - User/reference manuals or online help
 - Hardware/software requirements
 - Technical architecture and design key features, with emphasis on interoperability and available interfaces (i.e. APIs)
 - Supported systems (i.e. Operating Systems) and environments (on premise, cloud, hybrid)
 - Type of source code used (open source, proprietary) and licenses requirements
 - Available frontend (i.e. rich client, thin/web-based) and backend deployment options (i.e. bare metal, virtual machines, containers)
 - Previous or existing usage in NATO or National exercises
 - Latest Product Release Notes
 - Accreditation and other security documents (i.e. NIAPC), etc.
- 3.5.6.5. Technical Videos
- 3.5.6.5.1. The Bidder shall demonstrate the functional capabilities of their COTS product by providing a series of documentation, video clips and/or animated presentations where the Human-Machine (user) Interface (HMI) can be seen.
- 3.5.6.5.2. The total combined duration of the technical videos shall not exceed one (1) hour.
- 3.5.6.5.3. The purpose of the Technical Videos is to highlight the product current functionalities and how it can support the SRS as well as the evaluation criteria defined in the TVCRM.
- 3.5.7. Part II - Supportability Proposal
- 3.5.7.1. This part of the Technical Proposal covers the Bidder's approach to meeting requirements related to Deployment, Integrated Product Support (IPS), Operations and Maintenance (O&M), and Training requirements.
- 3.5.7.2. The following documents shall be the part of Supportability Proposal Package:

- Supportability Bidder Qualifications
 - Product Roadmap
 - Support Package
 - Training Package
- 3.5.7.3. The Supportability Proposal package shall not include detailed information which is publicly available (e.g. Support Framework).
- 3.5.7.4. Supportability Bidder Qualifications
- 3.5.7.4.1. The Bidder shall detail its experience and expertise in the area of COTS product maintenance and support.
- 3.5.7.4.2. The Bidder shall provide the information in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.7.4.3. The Bidder Qualifications document shall not exceed 30 pages.
- 3.5.7.5. Product Roadmap
- 3.5.7.5.1. The Bidder shall provide the Product roadmap of its COTS product(s).
- 3.5.7.5.2. The Bidder shall provide the information in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.7.6. Support Package
- 3.5.7.6.1. The Bidder shall provide a package describing its COTS product(s) support and maintenance options.
- 3.5.7.6.2. The Bidder shall provide the information in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.7.7. Training Package
- 3.5.7.7.1. The Bidder shall provide a package describing its COTS product(s) training options.
- 3.5.7.7.2. The Bidder shall provide the information in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.8. Part III - Management Proposal
- 3.5.8.1. This part shall address the Bidder's overall understanding of the requirements of the Purchaser as described in the SOW. The Bidder's strategic vision, objectives and constraints shall be addressed and related to the technical solution described in the Bid. The Management Proposal shall furthermore describe the Bidder's overall approach to Project, Risk and Schedule management.
- 3.5.8.2. The submitted documents shall include sufficient information to demonstrate the Bidder's understanding of the key challenges involved in project DEMETER and demonstrate that the Bidder is proposing an approach that can deal with these challenges.

- 3.5.8.3. The following documents shall be part of the Management Proposal Package:
- Management Bidder Qualifications
 - Initial Project Management Plan (PMP)
 - Initial Project Master Schedule (PMS)
 - Initial Risks, Actions, Issues, Decisions (RAID) Register
- 3.5.8.4. The Management Proposal package shall not include detailed information which is publicly available (e.g. Project Management Methodology).
- 3.5.8.5. Management Bidder Qualifications
- 3.5.8.5.1. The Bidder shall detail its experience and expertise in the area of delivery and management of similar-sized projects for geographically dispersed organizations, with particular emphasis on recent experience in deploying and integrating COTS software solutions for Land C2 systems to meet military or government requirements.
- 3.5.8.5.2. The Bidder shall provide the information in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.8.5.3. The Bidder Qualifications document shall not exceed 30 pages.
- 3.5.8.6. Initial Project Management Plan (PMP)
- 3.5.8.6.1. The Bidder shall provide an initial PMP in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.8.6.2. A full PMP is not required as part of the Bid. However, the Bidder shall provide sufficient detail in the initial PMP such that the Purchaser will be capable of assessing the feasibility of the project.
- 3.5.8.6.3. The initial PMP shall not exceed 40 pages.
- 3.5.8.7. Initial Project Master Schedule (PMS)
- 3.5.8.7.1. The Bidder shall provide an initial PMS in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.8.7.2. A full PMS is not required as part of the Bid. However, the Bidder shall provide sufficient detail in the initial PMS such that the Purchaser will be capable of assessing the feasibility of the project.
- 3.5.8.8. Initial Risks, Assumptions, Issues, Decisions (RAID) Register
- 3.5.8.8.1. The Bidder shall provide an initial RAID Register in accordance with the requirements as described in Annex D: Technical Volume Cross Reference Matrix (TVCRM).
- 3.5.8.8.2. Only the Initial Risk Register is requested at this time.

SECTION 4 BID EVALUATION AND CONTRACT AWARD

4.1. General

- 4.1.1. The evaluation of Bids will be made by the Purchaser solely on the basis of the requirements specified in this IFB.
- 4.1.2. All bids will be evaluated solely using the formula, evaluation criteria and factors contained herein. Technical Proposals will be evaluated strictly against the technical criteria and not against other Technical Proposals submitted.
- 4.1.3. The evaluation of bids and the determination as to the Best Value Score will be based only on that information provided by the Bidder and contained in its Bid. The Purchaser shall not be responsible for locating or securing any information that is not clearly and unequivocally provided and identified in the Bid. Documents included by reference only will not be considered.
- 4.1.4. The Bidder shall furnish with his Bid all information requested by the Purchaser in SECTION 3, Bid Preparation Instructions. Significant omissions and/or cursory submissions will result in a reduced Best Value Score and may result in a determination of non-compliance without recourse to further clarification. The information provided by the Bidder in its proposal shall be to a level of detail necessary for the Purchaser to fully comprehend exactly what the Bidder proposes to furnish as well as his approach and methodologies.
- 4.1.5. During the evaluation, the Purchaser may request clarification of the Bid from the Bidder and the Bidder shall provide sufficiently detailed information in connection with such requests as to permit the Purchaser to make a final assessment of the bid based upon the facts. The purpose of such clarifications will be to resolve ambiguities in the bid and to permit the Bidder to state his intentions regarding certain statements contained therein. The purpose of the clarification stage is not to elicit additional information from the Bidder that was not contained in the original submission or to allow the Bidder to supplement cursory answers or omitted aspects of the Bid. The Bidder is not permitted any cardinal alteration of the Bid regarding technical matters and shall not make any change to his price quotation at any time.
- 4.1.6. The Bidder's prompt response to the Purchaser's clarification requests is important and therefore failure to provide the requested clarifications within the time-limits set forth in the specific Clarification Requests (minimum 24 hours next working day) may cause the Bid to be deemed non-compliant.
- 4.1.7. The Purchaser reserves the right, during the evaluation and selection process, to verify any statements made concerning experience, facilities, or existing designs or materials by making a physical inspection of the Bidder's facilities and capital assets. This includes the right to validate, by physical inspection, the facilities and assets of proposed Subcontractors.

4.1.8. The evaluation will be conducted in accordance with NATO Infrastructure Bidding Procedures as set forth in the document, and the Best Value evaluation procedures set forth in AC/4-D(2008)0002, "Procedures and Practices for Conducting NSIP International Competitive Bidding Using Best Value Methodology". The bid evaluation methodology to be followed, including the top-level evaluation criteria and their weighting factors, were agreed by the NATO Investment Committee (IC).

4.2. **Best Value Award Approach and Bid Evaluation Factors**

4.2.1. The Contract resulting from this IFB will be awarded to the Bidder whose conforming offer provides the Best Value to NATO, as evaluated by the Purchaser in accordance with the requirements of this IFB and in accordance with the evaluation method specified in this section.

4.2.2. The Best Value Final Score (FS) will be the sum of the weighted Technical Score (TS) plus the Price Score (PS) according to the following formula:

$$FS = (PS*20\%) + (TS*80\%) \leq 100$$

4.2.3. The bid having the highest final score will be selected as the successful bid unless there is a statistical tie.

4.2.4. Price Score – 20% weight

4.2.4.1. The Price Score (PS) shall be determined according to the following formula:

$$PS = 100 * (1 - (Bid Price / (2 * Average Bid Price)))$$

4.2.4.2. Upon approval of the price evaluation report, the technical weighting scheme will be opened and the technical weight will be applied to the raw Technical Score (TS) to produce the weighted technical score.

4.2.5. Technical Score – 80% weight

4.2.5.1. The Technical Score (TS) will be the sum of the weighted Engineering Score (ES), Supportability Score (SS) and Management Score (MS) according to the following formula:

$$TS = ES*70\% + SS*20\% + MS*10\% \leq 100$$

4.2.5.2. The cumulative technical score of the bid will be determined by evaluating and scoring the different areas of submission (Engineering, Management and Supportability) in accordance with the prescriptions of the paragraphs below.

4.2.5.3. The Purchaser's priorities in the evaluation of the Technical Proposal are described in the form of sub criteria in Section 4.5 below. The [sub-level 3](#) criteria are listed in descending order which reflects the relative importance that the Purchaser places on each [sub-criterion](#).

4.2.5.4. The scores obtained from the Evaluation Criteria will be aggregated through the formula specified in paragraph 4.2.2 in order to obtain the overall score of each bid.

4.2.5.5. A weighting scheme for sub-criteria values has been developed by Purchaser staff not associated with the Technical Evaluation. This weighting scheme has been sealed and is not known to any of the Purchaser staff beyond the originator and the Chairman of the Contracts Award Board, who are not evaluators within the framework of this IFB or in any manner or form are made privy of evaluation information throughout the course of the evaluation process. The weighting scheme remains sealed until Step 4 of the evaluation process, described in paragraph 4.7.

4.3. **Evaluation Procedure**

4.3.1. The evaluation will be conducted in a 4-step process as described below:

4.3.2. Step 1: Administrative Compliance

4.3.2.1. Received Bids will be reviewed for compliance with the mandatory administrative requirements specified in paragraph 4.4. Bids not meeting all of the mandatory requirements shall be determined to be non-compliant and not considered for further evaluation.

4.3.3. Step 2: Parallel Technical and Price Evaluations

4.3.3.1. All Bids having successfully passed Step 1, in Step 2, the Technical and Price evaluations will be performed in parallel. That is, independent teams of evaluators will evaluate the bids as described in Sections 4.5 and 4.64.5.2.3.2 at the same time, instead of waiting for the technical evaluations to be completed before opening the price volumes. However, the final price scores cannot be calculated until after the technical evaluations are complete, since the price score only includes those proposals evaluated as technically compliant.

4.3.3.2. Bidders are advised that, since the evaluations are being conducted in parallel, they should not assume that they have been evaluated as technically compliant if they receive a clarification request regarding the Price volume.

4.3.3.3. Step 2A: Technical Evaluation

4.3.3.3.1. The Technical Proposal Packages will be evaluated against the predetermined top-level criteria and identified sub-criteria (see paragraph 4.5), and scored accordingly. This evaluation will result in "raw" or unweighted technical scores against the criteria.

4.3.3.3.2. Bidders are advised that any Bid whose Technical Proposal receives a composite score of less than 20% of the maximum score possible in any of the sub-criteria listed under paragraph 4.5 may be determined by the Purchaser to be non-compliant and not further considered for award.

4.3.3.4. Step 2B: Price Evaluation

4.3.3.4.1. The Price Quotations of all bids will be opened, evaluated and scored in accordance with paragraph 4.6.

4.3.4. Step 3: Determination of Apparent Successful Bid

4.3.4.1. Upon completion of the Price Evaluation, the Best Value Bid will be determined in accordance with paragraph 4.7 hereafter.

4.4. **Evaluation Step 1 – Administrative Compliance**

4.4.1. Bids will be reviewed for compliance with the formal requirements for Bid submission as stated in this IFB and the content of the Administrative Documentation Package. The evaluation of the Administrative Documentation Package will be made on its completeness, conformity and compliance to the requested information. This evaluation will not be scored in accordance with Best Value procedures but is made to determine if a bid complies with the requirements of the Bidding Instructions and Prospective Contract. Specifically, the following requirements shall be verified:

4.4.1.1. The Bid was received by the Bid Closing Date and Time,

4.4.1.2. The Bid is packaged and marked properly,

4.4.1.3. The Bid Administration Package contains the documentation listed in paragraph 3.3 and complies with the formal requirements established in paragraph 3.1.

4.4.1.4. The Bidder has not taken exception to the Terms and Conditions of the Prospective Contract or has not qualified or otherwise conditioned his offer on a modification or alteration of the Terms and Conditions or the language of the Statement of Work.

4.4.1.5. Receipt of an unreadable electronic bid. If a bid received is unreadable to the degree that conformance to the essential requirements of the solicitation cannot be ascertained, the CO immediately shall notify the Bidder that the bid will be rejected unless the Bidder provides clear and convincing evidence:

4.4.1.5.1. Of the content of the bid as originally submitted; and,

4.4.1.5.2. That the unreadable condition of the bid was caused by Purchaser software or hardware error, malfunction, or other Purchaser mishandling.

4.4.2. A Bid that fails to conform to the above requirements may be declared non-compliant and may not be evaluated further by the Purchaser.

4.4.3. Bids that are determined to be administratively compliant will proceed to Step 2A, Technical Evaluation, and Step 2B, Price Evaluation.

4.4.4. Notwithstanding paragraph 4.4.3 if it is later discovered in the evaluation of the Administrative Package, Technical Bid or the Price Quotation that the Bidder has taken exception to the Terms and Conditions of the Prospective Contract, or has qualified and/or otherwise conditioned its offer on a modification or alteration of the Terms and Conditions or the language of the SOW, the Bidder may be determined to have submitted a non-compliant bid at the point in time of discovery.

4.5. Evaluation Step 2A – Technical Evaluation

4.5.1. The Technical Proposal will be evaluated against the criteria and sub-criteria set forth in Annex D: Technical Volume Cross Reference Matrix (TVCRM).

4.5.2. Mapping of criteria and sub-criteria against the Bidder's provided evidences shall be done in the TVCRM (as per Section 3.5.5).

4.5.2.1. Engineering Criteria (70% weight)

4.5.2.1.1. The engineering evaluation will be based on the criteria and sub-criteria which appear in descending order of importance as in Annex D: Technical Volume Cross Reference Matrix (TVCRM).

4.5.2.1.2. For each of the listed engineering ~~criteria and~~ sub-criteria, the Bidder shall provide the following evidence:

- Product Description or
- Technical Video

4.5.2.2. Supportability Criteria (20% weight)

4.5.2.2.1. The supportability evaluation will be based on the criteria / sub-criteria listed in descending order of importance in Annex D: Technical Volume Cross Reference Matrix (TVCRM).

4.5.2.3. Management Criteria (10% weight)

4.5.2.3.1. The management evaluation will be based on the criteria / sub-criteria which are listed in descending order of importance in Annex D: Technical Volume Cross Reference Matrix (TVCRM).

4.6. Evaluation Step 2B – Price Evaluation

4.6.1. As stated in Section 4.3.1.2, the Price evaluation will be done in parallel to the Technical evaluation.

4.6.2. The Bidder's Price Quotation will initially be assessed for compliance against the following criteria:

4.6.2.1. The bid price complies with the requirement relevant to the Bid Ceiling Price.

4.6.2.2. In particular, the Bidders shall note that the amount of the CLINs SHALL NOT exceed amounts, as described in paragraph 3.4.1.1.

4.6.2.3. The Price Quotation meets the pricing prescriptions as well as the requirements for preparation and submission of the Price Quotation set forth in the Bid Preparation Section 3.4 and the Instructions for Preparation of the Bidding Sheets in Annex A: Bidding sheets.

4.6.2.4. Detailed pricing information has been provided and is adequate, accurate, traceable, and complete.

4.6.2.5. The Price Quotation meets requirements for price realism and balance as described below in paragraph 4.6.6 and does not exceed the defined price ceiling as per paragraph 4.6.2.2.

- 4.6.3. A bid which fails to meet the compliance standards defined in this section may be declared non-compliant and may not be evaluated further by the Purchaser.
- 4.6.4. Basis of Price Comparison
- 4.6.4.1. The Purchaser will convert all prices quoted into EURO for purposes of comparison and computation of price scores and compliance with the stated price ceiling. The exchange rate to be utilised by the Purchaser will be the average of the official buying and selling rates of the European Central Bank at close of business on the last working day preceding the Bid Closing Date.
- 4.6.4.2. For computation of price scores the Purchaser will use a Present Value analysis of the evaluated prices. This calculation will convert the annual value, per the Payment Schedule, to a total Present Value. The rate to be utilised by the Purchaser will be the European Central Bank 10 Year Euro bond rate at close of business on the last working day preceding the Bid Closing Date.
- 4.6.4.3. The Evaluated Bid Price to be inserted into the formula specified at paragraph 4.2.4 will be the Total Present Value of the annual values of Contract CLIN 1 to CLIN 4. See example Present Value conversion:

10 Year Euro Bond Rate		3.21%
Year	Fixed Price	Present Value
1	€ 2,000,000	€ 2,000,000
2	€ 2,000,000	€ 1,937,797
3	€ 2,000,000	€ 1,877,528
4	€ 2,000,000	€ 1,819,134
5	€ 2,000,000	€ 1,762,556
6	€ 2,000,000	€ 1,707,737
7	€ 2,000,000	€ 1,654,624
8	€ 2,000,000	€ 1,603,163
9	€ 2,000,000	€ 1,553,302
10	€ 2,000,000	€ 1,504,991
11	€ 2,000,000	€ 1,458,184
12	€ 2,000,000	€ 1,412,832
13	€ 2,000,000	€ 1,368,890
Total	€ 26,000,000	€ 21,660,737

- 4.6.5. Accuracy – Order of Precedence
- 4.6.5.1. Bidders are responsible for the accuracy of the price quotation provided. In case of inconsistencies between different parts of the bidding sheets and notwithstanding the possibility for the Purchaser, at its sole discretion, to resort to the clarification procedure described at paragraph 4.1.5, for the purpose of determining the bid price subject to evaluation as per paragraph 4.6.5 (hence computable in the Best Value bid via the application of the formula at paragraph 4.2.4), the fixed prices on the ‘Offer Summary’ worksheet of the bidding sheets will be taken forward as the price quotation.

4.6.6. Price Balance and Realism

4.6.6.1. In those cases in which the prices quoted in relation with this IFB appear to be unreasonably low in relation to the performance required under the prospective contract and/or the level of effort associated with the tasks, the Purchaser will reserve the right to request the Bidder clarifications aimed to demonstrate the rationale for such circumstances.

4.6.6.2. Indicators of an unrealistically low Bid may be the following, amongst others:

4.6.6.2.1. Labour Costs that, when amortised over the expected or proposed direct labour hours, indicate average labour rates far below those prevailing in the Bidder's locality for the types of labour proposed;

4.6.6.2.2. Direct Material costs that are considered to be too low for the amounts and types of material proposed, based on prevailing market prices for such material; or

4.6.6.2.3. Numerous Line Item prices for supplies and services that are provided at no cost or at nominal prices.

4.6.6.3. If the Purchaser has reason to suspect that a Bidder has artificially debased its prices in order to secure contract award, the Purchaser will request clarification of the Bid in this regard and the Bidder shall provide explanation on one of the following bases:

4.6.6.3.1. An error was made in the preparation of the price quotation. In such a case, the Bidder must document the nature of the error and show background documentation concerning the preparation of the price quotation that makes a convincing case that a mistake was made by the Bidder. In such a case, the Bidder shall petition the Purchaser to either remain in the competition and accept the Contract at the offered price, or to withdraw from the competition;

4.6.6.3.2. The Bidder has a competitive advantage due to prior experience or industrial/technological processes that demonstrably reduce the costs of Bidder performance and therefore the price offered is realistic. Such an argument must support the technical Bid offered and convincingly and objectively describe the competitive advantage and the net savings achieved by this advantage over standard market practices and technology; or

4.6.6.3.3. The Bidder recognises that the submitted price quotation is unrealistically low compared to its cost of performance and, for business reasons, the Bidder is willing to absorb such a loss. Such a statement can only be made by the head of the business unit submitting the Bid and will normally be made at the level of Chief Operating Officer or Chief Executive Officer. In such a case, the Bidder shall estimate the potential loss and show that the financial resources of the Bidder are adequate to withstand such reduction in revenue.

- 4.6.6.4. If a Bidder fails to submit a comprehensive and compelling response on one of the bases above, the Purchaser may determine the Bid submitted as non-compliant. If the Bidder responds on the basis of paragraph 4.6.6.3.1 above and requests to withdraw from the competition, the Purchaser may, depending on the nature and gravity of the mistake, allow the Bidder to withdraw.
- 4.6.6.5. If the Purchaser accepts the Bidder's explanation of mistake in paragraph 4.6.6.3.1 and allows the Bidder to accept the Contract at the offered price, or the Purchaser accepts the Bidder's explanation pursuant to paragraph 4.6.6.3.3 above, the Bidder shall agree that the supporting pricing data submitted with its Bid will be incorporated by reference in the resultant contract. The Bidder shall agree as a condition of contract signature, that the pricing data will be the basis of determining fair and reasonable pricing for all subsequent negotiations for modifications of or additions to the contract and that no revisions of proposed prices will be made.
- 4.6.6.6. If the Bidder presents a convincing rationale pursuant to paragraph 4.6.6.3.2 above, no additional action will be warranted. The Purchaser, however, reserves its right to reject such an argument if the rationale is not compelling or capable of objective analysis. In such a case the Bid may be determined to be non-compliant.
- 4.6.6.7. The Agency reserves the right to request prime contractors, or the subcontractor to separately identify each of the direct/indirect costs, advise why each is required, and provide supporting documentation to substantiate each charge, such as: 1) catalogue price lists and any applicable discounts, 2) copies of the subcontractor's orders from others for the same or similar items, including explanations for cost variations, or 3) subcontractor's internal cost estimate, or documentation of whatever means the subcontractor used to arrive at the charge.
- 4.6.6.8. Once the offered prices as described in paragraph 4.6.4.1 have been calculated and checked, the formula set forth in paragraph 4.2.4.1 above will be applied to derive the Price Score of each bid.

4.7. **Evaluation Step 3 – Calculation of Best Value Scores**

- 4.7.1. Upon conclusion and approval of the Price Evaluation results, the pre-determined weighting scheme for the Technical Evaluation will be unsealed and the scores for the Engineering, Management, and Supportability factors will be calculated for each compliant bid. Then all partial scores will be fed into the formula stated in paragraph 4.2.2 in order to obtain the Best Value Score of each bid.
- 4.7.2. The highest scored bid will be recommended as the Successful Bid.
- 4.7.3. A statistical tie is deemed to exist when the final scores of the highest scoring bids are within one point of each other. (For example, final scores of 67.30 and 68.30 are within one point of each other and would therefore be considered a statistical tie. Final scores of 67.30 and 68.31 are more than one point apart and would not be considered a tie.) The Purchaser will

then resolve the statistical tie by awarding the contract to the Bid with the highest weighted technical score.

4.8. Post Evaluation Test Drive

4.8.1. General

4.8.1.1. The apparent winner selected from the Best Value exercise will be invited to install and configure the proposed COTS capability at the Purchaser’s Reference Environment in The Hague, The Netherlands.

4.8.1.2. The aim of the Test Drive is to verify that the proposed COTS solution is in line with the Bid Proposal, in particular with Part I – Engineering Proposal.

4.8.1.3. Test Drive shall include demonstration of a subset of capability/project requirements for which Bidder provided Bid references in the TVCRM (Section 3.5.5) to prove that its offered COTS tool is satisfying or partially satisfying them.

4.8.1.4. Selection of the project/capability requirements to be demonstrated during the Test Drive will be done by the Purchaser, as part of the Test Drive Initial Package (see **Table 1**).

4.8.1.5. The Test Drive will be deemed successful if all Test Scenarios in the Final Test Plan are successfully demonstrated per the Acceptance criteria defined by the Purchaser and within the time limits described in Figure 1.

4.8.2. Schedule

4.8.2.1. Proposed Test Drive Schedule is provided in Figure 1:

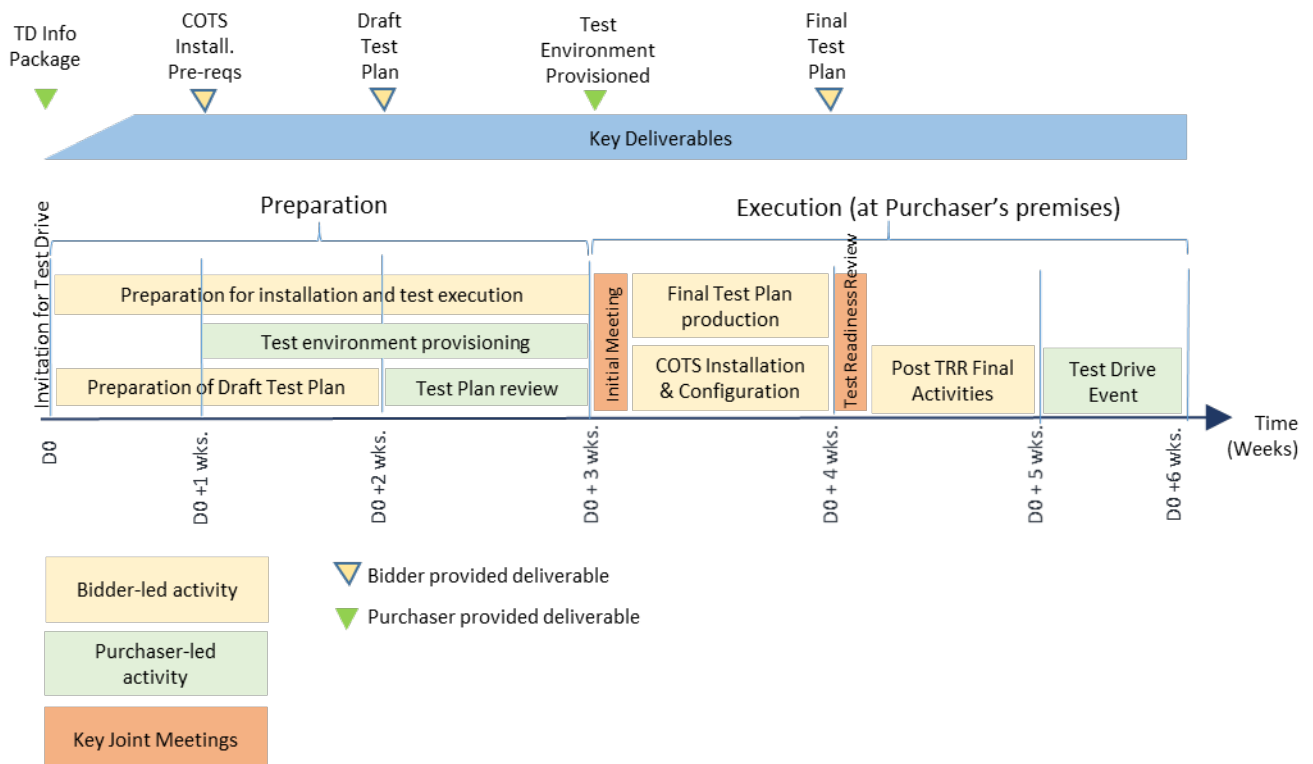


Figure 1 Test Drive Schedule

- 4.8.2.2. The Bidder shall meet or “exceed” the dates mentioned in the Figure 1. “Exceed” shall be understood as a situation where the Bidder has performed the activities within the durations mentioned in the schedule.
- 4.8.2.3. Key deliverables from the Test Drive are described in Table 1.

Table 1 Test Drive Key Deliverables

Activity	Author	Description
Test Drive Info Package	Purchaser	Minimum information: * Scope of requirements selected for Test Drive; * Test drive draft schedule and logistics;
COTS installation pre-requisites	Bidder	* COTS installation hardware (i.e. VM sizing) and software pre-requisites
Draft Test Drive Plan	Bidder	Minimum information: * Proposed Demo scenarios and test cases; * Detailed schedule of test events; * Test Drive requirements (tools, procedures, etc.)
Test Environment Provisioned	Purchaser	Test environment ready for COTS installation
Final Test Plan	Bidder	Final version of above

4.8.3. Process and Key Steps

4.8.3.1. Invitation for Test Drive

- 4.8.3.1.1. Purchaser will trigger the Post Evaluation Test Drive by sending the Invitation for Test Drive incl. Test Drive Information Package to the Bidder.
- 4.8.3.1.2. Remaining contents of the Test Drive Information Package are described in Table 1.

4.8.3.2. Preparation Phase

- 4.8.3.2.1. Preparation Phase will last for maximum 3 weeks and shall be executed remotely (off-site).
- 4.8.3.2.2. Goal of the Preparation Phase is for the Purchaser to prepare for the Test Drive Execution (i.e. visit logistics, staffing, and environment preparation) and for the Bidder to submit the Draft Test Plan, incl. proposed Test Scenarios and Test Cases.
- 4.8.3.2.3. Submission of the Draft Test Plan shall happen no later than 2 weeks after Invitation for Test Drive has been sent by the Purchaser.
- 4.8.3.2.4. Purchaser will review the Draft Test Plan and provide its feedback during the Initial Meeting.

4.8.3.3. Execution Phase

- 4.8.3.3.1. Execution Phase is kicked off by the on-site Initial Meeting. The purpose of the Initial meeting is for the Purchaser to provide feedback on the Draft Test Plan, in particular regarding:
- Test environment pre-requisites and conditions.
 - Test Drive scenarios and test cases.
- 4.8.3.3.2. Once the Initial Meeting is concluded, the Bidder shall remain on-site to:
- Produce the Final Test Plan (based on Initial Meeting feedback), including agreed start date of the Final Test Drive.
 - Start COTS installation and configuration on the Purchaser provided test environment
- 4.8.3.3.3. The Bidder shall submit the Final Test Plan no later than 1 week after the Initial meeting.
- 4.8.3.3.4. Test Readiness Review (TRR) meeting shall be prepared and ran by the Bidder. TRR goal is to review if all preparations for the Test Drive are done, or identify any remaining activities.
- 4.8.3.3.5. Final Test Drive scenarios and test cases will be executed by the Purchaser's team (end users and subject matter experts), with the support of the Bidder.
- 4.8.3.3.6. An unsuccessful test drive may determine the Bidder's Offer to be non-compliant.

ANNEX A: BIDDING SHEETS

See separate Excel Workbook attached
"IFB-CO-115791-DEMETER - Bidding Sheets.xls"

1. INTRODUCTION

Bid pricing requirements as addressed in this Annex are mandatory. Failure to abide to the bid pricing requirements included in this section may lead to the Bid being declared non-compliant and not being taken into consideration for award..

No alteration of the Bidding sheets – including, but not limited to quantity indications, descriptions, titles or pre-populated Not-to-Exceed amounts – are allowed with the sole exception of those explicitly indicated as allowed in this document or in the instructions embedded in the Bidding Sheets file.

Additional price columns may be added if multiple currencies are Bid, including extra provisions for all totals.

2. GENERAL REQUIREMENTS

Bidders are required, in preparing their Price Volume to utilise the electronic files provided as part of this IFB and referenced in this Annex.

Bidders shall include this file in its proposal in the same Excel format in which it is provided in this IFB.

This Excel file includes detailed instructions on each tab that will facilitate Bidders' preparation of the bid pricing. These instructions are mandatory.

The prices and quantities entered on the document shall reflect the total items required to meet the Contractual requirements. The total price shall be indicated in the appropriate columns.

In preparing the Bidding Sheets, Bidders shall ensure that the prices of the Sub-items total the price of the major item of which they constitute a part.

All metrics (e.g., cost associated with labour) will be assumed to be standard or normalised to 7.6 hours/day, for a five-day workweek at NATO and national sites and Contractor facilities.

Should the Bid be in other than Euro currency, the award of the Contract will be made in the currency or currencies of the bid.

Bidders are advised that formulae are designed to ease evaluation of the Bidders Bid have been inserted in the electronic copies of the Bidding Sheets. Notwithstanding this the Bidder remains responsible for ensuring that their figures are correctly calculated and should not rely on the accuracy of the formulae electronic copies of the Bidding Sheets.

If the Bidder identifies an error in the spreadsheet, it should notify the Purchaser who will make a correction and notify all the Bidders of the update.

Any discounted or reduced prices offered by the Bidder must be traceable to a CLIN or CLINs at the lowest level. Prices and detail of the traceability of application of the discount shall be clearly identified in the supporting detail sheets and applied at the unit price level.

Prices shall not include any provision for taxes or duties for which the Purchaser is exempt.

ANNEX B: PRESCRIBED ADMINISTRATIVE FORMS AND CERTIFICATES

B-1. Certificate of Legal Name of Bidder

This Bid is prepared and submitted on behalf of the legal corporate entity specified below:

FULL NAME OF CORPORATION: _____

DIVISION (IF APPLICABLE): _____

SUB DIVISION (IF APPLICABLE): _____

OFFICIAL MAILING ADDRESS

E-MAIL ADDRESS: _____

TELEFAX No: _____

POINT OF CONTACT REGARDING THIS BID:

NAME: _____
POSITION: _____
TELEPHONE: _____

ALTERNATIVE POINT OF CONTACT:

NAME: _____
POSITION: _____
TELEPHONE: _____

Signature of authorised Representative:

Printed Name: _____

Title: _____

Date: _____

Company: _____

B-3. Certificate of Independent Determination

It is hereby stated that:

- a. We have read and understand all documentation issued as part of CO-115791-DEMETER. Our Bid submitted in response to the referred solicitation is fully compliant with the provisions of the IFB and the prospective Contract.
- b. Our Bid has been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, with any other Bidder or with any competitor;
- c. The contents of our Bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to award, directly or indirectly to any other Bidder or to any competitor; and
- d. No attempt has been made, or will be made by the Bidder to induce any other person or firm to submit, or not to submit, a Bid for the purpose of restricting competition.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Company: _____

Bid Reference _____

B-4. Certificate of Bid Validity

I, the undersigned, as an authorised representative of the firm submitting this Bid, do hereby certify that the pricing and all other aspects of our Bid will remain valid for a period of twelve months from the Bid Closing Date of this IFB.

Signature of authorised Representative:

Printed Name: _____

Title: _____

Date: _____

Company: _____

B-5. Certificate of Exclusion of Taxes, Duties and Charges

I hereby certify that the prices offered in the price quotation of this Bid exclude all taxes, duties and customs charges from which the Purchaser has been exempted by international agreement.

Signature of authorised Representative:

Printed Name: _____

Title: _____

Date: _____

Company: _____

B-6. Comprehension and Acceptance of Contract Special and General Provisions

The Bidder hereby certifies that he has reviewed the Special Contract Provisions and the NCI Agency General Provisions set forth in the Prospective Contract, Book II of this IFB. The Bidder hereby provides its confirmation that he fully comprehends the rights, obligations and responsibilities of the Contractor as set forth in the Articles and Clauses of the Prospective Contract. The Bidder additionally certifies that the offer submitted by the Bidder is without prejudice, qualification or exception to any of the Terms and Conditions and he will accept and abide by the stated Special and General Provisions if awarded the Contract as a result of this IFB.

Signature of authorised Representative:

Printed Name:

Title:

Date:

Company:

B-7. Disclosure of Requirements for NCI Agency Execution of Supplemental Agreements

I, the undersigned, as an authorised representative of _____, certify the following statement:

All supplemental agreements, defined as agreements, documents and/or permissions outside the body of the Contract but are expected to be required by my Government, and the governments of my subContractors, to be executed by the NCI Agency, or its legal successors, as a condition of my firm’s performance of the Contract, have been identified, as part of the Bid.

These supplemental agreements are listed as follows:

Examples of the terms and conditions of these agreements have been provided in our Offer. The anticipated restrictions to be imposed on NATO, if any, have been identified in our offer along with any potential conflicts with the terms, conditions and specifications of the Prospective Contract. These anticipated restrictions and potential conflicts are based on our knowledge of and prior experience with such agreements and their implementing regulations. We do not certify that the language or the terms of these agreements will be exactly as we have anticipated.

The processing time for these agreements has been calculated into our delivery and performance plans and contingency plans made in the case that there is delay in processing on the part of the issuing government(s).

We recognise that additional supplemental agreements, documents and permissions presented as a condition of Contract performance or MOU signature after our firm would be selected as the successful Bidder may be cause for the NCI Agency, or its legal successors, to determine the submitted Bid to be non-compliant with the requirements of the IFB;

We accept that should the resultant supplemental agreements issued in final form by the government(s) result in an impossibility to perform the Contract in accordance with its schedule, terms or specifications, the Contract may be terminated by the Purchaser at no cost to either Party.

Signature of authorised Representative: _____

Printed Name: _____

Title: _____

Date: _____

Company: _____

B-8. Certificate of Compliance AQAP 2110 or ISO 9001:2015 or Equivalent

I hereby certify that _____ (name of Company) possesses and applies Quality Assurance Procedures/Plans that are equivalent to the AQAP 2110 or ISO 9001:2015 as evidenced through the attached documentation¹.

Signature of authorised Representative:

Printed Name:

Title:

Date:

Company:

¹ Bidders must attach copies of any relevant quality certification.

B-9. List of Prospective Subcontractors

Name and Address of Sub-Bidder	DUNS Number ²	Primary Location of Work	Items/Services to be Provided	Estimated Value of Sub-Contract

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Company: _____

² Data Universal Numbering System (DUNS). Bidders are requested to provide this data in order to help NCI AGENCY to correctly identify SubContractors. If a SubContractor's DUNS is not known this field may be left blank.

B-10. Bidder Background IPR

I, the undersigned, as an authorized representative of Bidder _____, warrant, represent, and undertake that:

- A. The Contractor Background IPR specified in the table below will be used for the purpose of carrying out work pursuant to the prospective Contract.

ITEM	DESCRIPTION

- B. The stated Bidder has and will continue to have, for the duration of the prospective Contract, all necessary rights in and to the Background IPR specified above.
- C. The Background IPR stated above complies with the terms specified in Clause 32 of the Special Contract Provisions and shall be licensed to the Purchaser according to the terms and conditions specified in the prospective Contract, and more particularly, in accordance with Clause 32 of the Special Contract Provisions and Clause 30 of the NCIA General Contract Provisions.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Company: _____

Bid Reference _____

B-12. Certificate of Origin of Equipment, Services, and Intellectual Property

The Bidder hereby certifies that, if awarded the Contract pursuant to this solicitation, he will perform the Contract subject to the following conditions:

- A. none of the work, including project design, labour and services shall be performed other than by firms from and within participating NATO member countries;
- B. no material or items of equipment down to and including identifiable sub-assemblies shall be manufactured or assembled by a firm other than from and within a participating NATO member country. (A sub-assembly is defined as a portion of an assembly consisting of two or more parts that can be provisioned and replaced as an entity); and
- C. The intellectual property rights to all design documentation and related system operating software shall reside in NATO member countries, and no license fees or royalty charges shall be paid by the Bidder to firms, individuals or Governments other than within the NATO member countries.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Company: _____

Bid Reference _____

B-13. Certificate of Price Ceilings

I hereby certify that the total price offered in the Price Volume of this Bid does not exceed the price ceilings provided in paragraph 3.4.1.1 of Book I - Bidding Instructions.

If any one or more of the prices proposed by the Bidders are above the ceilings provided in paragraph 3.4.1.1, then the Bid will be declared non-compliant.

Note: All prices, or supporting pricing information, shall be included in the Price Volume only. There shall be no pricing information disclosed in either the Bid Administration Volume or the Technical Volume..

Signature of authorised Representative:

Printed Name: _____

Title: _____

Date: _____

Company: _____

B-14. Disclosure of Involvement of Former NCI Agency Employment

The Bidder hereby certifies that, in preparing its Bid, the Bidder did not have access to solicitation information prior to such information been authorized for release to Bidders (e.g., draft statement of work and requirement documentation).

The Bidder hereby acknowledges the post-employment measures applicable to former NCI Agency Personnel as per the NCI Agency Code of Conduct.

The Bidder hereby certifies:

- Its personnel, at any tier, working as part of the company’s team preparing the Bid have not held employment with NCI Agency within the last two years.
- It has obtained a signed statement from the former NCI Agency personnel below, who departed the NCI Agency within the last two years, that they were not previously involved in the project under competition (as defined in the extract of the NCI Agency Code of Conduct provided in Annex B-15 of this IFB):

Employee Name	Former NCIA Position	Current Company Position

The Bidder also hereby certifies that it does not employ and/or receive services from former NCI Agency Personnel at grades A5 and above or ranks OF-5 and above, who departed the NCI Agency within the last 12 months. This prohibitions covers negotiations, representational communications and/or advisory activities.

Date :

Signature :

Name & Title :

Company :

B-15. NCI Agency AD. 05.00, Code of Conduct: Post Employment Measures

1. The NCI Agency will not offer employment contracts to former NCI Agency Personnel who departed less than 2 years earlier, unless prior approval by the General Manager has been received.
2. Former NCI Agency Personnel will not be accepted as consultants or commercial counterparts for two (2) years after finalization of their employment at NCI Agency, unless the General Manager decides otherwise in the interest of the Agency and as long as NATO rules on double remuneration are observed. Such decision shall be recorded in writing. Commercial counterparts include owners or majority shareholders, key account managers, or staff members, agents or consultants of a company and/or subcontractors seeking business at any tier with the NCI Agency in relation to a procurement action in which the departing NCI Agency staff member was involved when he/she was under the employment of the NCI Agency. As per the Prince 2 Project methodology, a Project is defined as a “temporary organization that is created for the purpose of delivering one or more business products according to an agreed business case”. For the purpose of this provision, involvement requires (i) drafting, review or coordination of internal procurement activities and documentation, such as statement of work and statement of requirement; and/or (ii) access to procurement information that has not yet been authorized for release for outside distribution, including draft statements of work and requirement documentations; and/or (iii) being appointed as a representative to the Project governance (e.g., Project Board) with access to procurement information as per (ii) above; and/or (iv) having provided strategic guidance to the project, with access to procurement information as per (ii) above.
3. In addition to paragraph 2 above, former NCI Agency Personnel at grades A5 and above or ranks OF-5 and above are prohibited during twelve months following the end of their employment with the NCI Agency from engaging in negotiations, representational communications and/or advisory activities with the NCI Agency on behalf of a private entity, unless this has been agreed in advance by the NCI Agency General Manager and notified to the Agency Supervisory Board (ASB).
4. NCI Agency Personnel leaving the Agency shall not contact their former colleagues in view of obtaining any information or documentation about procurement activities’ not-yet-authorized release. NCI Agency Personnel shall immediately report such contacts to the Director of Acquisition.
5. The ASB Chairman will be the approving authority upon recommendation by the Legal Adviser when the NCI Agency Personnel concerned by the above is the NCI Agency General Manager and will notify the ASB.
6. NCI Agency Personnel leaving the Agency shall sign a statement that they are aware of the post-employment measures set out in this Directive.
7. The post-employment measures set out in this Directive shall be reflected in the NCI Agency procurement documents, such as IFBs, and contract provisions.

ANNEX C: BID GUARANTEE – STANDBY LETTER OF CREDIT

Standby Letter of Credit Number: _____

Issue Date: _____

Beneficiary: NATO CI Agency,
Financial Management Resource Centre,
Boulevard Leopold III,
B-1110 Brussels, Belgium

Expiry Date: _____

- A. We, (issuing bank) hereby establish in your favour our irrevocable standby letter of credit number {number} by order and for the account of (NAME AND ADDRESS OF BIDDER) in the original amount of € 300,000.00 (Three Hundred Thousand Euro). We are advised this Guarantee fulfils a requirement under Invitation for Bid IFB CO-115791-DEMETER dated _____.
- B. Funds under this standby letter of credit are available to you upon first demand and without question or delay against presentation of a certificate from the NCI Agency Contracting Officer that:
- 1) (NAME OF BIDDER) has submitted a Bid and, after Bid Closing Date (including extensions thereto) and prior to the selection of the lowest priced, technically compliant Bid, has withdrawn its Bid, or stated that he does not consider its Bid valid or agree to be bound by its Bid, or
 - 2) (NAME OF BIDDER) has submitted a Bid determined by the Agency to be the lowest priced, technically compliant Bid, but (NAME OF BIDDER) has declined to execute the Contract offered by the Agency, such Contract being consistent with the terms of the Invitation for Bid, or
 - 3) The NCI Agency has offered (NAME OF BIDDER) the Contract for execution but (NAME OF BIDDER) has been unable to demonstrate compliance with the security requirements of the Contract within a reasonable time, or
 - 4) The NCI Agency has entered into the Contract with (NAME OF BIDDER) but (NAME OF BIDDER) has been unable or unwilling to provide the Performance Guarantee required under the terms of the Contract within the time frame required.
- C. This Letter of Credit is effective the date hereof and shall expire at our office located at (Bank Address) on _____. All demands for payment must be made prior to the expiry date.
- D. It is a condition of this letter of credit that the expiry date will be automatically extended without Amendment for a period of sixty (60) calendar days from the current or any successive expiry date unless at least thirty (30) calendar days prior to the then current expiry date the NCI Agency Contracting Officer notifies us that the Letter of Credit is not required to be extended or is required to be extended for a shorter duration.

- E. We may terminate this letter of credit at any time upon sixty (60) calendar days notice furnished to both (NAME OF BIDDER) and the NCI Agency by registered mail.
- F. In the event we (the issuing bank) notify you that we elect not to extend the expiry date in accordance with paragraph 4 above, or, at any time, to terminate the letter of credit, funds under this credit will be available to you without question or delay against presentation of a certificate signed by the NCI Agency Contracting Officer which states
- G. "The NCI Agency has been notified by {issuing bank} of its election not to automatically extend the expiry date of letter of credit number {number} dated {date} pursuant to the automatic renewal clause (or to terminate the letter of credit). As of the date of this certificate, no suitable replacement letter of credit, or equivalent financial guarantee has been received by the NCI Agency from, or on behalf of (NAME OF BIDDER), and the NCI Agency, as beneficiary, hereby draws on the standby letter of credit number _____ in the amount of € (Amount up to the maximum available under the LOC), such funds to be transferred to the account of the Beneficiary number _____ (to be identified when certificate is presented)."
- H. Such certificate shall be accompanied by the original of this letter of credit and a copy of the letter from the issuing bank that it elects not to automatically extend the standby letter of credit, or terminating the letter of credit.
- I. The Beneficiary may not present the certificate described in paragraph 6 above until 20 (twenty) calendar days prior to a) the date of expiration of the letter of credit should {issuing bank} elect not to automatically extend the expiration date of the letter of credit, b) the date of termination of the letter of credit if {issuing bank} notifies the Beneficiary that the letter of credit is to be terminated in accordance with paragraph 6 above.
- J. Multiple drawings are allowed.
- K. Drafts drawn hereunder must be marked, "Drawn under {issuing bank} Letter of Credit No. {number}" and indicate the date hereof.
- L. This letter of credit sets forth in full the terms of our undertaking, and this undertaking shall not in any way be modified, amended, or amplified by reference to any document, instrument, or agreement referred to herein (except the International Standby Practices (ISP 98) hereinafter defined) or in which this letter of credit is referred to or to which this letter of credit relates, and any such reference shall not be deemed to incorporate herein by reference any document, instrument, or agreement.
- M. We hereby engage with you that drafts drawn under and in compliance with the terms of this letter of credit will be duly honoured upon presentation of documents to us on or before the expiration date of this letter of credit.
- N. This Letter of Credit is subject to The International Standby Practices-ISP98 (1998 Publication) International Chamber of Commerce Publication No.590.

ANNEX D: TECHNICAL VOLUME CROSS REFERENCE MATRIX (TVCRM)

1. Volume III shall contain a Technical Volume Cross Reference Matrix (TVCRM), indicating where in the Bid the Bidder addresses each of the Evaluation criteria.
2. Pre-populated TVCRM template is provided as Excel sheet (“Book I Annex D: Technical Volume Cross Reference Matrix (TVCRM)”) to the Bidder.
3. Bidders shall populate the TVCRM in Excel format according to the provided template.
4. The TVCRM shall be completed as per the instructions provided within the *Guidance* sheet of the template.
5. One copy of the duly completed TVCRM shall be included in the Technical Bid Package (Volume III).

See separate Excel Workbook attached

“IFB-CO-115791-DEMETER – Annex D-TVCRM.xls”

ANNEX E: EVALUATION CRITERIA TO REQUIREMENTS TRACEABILITY MATRIX

See separate Excel Workbook attached

“IFB-CO-115791-DEMETER – Annex E-Eval Criteria to Req Matrix.xls”

ANNEX F: LIST OF ACCEPTABLE BANKS TO ISSUE BID GUARANTEES

#	Country (Alphabetical Order)	Banking institution
1	BEL	KBC Group
2	CAN	Bank of Montreal
3	CAN	Royal Bank of Canada
4	CAN	Scotiabank
5	DNK	Danske Bank
6	DEU	Commerzbank AG
7	DEU	Deutsche Bank
8	ESP	Banco Santander
9	ESP	BBVA
10	EUR	Citibank Europe
11	FRA	BNP Paribas
12	FRA	Credit Agricole Group
13	FRA	Societe Generale
14	GBR	Barclays PLC
15	GBR	HSBC Holdings
16	GBR	Standard Chartered PLC
17	ITA	Intesa
18	ITA	UniCredit S.p.A.
19	NLD	ING Group
20	NLD	Rabobank Group
21	SWE	SEB Bank
22	SWE	Swedbank AB
23	USA	Bank of America
24	USA	Wells Fargo

ANNEX G: CLARIFICATION REQUEST FORM

INSERT COMPANY NAME HERE
INSERT SUBMISSION DATE HERE

ADMINISTRATION or CONTRACTING				
Serial Nr	IFB Ref	Questions	Answers	Status
A.1.				
A.2.				
A.3.				

INSERT COMPANY NAME HERE
INSERT SUBMISSION DATE HERE

PRICE				
Serial Nr	IFB Ref	Questions	Answers	Status
P.1				
P.2				
P.3				

INSERT COMPANY NAME HERE
INSERT SUBMISSION DATE HERE

TECHNICAL				
Serial Nr	IFB Ref	Questions	Answers	Status
T.1				
T.2				
T.3				



CO-115791-DEMETER

**PART II
CONTRACT SPECIAL PROVISIONS**

1	ALTERATIONS, MODIFICATIONS AND DELETIONS OF THE NCIA	
	CONTRACT GENERAL PROVISIONS	3
2	INTERPRETATIONS, DEFINITIONS AND ACRONYMS	3
3	SCOPE	4
4	CONTRACT TYPE AND CONSIDERATION	5
5	CONTRACT DURATION	5
6	INVOICING AND PAYMENT	5
7	ECONOMIC PRICE ADJUSTMENT	6
8	OPTIONAL WORK PACKAGE	8
9	ACCEPTANCE PROCEDURES	9
10	LIQUIDATED DAMAGES	<u>109</u>
11	CONTRACT ADMINISTRATION	<u>1140</u>
12	TECHNICAL DIRECTION.....	<u>1244</u>
13	PARTICIPATING COUNTRIES	12
14	CONFIDENTIALITY AND NON-DISCLOSURE	<u>1342</u>
15	SECURITY	<u>1443</u>
16	CONFLICT OF INTEREST	<u>1544</u>
17	INTELLECTUAL PROPERTY.....	<u>1645</u>
18	KEY PERSONNEL	<u>1746</u>
19	SOFTWARE WARRANTY.....	<u>1847</u>
20	PURCHASER FURNISHED PROPERTY AND SERVICES	<u>1947</u>
21	SOFTWARE LICENSES.....	<u>1948</u>
22	COTS PRODUCT REPLACEMENT	<u>2048</u>
23	PRICING OF CHANGES, MODIFICATIONS, FOLLOW-ON CONTRACTS AND CLAIMS.....	<u>2049</u>
24	INDEMNITY	<u>2149</u>
25	PLACE AND TERMS OF DELIVERY	<u>2120</u>
26	SUPPLEMENTAL AGREEMENT(S), DOCUMENTS AND PERMISSIONS	<u>2120</u>
27	COMPREHENSION OF CONTRACT AND SPECIFICATIONS.....	<u>2220</u>
28	PURCHASER RIGHT TO CONTRACT WITH THIRD PARTIES IN CASE OF CONTRACTOR DEFAULT	<u>2324</u>
29	EXPORT AGREEMENT AND LICENSE	<u>2324</u>
30	INDEPENDENT CONTRACTOR.....	<u>2324</u>
31	FORCE MAJEURE	<u>2322</u>
32	RESPONSIBILITY OF THE CONTRACTOR TO INFORM EMPLOYEES OF WORK ENVIRONMENT	<u>2422</u>
33	PERFORMANCE GUARANTEE.....	<u>2422</u>
34	ENGINEERING CHANGE PROPOSALS (ECP).....	<u>2422</u>
35	NCI AGENCY SUPPLIER CODE OF CONDUCT.....	<u>2523</u>
	ANNEX A. KEY PERSONNEL.....	<u>2624</u>
	ANNEX B. CONTRACTOR BACKGROUND IPR	<u>2725</u>
	ANNEX C. SUBCONTRACTOR AND THIRD PARTY IPR.....	<u>2826</u>
	ANNEX D. LIST OF ACCEPTABLE BANKS TO ISSUE PERFORMANCE GUARANTEES	<u>2927</u>
	ANNEX E. NSF RESOURCES ALLOCATED TO THE CONTRACTOR.....	<u>3028</u>

1 ALTERATIONS, MODIFICATIONS AND DELETIONS OF THE NCI CONTRACT GENERAL PROVISIONS

- 1.1 Article 2 “Interpretations, Definitions and Acronyms” supplements Clause 2 “Definitions of Terms and Acronyms” of the Contract General Provisions.
- 1.2 Article 4 “Contract Type and Consideration” replaces Clause 7 “Firm Fixed Price Contract” of the Contract General Provisions.
- 1.3 Article 5 “Invoicing and Payment” supplements Clause 25 “Invoices and Payment” of the Contract General Provisions.
- 1.4 Article 8 “Acceptance Procedures – Agile Development” supplements Clause 21 “Inspection and Acceptance of Work” and Clause 22 “Inspection and Acceptance of Documentation” of the Contract General Provisions.
- 1.5 Article 9 “Final Systems Acceptance” supplements Clause 21 “Inspection and Acceptance of Work” and Clause 22 “Inspection and Acceptance of Documentation” of the Contract General Provisions.
- 1.6 Article 10 “Liquidated Damages” replaces Clause 38 “Liquidated Damages” of the Contract General Provisions.
- 1.7 Article 13 “Participating Countries” supplements Clause 9 “Participating Countries” of the Contract General Provisions.
- 1.8 Article 15 “Security” supplements Clause 11 “Security” of the Contract General Provisions.
- 1.9 Article 16 “Intellectual Property” supplements Clause 30 “Intellectual Property” of the Contract General Provisions.
- 1.10 Article 18 “Software Warranty” supplements Clause 31 “Software Warranty” of the Contract General Provisions.
- 1.11 Article 19 “Purchaser Furnished Property” supplements Clause 13 “Purchaser Furnished Property and Services” of the Contract General Provisions.
- 1.12 Article 21 “Pricing of Changes, Modifications, Follow-on Contracts and Claims” supplements Clause 19 “Pricing of Changes, Amendments and Claims” of the Contract General Provisions.
- 1.13 Article 24 “Place and Terms of Delivery” replaces sub-Clause 20.1 of Clause 20 “Notice of Shipment and Delivery” of the Contract General Provisions.
- 1.14 Article 27 “Purchaser Right to Contract with Third Parties in Case of Contractor Default” supplements Clause 39 “Termination for Default” of the Contract General Provisions.

2 INTERPRETATIONS, DEFINITIONS AND ACRONYMS

- 2.1 This Article supplements Clause 2 (Definitions of Terms and Acronyms) of the NATO Communications and Information Agency (NCI Agency) Contract General Provisions.
- 2.2 As used throughout this Contract, the following terms shall have the meanings specified below unless otherwise specified in the Contract:

- 2.2.1 “**CLIN**”: Contract Line Item Number, as shown in the Schedule of Supplies and Services (SSS). For example, 1, 2, etc.
- 2.2.2 “**Compliance**”: strict conformity to the requirements and standards of the Contract.
- 2.2.3 “**Contractor**”: the awardee which shall be responsible for the fulfilment of the requirements established in the Contract.
- 2.2.4 “**Days**”: calendar days.
- 2.2.5 “**Deliverables**”: the items, features or services to be delivered by the Contractor at a Milestone Date or at any other stage during the performance of this Contract as listed in Part I (Schedule of Supplies and Services) and as more particularly described in the Statement of Work (SOW), and the Software Requirements Specification (SRS).
- 2.2.6 “**EDC**”: Effective Date of Contract.
- 2.2.7 “**FSA**”: Final System Acceptance.
- 2.2.8 “**NATO Participating Country**”: any of the 30 NATO nations that have undertaken to share the cost of the project, namely, (in alphabetical order): Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Montenegro, The Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Türkiye, The United Kingdom and The United States of America.
- 2.2.9 “**Purchaser**”: the current NCI Agency or its legal successor.
- 2.2.10 “**Requirement**”: a condition or capability possessed by the software or component to satisfy the Contract. The Requirements are expressed within the Software Requirements Specification (SRS).
- 2.2.11 “**SSS**”: the Schedule of Supplies and Services.
- 2.2.12 “**Sub-CLIN**”: Sub Contract Line Item Number that falls under a CLIN.

3 SCOPE

- 3.1 The purpose of this Contract is to procure a Land C2 System (DEMETER).
- 3.2 All of the technical details and requirements of this project are explained in Part IV – Statement of Work (SOW), and its annexes.
- 3.3 The main work will be organized in two work packages (WP1 and WP2). In addition, an optional work package (WP3) is defined for Interoperability

Adaptations. Furthermore, the scope of work includes optional WP4 for Maintenance and Support Services.

4 CONTRACT TYPE AND CONSIDERATION

- 4.1 This Article replaces Clause 7 of the Contract General Provisions.
- 4.2 This is a Fixed Price Contract subject to Economic Price Adjustment (EPA).
- 4.3 The Schedule of Supplies and Services (SSS) of this Contract, organized into Contract Line Items (CLINs), lists all services and/or deliverables, their priority, and their fixed price.
- 4.4 Included in the prices shown in the SSS are all costs for activities not specifically listed on the SSS, but that are considered necessary by the Contractor to execute the Statement of Work, included but not limited to:
 - All travel, per diem and accommodation costs;
 - All executive management, administrative or other support effort;
 - All facility or other overhead costs;
 - All other direct costs.

5 CONTRACT DURATION

- 5.1 This Contract will begin on the Effective Date specified in the Signature Page and, unless terminated at an earlier date in accordance with other terms and conditions of the Contract or extended by virtue of a formal Contract amendment, will terminate after 147 Months, broken down as follows:
 - 27 months from Effective Date of Contract until FSA+ one year warranty, and;
 - 120 months of additional optional Operation and Maintenance (O&M) support, starting at FSA.

6 INVOICING AND PAYMENT

- 6.1 This Article supplements and partly replaces Article 25 “Invoices and Payment” of the Contract General Provisions. Specifically, Articles 6.2 through 6.12 supplements Article 25 “Invoices and Payment” of the Contract General

Provisions while Article 6.10 replaces Article 25.5 of the Contract General Provisions.

- 6.2 Payment for supplies and services furnished under this Contract shall be made in the currency quoted by the Contractor for the relevant portion of the Contract.
- 6.3 Payments will be made to the Contractor on achievement/delivery and upon written acceptance by the Purchaser of the Progress Payment Milestones defined at Tab “Payment Milestones” of the SSS.
- 6.4 Where Optional CLINs are exercised, payments shall be made in accordance with the stipulations of the relevant amendment providing for the exercise of such Options.
- 6.5 No payment shall be made with respect to undelivered supplies, works not performed; services not rendered and/or incorrectly submitted invoices.
- 6.6 The Purchaser shall not be liable for any amount resulting from the performance of services or the delivery of equipment outside the scope of this Contract.
- 6.7 Payment to the Contractor will be made within 30 days of receipt of properly supported and documented invoices and upon acceptance in writing by the Purchaser.
- 6.8 All invoices shall refer to CO-115791-DEMETER and Purchase Order Number # {to be filled out at Contract award}.
- 6.9 Invoices shall be properly supported with any necessary reports, certificates, statements, receipts, written evidence of acceptance by the Purchaser and any other required documentation in accordance with the terms of the Contract.
- 6.10 All invoices shall be sent electronically to: accountspayable@ncia.nato.int. No paper invoices will be accepted.
- 6.11 Exercised optional Sub- CLINs 7.1-7.10 will be paid in four quarterly payments of 25% of the Sub-CLIN amount upon approval of a quarterly status report.
- 6.12 Invoices related to Economic Price Adjustment shall further comply with stipulations of article 7.6 below.

7 ECONOMIC PRICE ADJUSTMENT

- 7.1 The price of this Contract is subject (upwards or downwards) to adjustment or revision within the limits defined herein:
- 7.2 Milestones 01 to 06 are Firm Fixed Price not subject to this EPA Clause.
- 7.3 Beginning for Milestone 07 of the Contract until the end of the period of performance (to include any options), if a variation occurs in the cost of labour and/or materials forming part of the Contract, then the Contract price shall be adjusted (upwards or downwards), in accordance with the formula in below para 7.7.
- 7.4 The revision shall be based on the evolution of the Labour Cost Index and the Producer Price index, as published by OECD statistics at respectively

https://stats.oecd.org/viewhtml.aspx?datasetcode=ULC_EEQ&lang=en and
https://stats.oecd.org/viewhtml.aspx?datasetcode=MEI_PRICES_PPI&lang=en

- 7.5 The labour and material allocations and the portion of the Contract price subject to price adjustment have been established here and remain fixed through the life of the Contract and shall not be modified except in the event of significant changes to the scope of the Contract.
- 7.6 When a price adjustment is due (i.e. at each Milestone acceptance from Milestone 07 onwards), the Contractor shall submit a separate invoice for the price indexation in accordance with this Article, quoting the cumulated amount of price indexations implemented so far and the PO# xxxx .The indexed prices will become the new Contract price. After Milestone 15 a Contract Amendment shall reflect the final Contract prices as adjusted.
- 7.7 Economic Price Adjustment Formula:

$$P = P_o * (0.2 + 0.7 L/L_o + 0.1 M/M_o)$$

in which:

- P Revised price for the Milestone applicable after EPA
- P_o Total Base Contract price of the original Milestone at Bid Closing Date (BCD)
- L Labour index value registered in month “n” after EDC, n defined per Milestone as per below table:

MS07	Initiation phase WP2 completed	n = 12
MS08	M&S during WP2 - 1	n = 13
MS09	M&S during WP2 - 2	n = 16
MS10	M&S during WP2 - 3	n = 19
MS11	Validation phase completed	n = 19
MS12	Partial System Acceptance of WP2 (PSA ^{WP2})	n = 22
MS13	Final System Acceptance (FSA)	n = 22
MS14	Warranty 50% (FSA + 1/2 year)	n = 28
MS15	Warranty 100% (FSA + 1 year)	n = 34

“n” shall not be subject to slippage in case of project delay: if the Contractor is late in achieving a milestone, the price of that milestone will remain adjusted to the economic conditions in the above table.

- L_o Basic index for Labour value at BCD
- M Material (Producer Price) index in month “n” after EDC, n defined per Milestone as per above table
- M_o Basic index for Producer Price value at BCD

- 7.8 Calculations of price increases shall be made as soon as possible after publication of the index figure relating to the approved month “n” after ECD.
- 7.9 Where any index figure published is stated to be a provisional figure, the Contractor may opt:
- 7.9.1 either: to use that provisional figure in his calculation and present an appropriate invoice,
- 7.9.2 or: to delay presentation of his invoice until a definitive index figure is published.
- 7.9.3 No further adjustment will be allowed, up or down, following revision of any index figure if an invoice is presented using provisional indices.
- 7.9.4 Maximum Variation: The increase to the basic total basic Contract price shall not exceed 20% until MS 15, within an overall maximum of 50% for the whole duration of the Contract with options or any agreed extension thereof.
- 7.10 The index applicable to the revision formula and to be read from the OECD website mentioned above, shall be the one from the country where the task is performed, providing the currency applicable to the Milestone payment is the one from that Country. In case the task is performed in a non-Euro currency Country but the Contractor initially bid in Euro (Host Nation currency), the index to be used shall be the one from the Host Nation (Belgium).
- 7.11 For optional CLIN 3 the price from the SSS will be revised by the above formula and same principles. The indexes M and L will be the one published 13 months after EDC. For optional CLINs 4 to 6, the price from the SSS will be revised by the above formula and same principles. The indexes M and L will be the one published 3 months before the start date of the optional performance. The amount of the Contract will be adjusted to reflect the amount of the option as calculated above in the amendment reflecting the unilateral exercise of the option by the Purchaser.

8 OPTIONAL WORK PACKAGE

- 8.1 The Contract includes the optional CLIN 3 for specified interoperability requirements that require adaptations in order to fully meet the selection criteria to be delivered no later than 3 months before start of WP2 Transition.
- 8.2 The Contract further includes the optional Work Package 4, for maintenance and support of the DEMETER for up to ten years, starting from final system acceptance with the first year being concurrent with the warranty period. These optional Sub-CLINs for yearly maintenance and support are under CLIN 4.
- 8.3 The total value of these optional CLINs is not included in the initial Contract value stated on the signature page of the Contract. The Purchaser reserves the right to unilaterally exercise this option or part of them at any time from Contract Award until two months before the end of the Contract except for CLIN 3 which can be exercised only up to 6 months after EDC.
- 8.4 The Purchaser's liabilities and obligations under this Contract at the time of its signature, and unless a formal Contract Amendment is issued in accordance

with the terms of this Article and Clause 16 (Changes) of the Contract General Provisions, are limited in scope and amount to performance and deliverables associated to the base Contract as described in the SSS and SOW.

- 8.5 The Contractor understands that there are no obligations under this Contract for the Purchaser to exercise any of the Options and that the Purchaser bears no liability should it decide not to exercise them (either totally or partially).
- 8.6 Further, the Purchaser reserves the right to Contract with another company (or the same), to perform the tasks described in the Options of the current Contract through a new Contract with other conditions.
- 8.7 Any optional CLINs may be exercised unilaterally by the Purchaser, and confirmed by written amendment to the Contract which will establish the payment terms.
- 8.8 The delivery dates for the options will be specified in the amendment, and Acceptance of the items delivered under this Contract will be made according to Article 9.

9 ACCEPTANCE PROCEDURES

- 9.1 This Article supplements Clauses 21 and 22 of the Contract General Provisions.
- 9.2 “Acceptance” is the action by which the Purchaser formally acknowledges that the Contractor has fully demonstrated that the Deliverables, Works performed and Services furnished are “complete” or have been performed according to the definition, requirements and criteria set forth in the Statement of Work. Acceptance will be determined at each major milestones and decision gates as specified in the Statement of Work. Success criteria are described for each Milestone in various section of the Statement of Work and will determine the level of acceptance.
- 9.3 Contract payment milestones, as designated in the Schedule of Supplies and Services, shall only be considered as complete and eligible for payment when all milestone entry and exit criteria, and any works or events as defined in this Contract as associated and underlying the payment milestone has been formally delivered (as defined in the SOW) and acknowledged as delivered and accepted by the Purchaser. Payment milestones shall only be considered as confirmed and fully achieved when the Purchaser has advised the Contractor formally in writing that all conditions necessary for milestone completion have been successfully met. All documents and data pertaining to the considered

payment milestone shall be prepared by the Contractor and approved by the Purchaser.

10 LIQUIDATED DAMAGES

- 10.1 This Article replaces Clause 38 of the Contract General Provisions.
- 10.2 If the Contractor fails to meet the delivery schedule of any milestones specified in the SSS, or any extension thereof;
- 10.3 The actual damage to the Purchaser for the delay will be difficult or impossible to determine. Therefore, in lieu of actual damages the Contractor shall pay to the Purchaser, for each day of delinquency in achieving the milestone, fixed and agreed liquidated damages of 0.1% (zero point one percent) per day of the associated payment set forth in the Payment Milestones Tab of the Contract SSS.
- 10.4 Liquidated damages shall be payable from the first day of delinquency and shall accrue at the rate specified in Article 13.3 above to 15% (fifteen percent) of the value of each payment milestone individually, not to exceed 10% (ten percent) of the total value of the Contract. These liquidated damages shall accrue automatically and without any further notice being required.
- 10.5 The Contractor acknowledges that any sums payable under this Article are in the nature of liquidated damages and not penalties, and represent a reasonable estimate of fair compensation for the losses that may be reasonably anticipated from such failure to perform obligations.
- 10.6 The amount of Liquidated Damages due by the Contractor shall be recovered by the Purchaser in the following order of priority:
 - 10.6.1 By deducting such damages from the amounts due to the Contractor against the Contractor's invoices.
 - 10.6.2 By drawing from the performance guarantee.
 - 10.6.3 By reclaiming such damages through appropriate legal remedies.
- 10.7 In addition, the Purchaser may terminate this Contract in whole or in part, as provided in paragraph 39.1 of Clause 39 – “Termination for Default” of the Contract General Provisions and in that event the Contractor shall be liable to pay the excess costs provided in paragraph 39.5.
- 10.8 The Contractor shall not be charged with liquidated damages when the delay arises out of causes beyond the control and without the fault or negligence of the Contractor as defined in paragraph 39.6 of Clause 39 – “Termination for Default” of the Contract General Provisions. In such event, subject to the Disputes and Arbitration Clause, the Purchaser shall ascertain the facts and

extent of the delay and shall extend the time for performance of the Contract when in his judgement the findings of fact justify an extension.

10.9 The rights and remedies of the Purchaser under this clause are in addition to any other rights and remedies provided by law or under this Contract.

11 CONTRACT ADMINISTRATION

11.1 The Purchaser is the NATO Communications and Information Agency (NCI Agency). The Purchaser is the Point of Contact for all Contractual and Technical issues. The Contractor shall accept Contract modifications only in writing from the Purchaser’s Contracting Authority

11.2 Formal letters and communications shall be sent by email, or delivered in person, by registered mail, courier or other delivery service, to the official points of contact quoted in this Contract.

11.3 Informal notices and informal communication may be exchanged by any other means, including telephone.

11.4 All notices and communication shall be effective upon receipt.

11.5 Official Points of Contact are:

Purchaser	
Contractual Issues	Technical Issues
NCI Agency Oude Waalsdorperweg 61 2597 AK The Hague, The Netherlands Radu Munteanu +31 70374 3015 Radu.Munteanu@ncia.nato.int	NCI Agency Oude Waalsdorperweg 61 2597 AK The Hague, The Netherlands Will Leeming +31 70374 3664 Will.Leeming@ncia.nato.int
Contractor	
Contractual Issues	Technical Issues

12 TECHNICAL DIRECTION

- 12.1 For the direct official control and coordination of requirements, the Purchaser designates the Project Manager specified below as the staff element that has the authority to coordinate, monitor, and control Contractor's performance under this Contract:

NCI Agency

Oude Waalsdorperweg 61

2597 AK The Hague, Netherlands

Attn: [To be inserted at Contract Award]

Phone: [To be inserted at Contract

Award] E-mail: [To be inserted at

Contract Award]

- 12.2 The Purchaser may designate other staff elements as technical focal points for the execution of specific tasks and who will provide the Contractor with instruction and guidance, within the general scope of work, in performance of their duties and working schedule.
- 12.3 Notwithstanding the prescriptions of this Article, neither the Purchaser's Project Manager, nor any Technical Representative has the authority to change the terms and conditions of the Contract. If the Contractor has reason to believe that the Project Manager/Technical Representative is requesting work that is inconsistent with the scope of the Contract, the Contractor shall immediately inform the Purchaser's Contracting Authority for confirmation of the actions. Failure to obtain confirmation that the action of the Project Manager is under the authority of the Contract shall render any subsequent claim null and void.
- 12.4 Upon receipt of such notification above, the Purchaser's Contracting Authority will:
- 12.4.1 confirm the effort requested is within scope, or
- 12.4.2 confirm that the instructions received constitute a change and request a quotation for a modification of scope and/or price, or
- 12.4.3 rescind the instructions.

13 PARTICIPATING COUNTRIES

- 13.1 This Article supplements Clause 9 of the Contract General Provisions.
- 13.2 The Contractor may issue sub-contracts to firms and purchase from qualified vendors in any of the following 30 NATO participating nations: Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania,

Luxembourg, Montenegro, The Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Türkiye, The United Kingdom and The United States of America. None of the work, including project design, labour and services, shall be performed other than by firms from and within participating countries as per NATO policy.

- 13.3 The Contractor shall notify in writing to the Purchaser immediately upon being informed of any change in the nationality of its Sub-contractor(s) which would prevent the Contractor from further complying with Clause 15.2 above. Upon receipt of this information from the Contractor, the Purchaser may, within three months from this notification, require the Contractor to find an alternate subcontractor, complying with the requirements set out in Clause 15.2 above.
- 13.4 Unless authorised by NATO Policy, no material or items of equipment down to and including identifiable sub-assemblies delivered under this Contract shall be manufactured or assembled by a firm other than from and within a participating country.
- 13.5 The Intellectual Property Rights to all designed documentation and system operating software shall reside in NATO member countries, and no license fee, or royalty charges shall be paid by the Contractor to firms, individuals or governments other than within the NATO member community.

14 CONFIDENTIALITY AND NON-DISCLOSURE

- 14.1 For purposes of this Article, "Confidential Information" shall include all information pertaining to any part of this Contract or any program related to this Contract that is not marked "Non-Confidential".
- 14.2 Confidential Information does not include information that is: (a) publicly known at the time of disclosure or subsequently becomes publicly known through no fault of the Contractor; (b) discovered or created by the Contractor before disclosure by the Purchaser; (c) learned by the Contractor through legitimate means other than from the Purchaser or its representatives; or (d) is disclosed by the Contractor with the Purchaser's prior written approval.
- 14.3 Without prejudice to other obligations imposed by NATO Security regulations, the Contractor shall hold and maintain the Confidential Information in strictest confidence for the sole and exclusive benefit of the Purchaser. The Contractor shall carefully restrict access to Confidential Information to employees, sub-Contractors and third parties as is reasonably required and shall require those persons to sign nondisclosure restrictions at least as protective as those in this Contract. The Contractor shall not, without prior written approval of the Purchaser, use for the Contractor's own benefit, publish, copy, or otherwise disclose to others, or permit the use by others for their benefit or to the detriment of the Purchaser, any Confidential Information. The Contractor shall return to the Purchaser any and all records, notes, and other written, printed, or tangible materials in its possession pertaining to Confidential Information immediately if the Purchaser requests it in writing.
- 14.4 The provisions of this Article and the associated Contractor's duties shall survive the termination of this Contract and remain in effect until the Purchaser

sends the Contractor written notice releasing the Contractor from the obligations imposed by this Article, or for a further period of three (3) years after Contract close-out, whichever occurs first, and without prejudice to other obligations imposed by applicable NATO Security regulations.

- 14.5 The Contractor shall include the substance of the language of this Article in any subcontract/Contract issued for the purpose of the fulfillment of the obligations Contracted under this Contract regardless of the legal nature of the entity subscribing such subcontract.
- 14.6 The Contractor agrees that compliance with the obligations imposed by the terms of this Article is of the essence and that failure to abide to these terms shall constitute sufficient grounds for the termination of the Contract for default.

15 SECURITY

- 15.1 This Article supplements Clause 11 of the Contract General Provisions.
- 15.2 The Contractor is responsible, in accordance with NATO and National Security regulations, for the proper handling, storage and control of any classified documents and information as may be furnished to the Contractor in relation to the performance of this Contract. As such, the Contractor's premises shall be able to handle information up to NATO Restricted.
- 15.3 The security classification of this Contract and its annexes is "NATO UNCLASSIFIED". However, the Contractor's technical personnel working on the Contract will need to access NATO SECRET data and therefore shall hold a valid NATO SECRET security clearance for the duration of the Contract. This access to NATO SECRET data shall occur only at NATO premises and never at the Contractor's own premises.
- 15.4 Contractor's personnel visiting or working at Purchaser's facilities in connection with this Contract shall hold a NATO SECRET security clearance valid for the duration of the Contract. This requirement applies to all subcontracts issued by the Contractor for the effort under this prime Contract.
- 15.5 It is the responsibility of the Contractor to ensure that its personnel obtain the required security clearances and transmit this information to the sites to be visited in adequate time that the site may perform the appropriate administration.
- 15.6 The Contractor is advised that the personnel security process may be lengthy. The Purchaser bears no responsibility for the failure of the Contractor to secure the required clearances for its personnel within the necessary time.
- 15.7 Failure of the Contractor to obtain proper security clearances to have access to any NATO sites, and any attendant delay in the project which results from this access refusal, is not the basis for excusable delay under the terms of the Contract concerning default. The Contractor bears full responsibility and liability

under the Contract for delays arising from the failure of the Contractor to adhere to the security requirements.

- 15.8 If during the performance of the Contract, Contractor's personnel need to be escorted because of non-availability of the security clearance required by the Site, the Contractor shall pay to the Purchaser a compensatory fee of 800 Euro per day of escort.
- 15.9 In the absence of valid security clearances for the Contractor's personnel at Contract signature, the Purchaser reserves the right to terminate the Contract for "Default".

16 CONFLICT OF INTEREST

- 16.1 A conflict of interest means that because of other activities or relationships with other persons or entities, a Contractor is unable, or potentially unable to render impartial assistance or advice to the Purchaser, or the Contractor's objectivity in performing the Contract work is, or might be otherwise impaired, or the Contractor has an unfair competitive advantage.
- 16.2 Conflict of interest includes situations where the capacity of a Contractor (including the Contractor's executives, directors, consultants, subsidiaries, parent companies or subcontractors) to give impartial, technically sound advice or objective performance is or may be impaired or may otherwise result in a biased work product or performance because of any past, present or planned interest, financial or otherwise in organizations whose interest may substantially affected or be substantially affected by the Contractor's performance under the Contract.
- 16.3 The Contractor is responsible for maintaining and providing up-to-date conflict of interest information to the Contracting Officer. If, after award of this Contract or task order herein, the Contractor discovers a conflict of interest with respect to this Contract which could not reasonably have been known prior to award, or if any additional conflicts or potential conflicts arise after award, the Contractor shall give written notice to the Contracting Officer as set forth below.
- 16.4 If, after award of this Contract herein, the Purchaser discovers a conflict of interest with respect to this Contract or task order, which has not been disclosed by the Contractor, the Purchaser may at its sole discretion request additional information to the Contractor, impose mitigation measures or terminate the Contract for default in accordance with Article 39 (Termination for Default) of the Contract General Provisions.
- 16.5 The Contractor's notice called for in paragraph 19.2 shall describe the actual, apparent, or potential conflict of interest, the action(s) the Contractor has taken or proposes to take to avoid or mitigate any conflict, and shall set forth any other information which the Contractor believes would be helpful to the Contracting Officer in analyzing the situation. Any changes to the Contractor's

Conflict of Interest Mitigation Plan, if any is incorporated in the Contract, should be also detailed.

- 16.6 The Contractor has the responsibility of formulating and forwarding a proposed mitigation plan to the Contracting Officer, for review and consideration. This responsibility arises when the Contractor first learns of an actual, apparent, or potential conflict of interest.
- 16.7 If the Purchaser in its discretion determines that the Contractor's actual, apparent, or potential conflict of interest remains, or the measures proposed are insufficient to avoid or mitigate the conflict, the Contracting Officer will direct a course of action to the Contractor designed to avoid, neutralize, or mitigate the conflict of interest.
- 16.8 If the parties fail to reach agreement on a course of action, or if having reached such agreement the Contractor fails to strictly adhere to such agreement during the remaining period of Contract performance, the Contracting Officer has the discretion to terminate the Contract for default or alternatively refrain from exercising any further Option or Work Package under the Contract.
- 16.9 The Contractor's misrepresentation of facts in connection with a conflict of interest reported or a Contractor's failure to disclose a conflict of interest as required shall be a basis for default termination of this Contract.

17 INTELLECTUAL PROPERTY

- 17.1 This Article supplements Clause 30 (Intellectual Property) of the Contract General Provisions.
- 17.2 All Foreground IPR is the property of the Purchaser. Consequently, no statement shall be made restricting the rights of the Purchaser. All Foreground IPR are immediately and exclusively transferred and assigned to the Purchaser as from their coming into existence or, as the case may be, as from the conclusion of this Contract for rights already in existence at the time of execution of this Contract.
- 17.3 Any use by the Purchaser of Contractor Background IPR for the purpose of carrying out work pursuant to the Contract shall, subject to any obligation on the part of the Contractor to make payments to any third party in respect of IPR which is licensed from such third party, be free of any charge to Purchaser. The Contractor hereby grants to the Purchaser a non-exclusive, royalty-free and irrevocable licence throughout NATO, NATO operations (including out of area operations) and/or among NATO member nations to use and authorise others

to use any Contractor Background IPR for the purpose of exploiting or otherwise using the Foreground IPR for any purpose.

- 17.4 The Purchaser retains the right to redeploy the Software and capabilities provided and associated documentation necessary under the Contract within NATO, and/or among NATO Nations, and/or among NATO Partner Nations.
- 17.5 This licence shall also allow the Purchaser and its member nations to use and authorise others to use the software for further adaptation, integration, modifications and future procurements.
- 17.6 The Contractor intends to use the Background IPR stated in Contract Special Provisions - Annexes B and C hereto for the purpose of carrying out work pursuant to this Contract.
- 17.7 The Contractor warrants, undertakes, and represents that any derivative product created under this Contract from the stated Background IPR shall be considered as Foreground IPR and, therefore, shall be governed by the terms and conditions specified in Clause 30.3 (Foreground IPR) of the Contract General Provisions.
- 17.8 In addition, regarding the Contractor's Background IPR, the Purchaser shall have the right to further re-transfer this software (source code excluded) and associated documentation necessary and/or useful for use and integration, to companies eligible for other NATO procurements, subject to an appropriate license agreement. There shall be no additional charges or fees associated with this license agreement beyond the Firm Fixed Price of this Contract.
- 17.9 Any use of Contractor Background IPR as listed in Annex B and Third Party Background IPR as stated listed in Annexes ~~B and C~~, that are not part of the COTS and unless specifically applicable to COTS items, is not limited to the number of users or the number of licenses required by the Contract for use of the system. With the exception of COTS items, the Purchaser reserves the right to use or authorise NATO members to use the Background IPR as stated in Annexes B and C for any number of users and number of licenses as required, at no additional cost to the Purchaser.
- 17.10 All Software, except COTS, delivered under this Contract shall not be marked with corporate logos, proprietary information or contain warnings limiting the rights to use or reproduction nor shall those markings be included in the operating and/or maintenance manuals or instructions accompanying such software.

18 KEY PERSONNEL

- 18.1 The individuals listed in ANNEX B are considered to be key to the performance of this Contract and may not be replaced by the Contractor with substitute personnel without the prior written approval of the Purchaser.
- 18.2 The Contractor's Key Personnel assigned to this Contract shall remain working on the Contract for as long as required by the terms of the Contract. However, in the event where the Contractor has no control over the individual's non-availability (e.g., resignation, sickness, incapacity, etc.), the Contractor shall

notify the Purchaser of a change of key personnel within working 3 days of the date of knowledge of the prospective vacancy. The Contractor must nominate a substitute(s) of equivalent or higher qualification and experience within 15 working days of the date at which the Contractor has knowledge of the loss of service of such key personnel. The replacement personnel shall be in place within 7 days of Purchaser approval.

- 18.3 If the Contractor is unable to nominate and/or replace the lost personnel within the timeframe mentioned in 18.2 above, the Purchaser may conclude that the loss of the Key Personnel endangers progress under the Contract to the extent that the Purchaser may resort to the Clause 39 – “Termination for Default” of the Contract General Provisions for redress of the situation.
- 18.4 The Purchaser shall approve the dedicated personnel, as well as the replacement personnel. The Purchaser has the right to refuse any proposed substitution as not meeting the qualifications and request the Contractor to offer another qualified individual in lieu thereof.
- 18.5 The Purchaser reserves the right to reject a Contractor’s Key Personnel after acceptance of a Contractor’s Key Personnel on the basis of his/her CV if the individual is not providing the required level of support. The Purchaser will inform the Contractor in writing in case such a decision is taken and the Contractor shall propose and make another Key Personnel available within three working days after the written notification.
- 18.6 Key Personnel are not necessarily required to work full-time in that position. Therefore, it is possible for an individual to fill more than one Key Personnel role at the same time, assuming the person is qualified to perform both roles.

19 SOFTWARE WARRANTY

- 19.1 This Article supplements Clause 31 of the Contract General Provisions.
- 19.2 For all Requirements delivered under this Contract, the Contractor shall provide a warranty in accordance with Part IV - Statement of Work, Section 4.10, Warranty, and Clause 31 of the Contract General Provisions.
- 19.3 This warranty period shall extend for one year following the written declaration of Final Systems Acceptance (FSA) by the Purchaser’s Contracting Authority.
- 19.4 In the event of any inconsistency in language, terms or conditions with regards to warranty, the terms or conditions stipulated in Part IV - Statement of Work,

Section 4.10 shall have precedence over Clause 31 of the Contract General Provisions.

~~19.4~~19.5 Clause 31.4.4.2 of the Contract General Provisions is being deleted in its entirety.

20 PURCHASER FURNISHED PROPERTY AND SERVICES

- 20.1 This Article supplements Clause 13 (Purchaser Furnished Property) of the General Contract Provisions.
- 20.2 The Purchaser will provide the Contractor with the property and services for the performance of the Contract as specified in Section 2.1 of the SOW.
- 20.3 As specified in Section 3.6 of the SOW, the Contractor shall develop software in the NATO Software Factory (NSF). The Purchaser will provide the Contractor with a set of user accounts in the NSF and the services and products requested and justified by the Contractor in his bid as described in Special Provision ANNEX E.
 - 20.3.1 The Contractor has specified and dimensioned the number of NATO Software Factory user accounts and the Microsoft Azure Cloud Services and additional products that are required throughout the period of performance of the Contract as part of his bid and as reflected in ANNEX E.
 - 20.3.2 The Contractor's proposed additional services and products to be hosted on the NATO Software Factory shall be provided with justification and are subject to Contractor approval. When approved, the Contractor shall implement and provision the support associated with these services and products throughout period of performance of the Contract.
 - 20.3.3 The Contractor shall not exceed the number of NATO Software Factory user accounts and the amount of the Microsoft Azure Cloud Services dimensioned as mentioned in ANNEX E.
 - 20.3.4 The Contractor shall not use any internal tools (ALM management, work items management, build tools or repositories, etc.), storage or document management system outside of the tools provided by NATO Software Factory or explicitly approved by the Purchaser.

21 SOFTWARE LICENSES

- 21.1 Any software licenses purchased on behalf of or provided to the Purchaser by the Contractor shall be perpetual licenses. In the event a perpetual license model is not available for a particular software product, the Contractor shall request written approval from the Purchaser in advance.
- 21.2 Any software licenses the Contractor purchases on behalf of the Purchaser, and/or transfers or provides to the Contractor shall provide the same usage rights as required by Article 16. The Contractor shall ensure that any software

licenses that will ultimately need to be assigned to the Purchaser can be done so at no additional cost.

- 21.3 The Purchaser reserves the right to exclude from the awarded Contract the purchase of software licenses which the Purchaser may procure through centralized Contracts. In this case, the Contract terms, schedule and prices will be modified accordingly, and the software licenses will be provided to the Contractor in the form of "Purchaser Furnished Items".

22 COTS PRODUCT REPLACEMENT

- 22.1 If any COTS products specified in the Contract are upgraded or discontinued by their original providers for commercial or technological reasons, the Contractor shall propose their substitution by the new versions that are intended as market replacement of the original products. The proposed items shall provide an equivalent or enhanced performance without a price or life-cycle support cost increase and the Contractor shall be responsible for the installation, integration and transition of data and information to the new version.
- 22.2 The Contractor shall provide price and performance data to support an improvement in performance and/or a reduction in price and/or life-cycle support costs. If necessary for evaluation by the Purchaser, the Contractor shall provide a demonstration of the proposed items. Should the Purchaser decide that the proposed item(s) should be included in the Contract, an equitable price adjustment will be negotiated and the proposed item(s) shall be added to the Contract by bilateral modification under the authority of this Article.

23 PRICING OF CHANGES, MODIFICATIONS, FOLLOW-ON CONTRACTS AND CLAIMS

- 23.1 This Article supplements Clause 19 of the Contract General Provisions.
- 23.2 The Purchaser may at any time, by written order designated or indicated to be a change order, and without notice to the sureties, if any, make changes within the scope of any Contract or Task Order, in accordance with Clause 16 (Changes) of the Contract General Provisions.
- 23.3 Changes, modifications, follow-on Contracts of any nature, and claims shall be priced in accordance with Clause 19 (Pricing of Changes, Amendments and Claims) of the Contract General Provisions, and with the "Purchaser's Pricing Principles" as set out in the Annex to the Contract General Provisions.
- 23.4 Contractor price quotations for Contract changes or modifications shall be provided at no cost to the Purchaser and shall have a minimum validity period of six (6) months from submission.
- 23.5 The pricing information contained in the cost breakdown sheets submitted with the Bidding sheets, as part of the Contractor's proposal, and especially the

forward labour rates provided, will constitute the basis for any future negotiations related to possible future amendments to this Contract.

24 INDEMNITY

- 24.1 The Contractor will indemnify and hold harmless NATO and its servants or agents, against any liability, loss or damage arising out of or in connection of the Deliverables and Services under this Contract, including the provisions set out in Articles 29 "Patent and Copyright indemnity" and 30 "Intellectual Property" of the NCI Agency General Provisions.
- 24.2 The Contractor will indemnify NATO and its servants or agents, against claims made against NATO and its servants or agents, by their personnel, and their sub-Contractors (including their personal representatives) in respect of personal injury or death of such personnel or loss or destruction of or damage to the property of such personnel.
- 24.3 The Contractor will consult with the Agency over the handling of any claim or action to which the provisions of this Article may be relevant and will consult with the Agency over the handling of any such claim and conduct of any such action and will not without prior consultation and without the concurrence of the Agency settle or compromise any such claim or action.
- 24.4 In the event of an accident resulting in loss, damage, injury or death arising from negligence or willful intent of an agent, officer or employee of NATO for which the risk has been assumed by the Contractor, the Contractor shall involve the Agency in any investigation into the cause of the accident.

25 PLACE AND TERMS OF DELIVERY

- 25.1 This Article replaces Clause 20.1 of the Contract General Provisions.
- 25.2 All deliverables under this Contract shall be delivered DDP ("Delivered Duty Paid") as defined by the INCOTERMS published by the International Chamber of Commerce (Publication No. 560) to the places and at such times as stipulated in the Schedule of Supplies and Services. The Contractor shall note that the Purchaser is exempt from customs duties and Value Added Tax as per Clause 26 – "Taxes and Duties" of the Contract General Conditions.

26 SUPPLEMENTAL AGREEMENT(S), DOCUMENTS AND PERMISSIONS

- 26.1 The Contractor has submitted all relevant draft supplemental agreement(s), documents and permissions prior to Contract award, the execution of which by the Purchaser is/are required by national law or regulation. If any supplemental agreements, documents and permissions are introduced after Contract award, and it is determined that the Contractor failed to disclose the requirement for the execution of such agreement from the Purchaser prior to Contract

signature, the Purchaser may terminate this Contract for default in accordance with Clause 29 – “Termination for Default” of the Contract General Conditions.

- 26.2 Supplemental agreement(s), documents and permissions, the execution of which by the Purchaser is/are required by national law or regulation and that have been identified by the Contractor prior to the signature of this Contract, but have not yet been finalised and issued by the appropriate governmental authority, are subject to review by the Purchaser. If such supplemental agreement(s), documents and permissions are contrary to cardinal conditions of the signed Contract between the Parties, and the Purchaser and the appropriate governmental authority cannot reach a mutual satisfactory resolution of the contradictions, the Purchaser reserves the right to terminate this Contract and the Parties agree that in such case the Parties mutually release each other from claim for damages and costs of any kind, and any payments received by the Contractor from the Purchaser will be refunded to the Purchaser by the Contractor.

27 COMPREHENSION OF CONTRACT AND SPECIFICATIONS

- 27.1 The Contractor warrants that he has read, understood and agreed to each and all terms, clauses, specifications (including drawings) and conditions specified in the Contract and that this signature of the Contract is an acceptance, without reservations, of the said Contract terms within their normal and common meaning.
- 27.2 The specifications set forth the performance requirements for the Contractor’s proposed work as called for under this Contract. Accordingly, notwithstanding any conflict or inconsistency which hereafter may be found between achievement of the aforesaid performance requirements and adherence to the Contractor’s proposed design for the work, the Contractor hereby warrants that the work to be delivered will meet or exceed the performance requirements of the said specifications.
- 27.3 The Contractor hereby acknowledges that he has no right to assert against the Purchaser, its officers, agents or employees, any claims or demands with respect to the aforesaid specifications as are in effect on the date of award of this Contract:
- based upon impossibility of performance, defective, inaccurate, impracticable, insufficient or invalid specifications, implied warranties of suitability of such specifications, or;
 - otherwise derived from the aforesaid specifications, and hereby waives any claims or demands so based or derived as might otherwise arise.
- 27.4 Notwithstanding the “Changes” Clause or any other Clause of the Contract, the Contractor hereby agrees that no changes to the aforesaid specifications which may be necessary to permit achievement of the performance requirements specified herein for the Contractor’s proposed work shall entitle the Contractor either to any increase in the fixed price as set forth in this Contract or to any

extension of the delivery times for the work beyond the period of performance in the Schedule of Supplies and Services.

28 PURCHASER RIGHT TO CONTRACT WITH THIRD PARTIES IN CASE OF CONTRACTOR DEFAULT

- 28.1 This Article supplements Clause 39 (Termination for Default) of the Contract General Provisions.
- 28.2 In the event that the Contractor fails to deliver or make progress on the provision of any components of this project in accordance with the milestones and delivery dates stipulated in the SSS and SOW, and is notified by the Purchaser in writing that the Contractor is in a state of default in accordance with Clause 39 of the Contract General Provisions (Termination for Default), the Purchaser reserves the right to enter directly into contracts with any third party, including commercial entities, and Contractor's Subcontractors for provision of the Contract Work Package.
- 28.3 The provisions of this Article are in addition to and in no way limit the rights of the Purchaser contained in other applicable clauses of this Contract, including but not limited to, Clause 21 (Inspection and Acceptance of Work) and Clause 39 (Termination for Default) of the Contract General Provisions.

29 EXPORT AGREEMENT AND LICENSE

- 29.1 It is the Contractor's responsibility to ensure compliance with all relevant or necessary national export provisions in executing the work under this Contract. Copies of the documentation will be supplied to the Purchaser on request.

30 INDEPENDENT CONTRACTOR

- 30.1 The Personnel provided by the Contractor are at all times employees of the Contractor and not the Purchaser. In no case shall Contractor personnel act on behalf of or as an agent for NATO or any of its bodies. In no way shall the Contractor personnel claim directly or indirectly to represent NATO in an official capacity or claim themselves to be NATO employees.
- 30.2 The Purchaser shall not be responsible for securing work permits, lodging, leases nor tax declarations, driving permits, etc., with national or local authorities. Consultants employed under this Contract are not eligible for any diplomatic privileges or NATO employee benefits.

31 FORCE MAJEURE

- 31.1 If the performance of this Contract, or any obligation hereunder is prevented, restricted or interfered with by reason of fire, flood, earthquake, explosion or other casualty or accident, strikes or labour disputes, war or other violence, including acts of terrorism, any law, order, proclamation, regulation, ordinance, demand or requirement of any governmental agency, or any other act, event or condition whatsoever beyond the reasonable control of the affected Party, the

Party so affected, upon giving prompt notice to the other Party, shall be excused from such performance to the extent of such prevention, restriction or interference, provided, however, that the Party so affected shall take all reasonable steps to avoid or remove such cause of non-performance and shall resume performance hereunder with dispatch whenever such causes are removed.

32 RESPONSIBILITY OF THE CONTRACTOR TO INFORM EMPLOYEES OF WORK ENVIRONMENT

- 32.1 The Contractor shall inform his employees under this Contract of the terms of the Contract and the conditions of the working environment.
- 32.2 Specifically, personnel shall be made aware of all risks associated with the performance under this Contract, the conditions of site in which the performance is to take place and living conditions while performing within the boundaries of the Contract. The selection of adequate personnel shall remain sole responsibility of the Contractor.

33 PERFORMANCE GUARANTEE

- 33.1 This Article replaces paragraph 8.4 of the Contract General Provisions as follows:
- 33.2 The standby letter of credit shall be issued by a financial institution listed in ANNEX D either on its own behalf or as a confirmation of the Standby Letter of Credit issued by a different bank not listed in ANNEX D to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Purchaser of a written demand therefore. Neither the financial institution nor the Contractor can revoke or condition the Standby Letter of Credit.

34 ENGINEERING CHANGE PROPOSALS (ECP)

- 34.1 This Article supplements Article 16 of the Contract General Provisions.
- 34.2 Engineering Change Proposals (ECP) as defined in this Article are proposals for changes relevant to tasks, deliverables, technical requirements, processes, schedules or any other term of the Contract which are submitted in written form by the Contractor upon request from the Purchaser or independently when such changes are necessary in light of varied facts or circumstances which prevent the execution of the Contract in its form.
- 34.3 Any Engineering Change Proposal (ECP) submitted by the Contractor to the Purchaser in a format as in Annex D.1 to the SOW or compatible with any Contractor's internal change management methodology standards or forms,

that shall in any case, contain as a minimum, the elements listed in Annex D.1 to the SOW.

- 34.4 As required, the ECP shall be provided with following attachments:
- Revised copy of the Contract documents in native electronic format edited to incorporate the changes being proposed in a way that changes are immediately identifiable
 - Revised Schedule of Supplies and Services
 - A detailed price breakdown of all costs to identify single elements of cost contributing to the total. All labour costs quoted as part of any ECP shall be consistent with those stipulated in the Contract
 - Revised annexes and any other relevant document.
- 34.5 The Purchaser shall assess the ECP being proposed by the Contractor and subject to its sole judgment and without recourse by the Contractor approve or reject the ECP by the mean of written communication to be dispatched solely by the Purchaser's Contracting Authority.
- 34.6 The Contractor shall proceed with the performance on the approved ECP and not on a Pending or Rejected ECP.
- 34.7 Formally approved ECPs shall be treated as interim authorization to proceed with the changes proposed strictly and limited to the scope, content and price as specified in the approved ECP.
- 34.8 The Purchaser shall not be liable for any cost incurred by the Contractor for performance rendered, regardless of the nature or time, associated to ECPs not formally approved by the Purchaser's Contracting Authority.
- 34.9 All formally approved ECPs will be incorporated in the Contract via the issuance of a formal Contract Amendment at the earliest practical time after their issuance.
- 34.10 The production of any ECP regardless of its final approval or rejection shall be at no cost for the Purchaser.

35 NCI AGENCY SUPPLIER CODE OF CONDUCT

- 35.1 The NCI Agency has a Supplier Code of Conduct located at <https://www.ncia.nato.int/business/do-business-with-us/code-of-conduct.html> and it constitutes part of this Contract.
- 35.2 This Supplier Code of Conduct sets standards and practices for suppliers and their subcontractors to adhere to when doing business with the NCI Agency in the areas of labour rights, human rights, data protection, ethical conduct and the environment. It contains fundamental, basic principles that any supplier based in a NATO country should already be operating in compliance with.
- 35.3 In the event of any inconsistency in language, terms or conditions with the Contract General Provisions, the Contract General Provisions takes precedence.

ANNEX A. KEY PERSONNEL

- a. The following Key Personnel shall be subject to the stipulations contained in Clause 18 (Key Personnel) of the Contract Special Provisions for the period of designation indicated below
- b. The required qualifications are the same for the “Deputy” positions as for the lead positions in the same role. (For example, Deputy Project Manager and Project Manager.)

Position	SOW Reference	Name	Designation Period
Project Manager	3.7.4.2		
Technical Lead	3.7.4.4		
Test Manager	3.7.4.5		
Lead Instructor	3.7.4.3		

ANNEX B. CONTRACTOR BACKGROUND IPR

- a. The Contractor Background IPR specified in the table below will be used for the purpose of carrying out work pursuant to the Contract.

Item	Description / IP Ownership	Indicate if COTS ¹

- b. The Contractor represents that it has and will continue to have, for the duration of this Contract, all necessary rights in and to the IPR specified above necessary to meet the Contractor’s obligations under the Contract.
- c. The Contractor Background IPR stated above complies with the terms specified in Clause 17 of the Contract Special Provisions and shall be licensed to the Purchaser according to the terms and conditions specified therein and in Clause 30 of the Contract General Provisions.

ANNEX C. SUBCONTRACTOR AND THIRD PARTY IPR

- a. The Subcontractor and Third Party Background IPR specified in the table below will be used for the purpose of carrying out work pursuant to the Contract.

Item	Description / IP Ownership	Indicate if COTS ¹

- b. The Contractor represents that it has and will continue to have, for the duration of this Contract, all necessary rights in and to the IPR specified above necessary to meet the Contractor’s obligations under the Contract.
- c. The Subcontractor and Third Party Background IPR stated above complies with the terms specified in Clause 16 of the Contract Special Provisions and shall be licensed to the Purchaser according to the terms and conditions specified therein and in Clause 30 of the Contract General Provisions.

**ANNEX D. LIST OF ACCEPTABLE BANKS TO ISSUE
 PERFORMANCE GUARANTEES**

#	Country (Alphabetical Order)	Banking institution
1	BEL	KBC Group
2	CAN	Bank of Montreal
3	CAN	Royal Bank of Canada
4	CAN	Scotiabank
5	DNK	Danske Bank
6	DEU	Commerzbank AG
7	DEU	Deutsche Bank
8	ESP	Banco Santander
9	ESP	BBVA
10	EUR	Citibank Europe
11	FRA	BNP Paribas
12	FRA	Credit Agricole Group
13	FRA	Societe Generale
14	GBR	Barclays PLC
15	GBR	HSBC Holdings
16	GBR	Standard Chartered PLC
17	ITA	Intesa
18	ITA	UniCredit S.p.A.
19	NLD	ING Group
20	NLD	Rabobank Group
21	SWE	SEB Bank
22	SWE	Swedbank AB
23	USA	Bank of America
24	USA	Wells Fargo

ANNEX E. NSF RESOURCES ALLOCATED TO THE CONTRACTOR

TO BE COMPLETED AT CONTRACT AWARD

N A T O U N C L A S S I F I E D

Releasable to Finland and Sweden



**BOOK II STATEMENT OF WORK
BOOK-II-PART-IV-SOW**

STATEMENT OF WORK

Version 1.1

~~05/05/2023~~

Deleted: 02/03/2023

N A T O U N C L A S S I F I E D

TABLE OF CONTENTS

Table of Contents	i
Index of Figures	ii
Index of Tables	ii
1 Introduction	1
1.1 Purpose	1
1.2 Background	1
1.3 Conventions and Interpretations	1
1.4 Scope of Work Overview	2
2 Purchaser's Responsibilities	5
2.1 Purchaser Furnished Property and Services	5
2.2 NATO Software Factory DevSecOps Services	5
3 General Requirements	7
3.1 Communication	7
3.2 Meetings	7
3.3 Security Aspects	8
3.4 Location of Performance	8
3.5 NATO Software Factory	8
3.6 Third-Party Software and Components	10
3.7 Project Management	11
3.8 Test, Verification, Validation and Assurance (TVVA)	15
3.9 Configuration Management	29
3.10 Quality Assurance	32
3.11 Defect Management Process	32
3.12 Audits	35
4 Work Packages 1, 2 and 3: Delivery of DEMETER	36
4.1 Approach	36
4.2 Initiation Phase	38
4.3 Delivery Phase	39
4.4 Closure Phase	55
5 Integrated Product Support	57
5.1 General	57
5.2 Integrated Product Support Plan	57
5.3 Maintenance and Support	57
5.4 Supply Support	60
6 Warranty	63
7 Work Package 4: Optional Maintenance and Support	65
8 Documentation Artefacts and Definitions	67
8.1 Distribution	67
8.2 Review and Updates	67
8.3 Standards and Conventions	68
8.4 Project Management Plan	70
8.5 Risks, Actions, Issues, Decisions Register	71
8.6 Project Highlight Report	73
8.7 Master Test Plan	73

8.8	Release and Deployment Plan	74
8.9	Training	75
8.10	Configuration Management Plan	77
8.11	Quality	78
8.12	Integrated Product Support Plan	83
8.13	Deliverable Requirements Traceability Matrix	85
8.14	Interface Control Document	86
8.15	Installation and Configuration Manual	87
8.16	Maintenance and Administration Manual	87
8.17	Release Notes	88
9	References	89
10	Abbreviations and Acronyms	91
Annex A	Software Requirements Specifications	95
Annex B	Interfaces	96
Annex C	Agency Approved Software (A2SL) – Required Documents	101
Annex D	Templates	102
D.1	Engineering Change Proposal Template	102
D.2	Request for Deviation / Request for Waiver Template	102

INDEX OF FIGURES

Figure 1.1	– Overview of Timelines and Stages	2
Figure 1.2	– DEMETER Life Cycle overview	3
Figure 3.1	– Test Event timeline	19
Figure 4.1	– WP1 Delivery of DEMETER to the initial sites and Training	36
Figure 4.2	– WP2 Delivery of DEMETER to all remaining sites	37
Figure 4.3	– WP3 Optional implementation of interoperability adaptations	37
Figure 4.4	– Testing, Verification and Validation Process for WP1	49
Figure 4.5	– Testing, Verification and Validation Process for WP2	50
Figure 4.6	– Testing, Verification and Validation Process for WP3	50
Figure 8.1	– Product Quality Criteria	73
Figure 10.1	– DEMETER interfaces	100

INDEX OF TABLES

Table 1.1	– Key events and dates	3
Table 3.1	– List of TV&V Phases	17
Table 3.2	– Test Documentation	18
Table 3.3	– Definitions for Defect Categorization	32
Table 3.4	– Classification of defects based on severity	33
Table 3.5	– Priority Classes for Defect Classification	34
Table 3.6	– Defect Categories	34
Table 4.1	– Number of iterations for the DEMETER initial training	46
Table 4.2	– Overview Operational Sites, Reference Environment and Testbeds	52
Table 8.1	– Verification Methods	86
Table 9.1	– References	89

Table 10.1 – DEMETER non-standard interfaces 96
Table 10.2 – DEMETER standard interfaces 97

Document Revision History

<u>Date</u>	<u>Version</u>	<u>Changes</u>
<u>03/03/2023</u>	<u>1.0</u>	<u>Version for IFB package</u>
<u>04/05/2023</u>	<u>1.1</u>	<u>Changed [SOW-366] due to question 28;</u> <u>Changed paragraph headings 4.3.2.2.4 and 4.3.2.2.5 to [SOW-x]</u> <u>headings due to question 234;</u> <u>Changed [SOW-339] due to question 235;</u> <u>Changed paragraph 3.5 due to question 241;</u>

1 Introduction

1.1 Purpose

- [001] This Statement of Work (SOW) describes the requirements and activities to deliver the Future Land Command and Control (FLC2) System.
- [002] The purpose of this Contract is to buy and implement the best available Commercial-Off-The-Shelf (COTS) software product.
- [003] Project DEMETER is the name given to this project. It is the responsibility of the contractor to integrate DEMETER within the NATO Enterprise, to migrate the data from the existing Land Command and Control Information Services (LC2IS) and to address the initial training aspects of the capability.

1.2 Background

- [004] DEMETER was authorised under NSIP project 2021/0IS03211 and originates from the Capability Programme Plan 5A1201 "Future Land Command and Control Information Capability".
- [005] Currently, the NATO Land Command and Control requirements are supported by LC2IS. DEMETER is intended to replace LC2IS to provide an updated capability for Command and Control (C2) of NATO Land Forces at the Strategic and Operational levels, including provision of a Recognised Ground Picture, Enablement of Battlespace Management and exchange of information and knowledge across operational domains within the NATO Command Structure (NCS), NATO Force Structure (NFS) and NATO Nations.

1.3 Conventions and Interpretations

- [006] The headings in this SOW are for ease of reference only and shall not affect its interpretation.
- [007] In this SOW, unless the context otherwise requires:
- (a) The term "Contract Award" (CAW) is the date of the last signature of the Contract by the Parties and the date the Contract enters into force;
 - (b) The term "Effective Date of Contract" (EDC) is the date for beginning the period of performance under the Contract;
 - (c) For this project EDC = CAW.
 - (d) A number in brackets [number] precedes each informational or context paragraph; a unique identifier, consisting of a prefix and number [SOW-number] precedes each requirement;
 - (e) Requirements are formulated using the form "shall" and are contractually binding. Context information supporting the requirements definition is provided using the form "will" and implies the intent or aim on the part of the Purchaser; the context forms one part with the requirements;
 - (f) Any phrase introduced by the words "including", "includes", "in particular", "for example" or similar, shall be construed as illustrative and without limitation to the generality of the related general words;
 - (g) Any reference made to a section or paragraph encompasses the referenced section or paragraph including all subordinate sections and paragraphs; and

- (h) The convention used for dates (e.g. quoting dates of meetings) is day-month-year.

1.4 Scope of Work Overview

[008] This section provides a summary of the scope of work of this SOW. It is intended that project DEMETER will:

- (1) Provide the software in support of NATO FLC2 operations. It will be used across the full spectrum of NATO operations and missions to support the C2 needs of the NCS across strategic and operational levels;
- (2) Address initial training aspects of the capability with the provision of the training to the NATO trainers, support personnel and users; and
- (3) Migrate from LC2IS to DEMETER through a detailed Transition Plan, including secure data migration.

[009] As shown in Figure 1.1, the main work will be organized in two work packages (WPs) i.e. WP1 and WP2. In addition, an optional WP3 is defined for adaptations with regard to interoperability and an optional WP4 for Contractor furnished maintenance and support services.

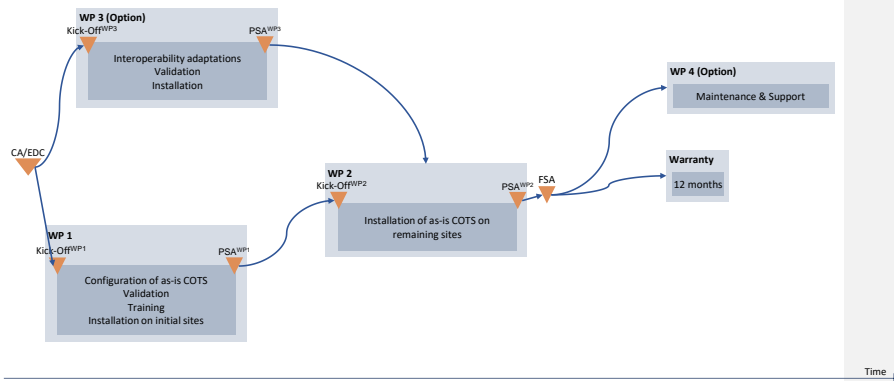


Figure 1.1 – Overview of Timelines and Stages

[010] Figure 1.2 illustrates the timelines of the Contract, the WPs and the major delivery milestones: Partial System Acceptance (PSA) for each of the WPs and Final System Acceptance (FSA).

[SOW-001] The Contractor shall deliver all supplies and services as specified in this SOW and as stated in the Schedule of Supplies and Services (SSS), with an associated expected delivery time. With the expected delivery time, it is assumed the Purchaser understands the difference between 'delivered' and 'accepted'. The Contractor will need to incorporate within its schedules sufficient time i.e. a minimum of 15 business days, for the Purchaser to validate and accept each deliverable and milestone.

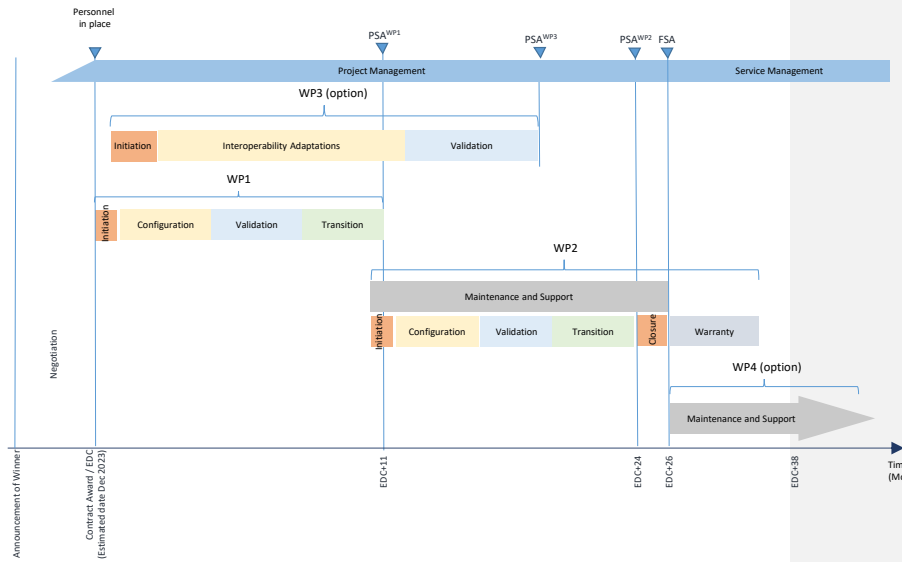


Figure 1.2 – DEMETER Life Cycle overview

[011] The project schedule as illustrated in Figure 1.2 is a proposed schedule, however the milestone dates are considered fixed dates.

[SOW-002] The Contractor shall deliver according to the SSS. The key project schedule constraints are listed in Table 1.1.

Table 1.1 – Key events and dates

Key event	Schedule Date
Training Materials accepted	Training Material Review (TMR) = EDC + 6 months
Acceptance of WP1	PSA ^{WP1} = EDC + 11 months
Acceptance of WP2	PSA ^{WP2} = EDC + 24 months
Acceptance of all project deliverables	FSA = EDC + 26 months
End of Warranty	FSA + 12 months

1.4.1 Work Package 1: Implement initial sites

[012] This WP covers the configuration and implementation of DEMETER in authorized locations (refer to Table 4.2) inclusive of licenses and all the required activities, such as tests, site surveys and deployments.

[013] This WP addresses initial training aspects of the capability with the provision of the training to the NATO trainers, support personnel and users.

- [014] This WP includes the migration from LC2IS to DEMETER by preparing a detailed Transition Plan, including secure data migration.
- [015] At successful completion of WP1, the PSA WP1 milestone is reached (PSA^{WP1}).

1.4.2 Work Package 2: Implement remaining sites

- [016] This WP covers the configuration and implementation of DEMETER in the remaining authorized locations, inclusive of licenses, as well as all the required activities, such as tests, site surveys and deployments.
- [017] This WP also includes (repeating) the migration from LC2IS to DEMETER.
- [018] The Contractor will perform the maintenance and support of DEMETER and any follow-on deployed baseline releases or patches.
- [019] At successful completion of this WP, the PSA WP2 milestone is reached (PSA^{WP2}).
- [020] FSA will be granted when the Purchaser has verified completeness of the entire scope and has determined that it meets the contractually agreed scope. Subsequently, on successful achievement of the FSA, the warranty period will commence.
- [021] Starting on the date of the FSA, the Contractor will provide one year warranty for all deliverables and services furnished under this Contract.

1.4.3 Work Package 3: Optional Interoperability Adaptations

- [022] This optional WP will cover the specified interoperability requirements that require adaptations in order to fully meet the selection criteria.
- [023] Also adaptations needed for other requirements are included in this WP.
- [024] The adaptations in this WP will be deployed to production as part of WP2.
- [025] Any additional costs when this WP is exercised should be included in WP3 and not in WP2.
- [026] At successful completion of this WP the PSA WP3 milestone is reached (PSA^{WP3}).
- [027] Refer to Annex B for the requested interfaces.
- [028] Reserved.

1.4.4 Work Package 4: Optional Maintenance and Support Services

- [029] The optional WP specifies the Contractor furnished services for the maintenance and support of DEMETER for ten years, starting from FSA with the first year being concurrent with the warranty period.

2 Purchaser's Responsibilities

- [030] The Purchaser's project manager (PM) will act as the Purchaser's representative and will be the primary interface between the Contractor and Purchaser after CAW.
- [031] The Purchaser's PM will be supported by specialists in certain areas (e.g. the technical lead) who may be delegated to act on the PM's behalf in their area of expertise.

2.1 Purchaser Furnished Property and Services

- [032] The Purchaser will provide the Contractor with NATO documentation and references if such are required for the efforts under the Contract.
- [033] The Purchaser will coordinate access to subject-matter experts (SMEs) and user communities.
- [034] The Purchaser will coordinate access to NATO sites the Contractor will have to visit.
- [035] The Purchaser will provide the Contractor with available technical descriptions of external NATO interfaces if such are required for the efforts under the Contract.
- [036] The Purchaser will equip the Contractor with two NATO RESTRICTED (NR) laptops to be used for sharing of electronic material up to NR. For access to material of classification higher than NR, the Contractor will be required to visit one of the Purchaser's main facilities in order to be able to review the classified material required for the efforts under this Contract.
- [037] The Purchaser will make available to the Contractor, by facilitating access at Purchaser facilities, the operational networks for deployment and if needed, for validation and training activities required under the Contract.
- [038] The Purchaser will provide the Contractor with "NATO Software Factory DevSecOps" services, "NATO Software Factory" (NSF) in short, a cloud-sourced development, integration and test platform covering the entire application development lifecycle (see Section 2.2).
- [039] The Purchaser will provide the Contractor for its project team a set of user accounts with access to the NSF and services furnished by the platform.
- [040] The Purchaser will make available to the Contractor, by facilitating access at Purchaser facilities, the reference test environments for the deployment, integration testing and validation activities required under the Contract.
- [041] The Purchaser will make available to Contractor, by facilitating access at Purchaser facilities, the integration testbed (ITB) facilities for deployment, integration testing and validation activities required under the Contract.
- [042] The Purchaser will provide the Contractor with access to an NCI Agency approved integration platform (e.g. the Service Oriented Architecture and Identity Management (SOA-IdM) platform, see [SOA-IdM] or IntCore).

2.2 NATO Software Factory DevSecOps Services

- [043] The NSF DevSecOps services offer a cloud-sourced development, integration and test platform covering the entire application development lifecycle.
- [044] The platform makes use of standardized application development processes and common tooling. This approach supports the Purchaser's strategy in moving towards

an agile capability development approach embracing a high degree of componentization and reuse through services, with an improved return on investment.

- [045] To ensure better coherency among the capabilities being developed and maintained within the NATO enterprise, the Purchaser is mandating the use of the NSF DevSecOps services. This approach will improve and tighten the collaboration between Purchaser and industry and ensures transparency of progress and quality throughout the development lifecycle, essential both to performance monitoring and quality assurance performed by the Purchaser.
- [046] The NSF DevSecOps services are hosted in a secure public cloud and will be offered as Platform as a Service (PaaS) based on the Microsoft Azure DevOps platform. Therefore, the highest level of security classification that is allowed to be used on this platform is NATO UNCLASSIFIED.
- [047] The NSF DevSecOps services will provide cloud services and a series of tools (toolchain) based on both Microsoft and Open-Source Stack (OSS) technology ecosystems. These include source code hosting, configuration management, build and continuous integration pipelines, (automated) testing, work item management, artefacts repository and collaboration space.
- [048] The Purchaser furnished services part of the NSF is limited to the following:
- (a) User accounts with access to the NSF:
 - Basic Plus Profile for Microsoft Azure DevOps services and Test Plan access;
 - NSF DevSecOps Security Services;
 - NSF Microsoft Office 365 E1 license (Microsoft Office 365 online, Microsoft Teams for collaboration, Microsoft SharePoint for documentation management and collaboration);
 - (b) Git for source code control (for optional WP3);
 - (c) NSF Microsoft Azure Cloud services access (DevTestLabs, build server, integration platform); and
 - (d) Microsoft Azure Cloud Services costs.

It does not include:

- (a) Development tools individual licenses (e.g. Microsoft Visual Studio).

3 General Requirements

- [049] This section defines the general requirements of this SOW.
- [050] The Purchaser's main facilities are at The Hague, Netherlands. Depending on the nature of the works, activities may need to be conducted at other facilities than the Purchaser's main facilities.

3.1 Communication

- [SOW-003] The Contractor shall use the English language in all its communications relevant to this Contract, i.e. in conversations, meetings, workshops, emails, reports, etc.

3.2 Meetings

- [051] The term meetings includes workshops, formal reviews and validation activities.
- [SOW-004] Meetings requiring in person attendance shall take place at one of the Purchaser's main facilities, with location at the discretion of the Purchaser. If circumstances of the meeting require, at the discretion of the Purchaser, the Contractor shall meet in person at other Purchaser's facilities.
- [SOW-005] If meeting/conference rooms at the specified Purchaser facilities are not available in the timeframe required to support an in-person meeting, the Contractor shall:
- (1) Reschedule the meeting to such time as meeting/conference rooms are available at the Purchaser's facilities, with no further adjustment to schedule or cost; or
 - (2) If the Contractor prefers the meeting to take place within the foreseen timeframe, provide suitable meeting/conference rooms (e.g. hotel meeting/conference rooms) for the meeting in close proximity of the Purchaser's facilities at no additional cost to the Purchaser; or
 - (3) Alternatively, if the Purchaser agrees, arrange to host the meeting at the Contractor's facilities. These meeting/conference rooms shall be provided at no additional cost to the Purchaser.
- [SOW-006] For meetings taking place at the Contractor's facilities, the Contractor shall enable the Purchaser to participate in the meeting remotely using video conferencing technology (e.g. Microsoft Teams), if the purpose and circumstances of the meeting allow for or require remote participation.
- [SOW-007] Unless specified otherwise, at least two (2) weeks prior to all meetings required under this Contract, the Contractor shall send an invitation, including agenda and objectives of the meeting.
- [SOW-008] If any artefacts or deliverables are to be reviewed in preparation of the meeting, the Contractor shall provide these artefacts at least at least one (1) week for the Purchaser to review them and provide feedback to the Contractor.
- [SOW-009] The Contractor shall record meeting minutes and provide the minutes to the Purchaser within three business days after the meeting.
- [SOW-010] The Contractor shall meet with the Purchaser as required to discuss progress of work or any other matter relevant to this Contract.

3.3 Security Aspects

- [052] Security aspects relevant to the Contractor's work are defined in the Contract Provisions. This section identifies additional security requirements related to the execution of the Contractor's work.
- [SOW-011] All Contractors' personnel assigned to work under this Contract shall have a NATO SECRET (NS), or higher, security clearance throughout the period of performance of the Contract.
- [SOW-012] The Contractor shall process all its personnel through NATO security at each of the Purchasers' facilities, adhering to the local procedures for clearances, to obtain unescorted access (unescorted security badges) for the duration of the on-site activities.
- [SOW-013] The Contractor shall seek prior Purchaser approval for any service or deliverable planned to be produced and delivered with a security classification level higher than NATO UNCLASSIFIED (NU).
- [SOW-014] The Contractor shall ensure secure transfer of any classified service and deliverable from the Contractor's facilities to the Purchaser's facilities.
- [SOW-015] All information items are to be handled according to their security classification, in accordance with [AD-070-001].

3.4 Location of Performance

- [SOW-016] The Contractor shall perform the main effort set forth in the Contract at the Contractor's facilities, unless specified otherwise or agreed by the Purchaser.

3.5 NATO Software Factory

- [SOW-017] The Contractor shall use the NSF services furnished by the Purchaser (Section 2.1) in support of delivering all capabilities and services, under the Contract.
- [SOW-018] The Contractor shall furnish its project team with capable physical workstations and enable connectivity and provide access for its project team to the NSF services from its facilities and from mobile workstations when project team members are away from the Contractor's facilities, e.g. on travel duty. Mobile devices, e.g. laptops, shall have full disk encryption enabled.
- [SOW-019] The Contractor shall deliver to the Purchaser a named-list of its project team members, including their email addresses.
- [053] When the Purchaser has received the named-list project team members from the Contractor, the Purchaser will create accounts for these project team members within the NSF. The NSF accounts for key personnel will be created upon confirmation of the Contractor's key personnel.
- [SOW-020] The Contractor shall verify that its project team members have access to the NSF after having received their account information.
- [SOW-021] The Contractor shall notify the Purchaser immediately of any changes in the Contractor's project team composition to allow the Purchaser to manage effectively and efficiently the NSF accounts assigned to Contractor's project team.

Version 1.1

- [SOW-022] The Contractor shall enable and maintain full traceability between contracted requirements, test cases, etc. within the NSF.
- [SOW-023] The Contractor shall organize the engineering artefacts within the NSF in a structured and logical way as configuration items that will enable the Purchaser to quickly find any artefacts based on context (e.g. WP) and artefact type.
- [SOW-024] The Contractor shall use the ticketing system on the NSF for tracking defects and issues.
- [SOW-025] The Contractor shall ensure that all artefacts uploaded and all services delivered on the NSF are kept at NATO UNCLASSIFIED or lower security classification level.
- [SOW-026] In case it would not be feasible to stay at NATO UNCLASSIFIED or lower security classification level on the NSF (e.g. not feasible to use declassified or mock data), the Contractor shall perform the work at a Contractor's furnished secure environment.
- [054] As per Section 2.1, the Purchaser will furnish NSF accounts and Microsoft Azure Cloud Services.
- [055] The Contractor may also propose additional services and tooling to be hosted on the NSF in addition to the services and tooling furnished by the Purchaser.

[SOW-027] The Contractor shall specify and dimension the number of NSF user accounts, the Microsoft Azure Cloud Services and additional products and services that are required throughout the period of performance of the Contract. Separate dimensioning shall be provided for the period from Contract Award to Final System Acceptance, the warranty period, and the yearly maintenance and support options. The details for each period shall provide sufficient information on how the specifications and dimension are derived and shall include:

- (1) Number of user accounts required monthly, e.g. the Contractors' project team size for each of the following profiles: developers, testers, stakeholders;
- (2) Design and specifications of the type and configuration(s) of the virtual workstations, servers and services that are required concurrently for development, build, testing and integration activities;
- (3) The quantity and characteristics of virtual workstations, servers and associated services (storage, Kubernetes Service, container registry, database service, etc.) required and their monthly usage/load profiles. Products and services shall be defined using the Azure Pricing calculator public profile (<https://azure.microsoft.com/en-us/pricing/calculator/>);
- (4) Specifications and quantity of any additional services and tooling to be hosted on the NATO Software Factory that the Contractor deems necessary and not yet covered in the services and tooling furnished by the Purchaser.

Extra care should be taken in the proposed dimensioning to minimize the overall cost by deploying and running the required resources only when actually used.

[SOW-027-1] The Contractor shall provide these specifications and dimensions as an annex to the Project Management Plan (see Section 8.4).

- [055-1] These specifications and dimensioning of NATO Software Factory resources will be inserted in the Annex E to Contract Special Provisions before Contract Award.
- [SOW-028] The Contractor shall limit use of the NATO Software Factory resources to the specifications and dimensions of the number of NATO Software Factory user accounts, the Microsoft Azure Cloud Services and additional products that are required throughout the period of performance of the Contract, in accordance with Article 23 and Annex E of the Contract Special Provisions.
- [SOW-029] In case additional products and services to be hosted on the NATO Software Factory are proposed, the Contractor shall be provide justification for the use of these products and services.
- [055-2] The additional products and services are subject to Purchaser approval.
- [SOW-030] After Purchaser approval has been obtained for the additional products and services, the Contractor shall submit any NATO Software Factory service request, including hosting of additional products and services on the platform to the Purchaser, who will evaluate the request and engage with the NATO Software Factory service support team for implementation of the request.
- [SOW-031] The Contractor shall implement and provision the support associated with these products and services throughout period of performance of the Contract.
- [SOW-031-1] The Contractor shall not use any internal tools (ALM management, work items management, build tools or repositories, etc.), storage or document management system outside of the tools provided by NATO Software Factory or explicitly approved by the Purchaser.
- [SOW-031-2] The Contractor shall acquire/procure the necessary licenses/subscriptions for its project team members and maintain those licenses throughout the period of performance of the Contract. These shall include but not limited to:
- (1) The Microsoft Azure DevOps Test Plan access (appropriate Microsoft Visual Studio licenses, e.g. Test Professional or Enterprise);
 - (2) Development tools individual licenses (e.g. Microsoft Visual Studio).
- Note: See Section 3.6 for further license/subscription requirements on third-party software and components.

3.6 Third-Party Software and Components

- [056] DEMETER may use and integrate several COTS, non-commercial and open-source, i.e. free and open-source software (FOSS), components, libraries and packages. This includes the development environment, office and other specialised applications for use by the project team. This collection of software, components, libraries and packages, are referred to as third-party software and components.
- [SOW-032] The Contractor shall only use components as described in [056] that are supportable and are admissible to the Agency Approved Software List (A2SL).
- [057] The choice of third-party software and components should not limit the distribution or installation of DEMETER.

Version 1.1

- [SOW-033] The Contractor shall acquire/procure the required third-party software and component licenses/subscriptions and maintain those licenses throughout the period of performance of the Contract.
- [SOW-034] The Contractor shall place all third-party software and components, including vendor-supplied documentation artefacts (e.g. manuals) under configuration control (refer to section 3.9).
- [SOW-035] The Contractor shall use and integrate any updates (major, minor, patch releases) of any of the third-party software and components when these become available.
- [SOW-036] The Contractor shall maintain a roadmap for the third-party software and components based on available information provided by vendors (e.g. anticipated or published release cycle) for at least the next three (3) years. The Contractor shall consult the Purchaser regarding the appropriate timeframe for inclusion of major versions and favour long-term support (LTS) releases when available. In addition, the Contractor shall adhere to the change management processes. Refer to section 3.8.4.4.
- [SOW-037] Subject to Purchaser approval, the Contractor may propose the use and integration of new third-party software and components, for example to replace existing software or components, or to support the implementation of new requirements.
- [SOW-038] The Contractor shall deliver the needed licenses and/or subscriptions as part of DEMETER and maintain those licenses/subscriptions throughout the period of performance of the Contract, meeting the following conditions:
- (1) The Contractor shall deliver all third-party software and component licenses/subscriptions registered with the NCI Agency as license holder;
 - (2) The Contractor shall ensure that all upgrades, update and patch releases of the third-party software and components are included within the provided licenses/subscriptions;
 - (3) The Contractor shall deliver renewed/extended licenses/subscriptions of these third-party throughout the period of performance of the Contract; and
 - (4) The Contractor shall ensure that none of the third-party software and components have an additional run-time or per end-user/seat license-fee.

3.7 Project Management

- [058] The objective of the Contractor's project management is to establish a project organization and guide the delivery of services and capabilities of this Contract through a controlled, well-managed, visible set of activities to achieve the desired outcomes. Wherever possible, the Contractor's project management should aim to eliminate problems and ensure that those problems that do occur are identified early, assessed accurately, and resolved quickly.

3.7.1 Project Organization and Management

- [SOW-039] The Contractor shall establish and maintain a project organization to manage and deliver all services necessary to discharge of all its responsibilities set forth in the Contract.
- [SOW-040] The Contractor shall establish a project management process using PRINCE2, or a similar and internationally recognized project management standard, and

perform effective project management throughout the period of performance of the Contract.

3.7.2 Project Board

- [059] A project board is formed by the Purchaser according to PRINCE2 principles and serves as the primary mechanism for monitoring project status, resolving issues or conflicts within the project, as well as advising the Purchaser's PM.
- [060] The Purchaser's C2 Centre Chief chairs the project board in an "Executive" role.
- [061] The Contractor will be considered a member of the project board as the "Senior Supplier" role.
- [062] The user community (or representative) will be considered a member of the project board as the "Senior User" role.
- [063] The other members (e.g. "Assurance") are designated representatives of the Purchaser.
- [SOW-041] Depending on the context of the meeting, the Contractor will be invited and shall participate in the project board meeting.

3.7.3 Resources and Personnel

- [SOW-042] The Contractor shall provide the necessary resources and personnel, appropriately skilled and experienced, to deliver the services and capabilities that meet the requirements set forth in the Contract.
- [SOW-043] The Contractor shall take all reasonable steps to ensure continuity of resources and personnel assigned throughout the period of performance of the Contract.
- [SOW-044] The Contractor's personnel shall be available to travel and may be required to perform duties (e.g. conduct preparations or perform upgrades) during weekends, official holidays, and after regular business hours as the Purchaser's operational or practical requirements necessitate.
- [SOW-045] The Contractor personnel identified below shall be considered as key personnel in accordance with the Contract Special Provisions:
- (1) Project Manager;
 - (2) Lead Instructor;
 - (3) Technical Lead; and
 - (4) Test Manager.
- [SOW-046] The Contractor shall provide to the Purchaser an (updated) list of the key personnel and their resumes during Contract negotiations.
- [SOW-047] The Contractor shall make available its key personnel for interviews with the Purchaser during Contract negotiations prior to CAW.
- [064] CAW will only proceed when Contractor proposed key personnel has been assessed and considered acceptable by the Purchaser.
- [SOW-048] The Contractor shall ensure that assigned key personnel is available from the CAW onwards.
- [SOW-049] The Contractor shall make available replacement key personnel for interviews with the Purchaser from the moment the Contractor formally notifies the Purchaser of the replacement.

3.7.4 Key Personnel Qualifications

3.7.4.1 General

[SOW-050] All key personnel shall be proficient in the English language for effective verbal and written communication and for technical documentation.

3.7.4.2 Project Manager

[SOW-051] The Contractor shall designate a PM, who shall direct and co-ordinate the activities of the Contractor's project organization. Responsibilities include establishing project plans as well as their proper execution, coordinating with the project teams to ensure that all project requirements, deadlines and schedules are on track, submitting project deliverables, preparing status reports, and coordinating with Purchaser.

[SOW-052] The Contractor's PM shall be prepared at all times to present and discuss the status of Contract activities with the Purchaser's PM, Contracting Officer, or Technical Lead.

[SOW-053] The Contractor's PM shall serve as point of contact for the Purchaser's Independent Verification, Validation and Quality (IVVQ) Service Line.

[SOW-054] The Contractor's PM shall meet the following minimum qualifications:

- (1) Have a bachelor's degree or equivalent;
- (2) Have a formal certification through Project Management Institute, PRINCE2, or equivalent; and
- (3) Have seven years of proven experience in managing projects similar to this project in technical and financial scope.

3.7.4.3 Lead Instructor

[SOW-055] The Contractor shall designate a Lead Instructor who shall be responsible for ensuring the integrity and quality of all training deliverables and training activities conducted under this Contract. The Lead Instructor shall have a leading role in delivering the training courses.

[SOW-056] The Contractor's Lead Instructor shall meet the following minimum qualifications:

- (1) Have a bachelor's degree or equivalent;
- (2) Have at least five years of experience in developing training materiel and two years of experience in leading training materiel development teams;
- (3) Have at least five years of experience in instructing software applications;
- (4) Have effective verbal and written communication skills, with ability to communicate direct feedback in a compelling way that empowers others;
- (5) Have effective presentation skills, strong classroom-management skills and stage presence;
- (6) Being able to relate the practical use of a software application to the applicable functional/operational context; and
- (7) Desirable to have a military background and/or have experience in instructing military personnel (e.g. commissioned officers).

3.7.4.4 Technical Lead

[SOW-057] The Contractor shall designate a Technical Lead who shall be responsible for all technical aspects of the project, such as:

- (1) The high-level structure of the COTS, its main components and their interfaces;
- (2) The interactions of the COTS with external systems; and
- (3) The configuration of the COTS to work on NATO networks.

[SOW-058] The Contractor's Technical Lead shall meet the following minimum qualifications:

- (1) Have a master's degree in computer science, or related/equivalent studies;
- (2) Have at least seven years of experience in leading technical roles in projects similar to this project in complexity and scope; and
- (3) Understanding of the particular business domain.

3.7.4.5 Test Manager

[SOW-059] The Contractor shall designate a Test Manager who shall be responsible for planning and executing all test activities conducted under this Contract and shall manage the testing team.

[SOW-060] The Contractor's Test Manager shall meet the following minimum qualifications:

- (1) Have a master's degree in computer science, or related/equivalent studies; and
- (2) Have at least five years of experience as test manager/senior test engineer in projects similar to this project in complexity and scope.

3.7.5 Project Management Plan

[SOW-061] The Contractor shall deliver a Project Management Plan (PMP) compliant with Section 8.4, and document its project organization, project management processes and project execution and delivery approach.

[065] The acceptance of the PMP by the Purchaser signifies only that the Purchaser agrees to the Contractor's approach in meeting the contractual obligations. This acceptance does not relieve the Contractor from its responsibilities to meet the requirements stated in the Contract. The requirements of the Contract supersede any statement in the PMP in case of any conflict, ambiguity or omission.

[SOW-062] The Contractor shall ensure the PMP remains current to reflect the actual state of the Contractor's organization, processes and efforts throughout the period of performance of the Contract.

[SOW-063] The Contractor shall deliver follow-on revisions (post the accepted baseline) of the PMP to the Purchaser for Purchaser assessment.

3.7.6 Risk Management

[SOW-064] The Contractor shall establish a risk management process and perform risk management throughout the period of performance of the Contract.

[SOW-065] The Contractor shall document its risk management process within the PMP.

[SOW-066] The Contractor shall document all risks to the project in the risk register as part of the risks, actions, issues, decisions (RAID) register (Section 8.5) and maintain the risk register to reflect the actual status of risks throughout the period of performance of the Contract.

[SOW-067] The Contractor shall periodically, at least once every three (3) months, conduct a risk assessment, deliver an updated risk register and report on any significant changes in the risks.

3.7.7 Issue Management

- [066] Issue management is the process of identifying, tracking, analysing, reporting and resolving all project issues.
- [SOW-068] The Contractor shall establish an issue management process and perform issue management throughout the period of performance of the Contract.
- [SOW-069] The Contractor shall document its issue management process within the PMP.
- [SOW-070] The Contractor shall document all project issues in the issue register as part of the RAID register (Section 8.5) and maintain the issue register to reflect the actual status of issues throughout the period of performance of the Contract.

3.7.8 Project Highlight Report and Project Checkpoint Review

- [SOW-071] The Contractor shall provide, no later than the fifth working day of every 3rd month, a Project Highlight Report (PHR), see Section 8.6.
- [SOW-072] The Contractor shall conduct Project Checkpoint Reviews (PCR) throughout the Contract period of performance. By default, the PCRs shall take place in the week after the delivery of the PHR.

3.8 Test, Verification, Validation and Assurance (TVVA)

- [067] This section details the Test, Verification and Validation TV&V processes and requirements to be applied and performed under the Contract, which are required for the verification and validation of the requirements set forth under the Contract by the Purchaser.
- [SOW-073] All Contract-related deliverables supplied by the Contractor under this contract shall be tested, verified and validated to ensure that they meet the requirements of the contract. Both fitness-for-use and fitness-for-purpose will be assessed using a quality based approach. Responsibility for each test, verification and validation activity is defined in this section.
- [068] The verification and validation approach will not only involve delivered equipment, but also interfaces and interoperability with existing NATO and/or national equipment, here considered as Purchaser Furnished Properties and Services.
- [069] In this document, the term "deficiency" is considered to be an inadequacy or incompleteness process definition or execution, while the term "defect" is an error, a fault or a malfunction inside a Configuration Item.
- [070] Requirements verification methods, as defined in [ISO/IEC/IEEE-29148], will be used in order to obtain evidence(s) that requirements have been fulfilled.
- [SOW-074] For each requirement, the Contractor shall select a verification method, which shall be approved by the Purchaser.
- [SOW-075] The Contractor shall use the Purchasers' categorization nomenclature for all defects and non-compliances.
- [SOW-076] If applicable, the Contractor shall develop and validate any Test Harnesses, simulators and stubs, including all script/code/data/tools required to execute the planned functional and non-functional tests in the Test Environment.

- [SOW-077] All TVVA material developed and used under this contract shall be delivered to the Purchaser, latest by FSA.
- [SOW-078] Progress and result measurement shall be reported at agreed milestones and focused on items identified in the Master Test Plan (MTP).

3.8.1 TV&V activities

- [SOW-079] The Contractor shall have the overall responsibility for meeting the TV&V requirements and conducting all related activities. This includes the development of all TV&V documentation required under the Contract, the conduct of all independent verification and validation as well as the evaluation and documentation of the results.
- [SOW-080] All document-based deliverables shall be produced in a manner compliant with the templates provided by the Purchaser.
- [SOW-081] The Contractor shall perform the verification activities for each iteration and for each target environment (Contractor and Purchaser).
- [SOW-082] The Contractor shall perform verification to confirm that each element properly reflects the specified requirements, design, code, integration and documentation.
- [SOW-083] The Contractor shall support Purchaser led Validation activities to confirm that the solution is fit for purpose.
- [SOW-084] The Contractor shall be responsible for the planning, preparation, organization, execution and follow-up of all TV&V events.
- [071] The Purchaser will assist in preparations by reviewing and providing feedback on all Contractor produced Configuration Items. The Purchaser will also provide testing and engineering Subject Matter Expertise (SME) during all TV&V events to witness and assist with these events, as well as IVVQ Test Engineers, and, for some events and at the Purchaser's discretion, a NATO Quality Assurance Representative.
- [SOW-085] The Contractor shall demonstrate to the Purchaser that there is a Test Process in place for the Contract, supported by Contractor Quality Assurance (QA).
- [SOW-086] The Contractor shall provide test data to support all TV&V activities.
- [SOW-087] The Contractor shall follow the Purchaser defined TV&V processes as described in this SOW.
- [SOW-088] If the Contractor wishes to propose a modification to the process, the proposal shall be approved by the Purchaser and documented accordingly.
- [SOW-089] The Contractor shall ensure that rigorous testing, including regression testing when required, is performed at every stage of the Project lifecycle in order to identify and correct defects as early as possible and minimise impact on cost and schedule.
- [SOW-090] All test, verification and validation material developed and used under the Contract shall be delivered to the Purchaser.
- [072] The List of TV&V Phases table below, lists and describes the different TV&V phases and associated activities during the project execution. If deemed necessary, the project may split the test phases defined in the Table into multiple events.

- [SOW-091] The Contractor shall appoint a Test Manager for the phases defined in the Table below. The Test Manager will work closely with the Purchaser's assigned TVV Manager and NATO Quality Assurance Representative (NQAR).
- [SOW-092] The Purchaser will appoint TV&V Test Engineers and Subject Matter Experts (SME) for each test event.
- [SOW-093] The Contractor shall use Key Performance Indicators (KPIs) to measure process execution and identify opportunities for quality improvement, provide solutions and update the plans, the achievement of defined objectives like coverage of risks, requirements, supported configurations, supported operational scenarios, etc.
- [SOW-094] The Contractor shall have the overall responsibility for meeting the TV&V requirements and conducting all related activities defined in the Table below.

Table 3.1 – List of TV&V Phases

TV&V Phases	Scope	Purchaser Involvement
Factory Acceptance Phase	To verify that production units comply with the requirement/design specifications and assess whether production can start. Confirm that all required engineering-level testing activities have been completed in accordance with the requirements. Determine if project deliverables are ready for subsequent TV&V activities.	Review: Event Test Plan, Test Cases/Scripts, Test Report, Test Data, Test Environment Baseline, Existing defects. Dry Run results. Participate: Dry Run (Optional Purchaser participation), TRR, Test Execution, Event Review Meeting (ERM)
TV&V Assessment Phase	Independent assessment performed with Purchaser and led by Contractor to determine whether or not a system satisfies user needs, functionality, requirements, and user workflow processes etc. before it gets into operation. Ensures quality criteria defined in figure 1 Product Quality Criteria, for the following tests: System Integration Test (SIT) – Requirements based testing, focused on verifying integration of the different components together and with any external interface as defined by the SoW User Acceptance Test (UAT) – Scenario based testing, focused on validating the system as per user needs. Security Tests – Tests focused on ensuring the security criteria are met. System Acceptance Test (SAT) – Tests focused on ensuring compliance with the requirements outlined in the SoW. RFC Evaluation – Review by Agency Change Managers and execution of any additional evaluation as requested by Change Managers.	Review: Event Test Plan, Security Test and Verification Plan (STVP), Test Cases/Scripts, Test Report, Test Data, Test Environment Baseline, Existing defects Participate: TRR, Test Execution, Event Review Meeting (ERM). User Reviews (including internal users)

	Under normal circumstances, all required inputs are generated from TV&V activities.	
Site Acceptance Phase (SiAT)	To ensure that the specific site/node is installed properly per site/node installation plan and the service meets the requirements stated in the SRS. Site Acceptance Testing is also to ensure compatibility and integration of the product with the site environment. Migration related tests are also covered under this tests. This includes integration with PFE.	Review: Event Test Plan, Test Cases/Scripts, Test Report, Test Data, Test Environment Baseline, Existing defects Participate: TRR, Test Execution, Event Review Meeting (ERM)
Operational Test and Evaluation	To ensure that all the Operational Acceptance Criteria (OAC) such as performance and availability have been successfully implemented. Sites are successfully integrated and tested on the network level. Demonstrate that all components of the System/Application have been integrated (including other systems) to meet all OACs as well as all security requirements defined in the Security Accreditation Documentation Package. Ensure end to end delivered system works as expected and can interoperate with other Purchaser equipment	Review: Event Test Plan, Test Cases/Scripts, Test Report, Test Data, Test Environment Baseline, Existing defects Participate: TRR, Test Execution, Event Review Meeting (ERM)

[073] The Purchaser reserves the right to monitor and inspect the Contractor's TV&V activities to verify their compliance with the requirements set forth in this Contract.

[SOW-095] The Contractor shall only proceed to the next formal TV&V activity, after the successful completion of the previous TV&V activity and after the agreement/approval by the Purchaser.

3.8.2 Deliverable

[SOW-096] The Contractor shall provide a System Test Documentation Package, following documentation templates provided by the Purchaser, which is comprised of the following documents:

Table 3.2 - Test Documentation

Work Product Name	Sent to Purchaser
The Master Test Plan (MTP)	4 weeks after Contract award
Defect Reporting and Management Plan	4 weeks after Contract award
Event Test Plans for individual test events (ETP)	4 weeks before TV&V event
The Security Test & Verification Plans (STVP)	as required per the NSAB
Any submitted test Waivers together with supporting material	4 weeks before TV&V event

Work Product Name	Sent to Purchaser
The Test Cases/Scripts/Steps	4 weeks before TV&V event. First draft 4 weeks after Contract award
Status Reports	Periodically (to be defined in the MTP)
Test Completion Report	1 week after TV&V event
System under-test Documentation	2 weeks before TV&V event
The Requirements Traceability Matrix (RTM) updated with test-related information	First with MTP and update as required

[SOW-097] The following timeline indicates by when the deliverables need to be provided to the Purchaser (and approved by the Purchaser) for each Test Event (dates follow the timelines of the previous table):

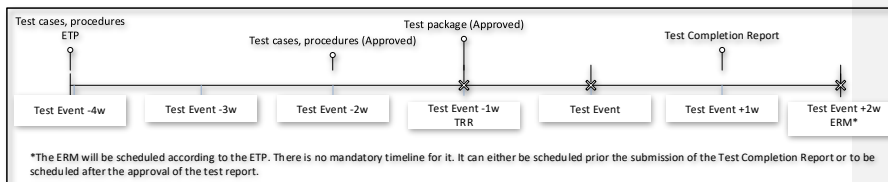


Figure 3.1 – Test Event timeline

[SOW-098] Modification of inaccurate or inadequate TV&V deliverables and any subsequent work arising as a result shall be carried out at the Contractor's expense.

[SOW-099] All TV&V materials developed and used under the Contract shall be delivered to the Purchaser.

[SOW-100] Templates provided by the Purchaser are to be utilized by the Contractor as structure guides and for the content the Purchaser expects to be detailed. If the Contractor would like to propose a modification of the templates, it shall be approved by the Purchaser.

[074] All deliverables shall undergo as many review cycles are required, and have to be approved once all deficiencies have been corrected.

3.8.2.1 Master Test Plan

[SOW-101] The Contractor shall develop a Master Test Plan (MTP) document conforming to the specifications in section 8.7 and keep the MTP always up to date.

3.8.2.2 Test Cases and Test Procedures

[SOW-102] Any updates required from the execution of test cases during each phase shall be incorporated into the relevant test cases by the Contractor for use during independent verification, validation and acceptance. If only certain sections are affected, then it shall be sufficient to up-date and re-issue those section plus cover sheet with amendment instructions. Should major changes in contents or page re-numbering be needed, then the complete section shall be re-issued by

the Contractor. All changes shall be made with the agreement and approval of the Purchaser

- [SOW-103] The Contractor shall submit the draft test cases for the TV&V event to the Purchaser for approval no later than four (4) weeks prior to the execution of the tests, unless differently stated in a work package. The Purchaser shall provide comments or approval within four (4) weeks of receipt. The Purchaser must have the final version of the test cases and Event Test Plan available one (1) week prior to the TRR for a specific TV&V event
- [SOW-104] The Contractor shall develop test and use cases to verify and validate all requirements in the SoW, requirements specifications and final design. The test cases shall follow the template provided by the Purchaser

3.8.2.3 Event Test Plan (ETP)

- [SOW-105] The Contractor shall create an Event Test Plan (ETP) per each event detailing all the information required for that event. The ETP shall follow the template provided by the Purchaser.
- [SOW-106] The Contractor shall describe in the event test plan what training (if any) will be provided prior to formal TV&V events.
- [SOW-107] The Contractor shall identify, in the ETP, which environment(s) to be used at each TV&V event and the responsibilities for configuration control, operation and maintenance of the environment.
- [SOW-108] The ETP shall describe when an agreement shall be reached between the Contractor and the Purchaser on the defect categorization and defect priority of failures encountered, as well as a way forward (if either at the end of each day of a TV&V event or at the Event Review Meeting). If agreement is not reached, the disputed items shall be escalated to the Purchaser's and Contractors' Project Managers

3.8.2.4 Requirement Acceptance Criteria

- [075] Requirement Acceptance criteria represent a condition that states whether the specified SRS requirements are fulfilled or not. Written in simple language, the Acceptance Criteria is complementary to each contractual requirement in the SRS and provides the basis of a shared understanding for what is to be delivered and what is required as objective evidence to assess that a requirement has been met. Acceptance Criteria for requirements with V&V Method of Test and Demonstration for instance can be written in "Given/When/Then" format. It is meant to provide a logical description which actions would lead to meeting the requirements. It is not meant to provide detailed input or physical description (as this is the actual Test Case/Script).
- [SOW-109] The Contractor shall translate each requirement in the SRS, in an acceptance criteria that will clearly detail how the requirement will be fully met (clear pass/fail or yes/no outcome)
- [SOW-110] The Contractor shall address the Purchaser's comments and update the Acceptance Criteria accordingly.
- [SOW-111] The Acceptance Criteria shall be agreed by both Contractor and Purchaser prior to the creation of the Test Cases/ Scripts.

[SOW-112] The agreed Acceptance Criteria SHALL be translated into Test Cases to provide details of full requirements coverage

3.8.2.5 Requirements Traceability Matrix (RTM)

[SOW-113] The Contractor shall produce and maintain the Requirement Traceability Matrix (RTM), which includes all functional and non-functional requirements, to track the TV&V status of all requirements throughout the Contract execution (especially during the TV&V activities). The RTM shall also trace the requirements to the design. It shall also define how the requirements will be validated or verified at each of the TV&V activities:

- (1) The verification method: Inspection, Analysis, Test or Demonstration
- (2) Correspondent TV&V phase(s) for each requirement
- (3) Coverage Status

[076] The Purchaser will review and approve the proposed RTM. In addition another document, called Operational Acceptance Traceability Matrix (OATM), shall be maintained by the Purchaser to trace the Operational Acceptance Criteria along the TVV activities execution.

[SOW-114] The Contractor shall maintain the RTM updated during the project lifecycle.

[SOW-115] The RTM shall be provided and maintained, extend this matrix to the [SW Only] Development Baseline, [/SW Only], Product Baseline / As-Built configuration and the Master Test Plan (MTP) to ensure verification throughout the project.

[SOW-116] The RTM shall guarantee the two-way link between requirements (SRS) and technical specifications.

[SOW-117] The Contractor shall provide the Purchaser with updates (via the tools) to the RTM daily during the execution of an event, and following the conclusion of each event defined in the MTP. A workflow for updating the RTM shall be proposed by the Contractor and approved by the Purchaser.

[SOW-118] The Contractor shall verify each requirement using a verification method as defined in Annex A. Selected verification method for each requirement is subject to Purchaser approval.

[SOW-119] If the verification method per requirement is not provided beforehand, the verification method shall be either test or demonstration. Any deviation to this requirement is subject to Purchaser approval.

3.8.2.6 Operational Acceptance Traceability Matrix

[077] Operational Acceptance is the formal process, and decision, with respect to confirming whether or not a system/project satisfies the operational requirements, user needs and is sustainable over the course of its expected life.

[078] An Operational Acceptance Criteria (OAC) is a requirement that a system, project, service, or capability must satisfy in order to be accepted by a user, customer or other authorized entity.

[SOW-120] The purchaser will provide a collection of Operational Acceptance Criteria in the SRS and in an Operational Acceptance Traceability Matrix (OATM).

[079] The process for updating the OATM will be provided by the Purchaser and coordinated with the Contractor.

- [SOW-121] For each OAC in OATM, the Contractor shall provide a proposal of evidence for achievement of the OAC. The proposal shall be approved by the Purchaser.
- [SOW-122] The Contractor shall provide the Purchaser with updates (via the tools) to the OATM during the execution of an event, and following the conclusion of each event defined in the MTP.

3.8.2.7 STVP

- [SOW-123] The Contractor shall produce an STVP, to ensure that the Security testing, including verification of compliance with NATO CIS Security Regulations is applied. This is an integral part of the TV&V process.
- [SOW-124] The STVP shall support the accreditation of the System Platform. This document shall be approved by NATO Office of Security.

3.8.2.8 Test Completion Report

- [080] The Test Completion Report provides a summary of the testing performed during the Test Event.
- [SOW-125] The Contractor shall provide, in the Test Completion Report, a log/record of the event, including but not limited to individual test results, defects found (with a way forward for the ones remaining open), requirement coverage (planned and executed), test execution durations, deviations during execution and sign-off for each result by both the Contractor and Purchaser.
- [SOW-126] The Contractor shall provide Contractor's provisions and strategy for building/maintaining of the Reference Environment in MTP

3.8.2.9 Tools

- [SOW-127] The Contractor shall generate and deliver automated test procedures/cases compatible with Purchaser test management and automation tools.
- [SOW-128] The Contractor shall make use of automated testing and supporting testing tools (test management, requirement coverage, defect management, etc.) to the maximum applicable extent, for all system development, implementation, internal and formal tests. The process and proposed supportive tools shall be described in the Master Test Plan (MTP). In areas where the Purchaser already uses specific tools, the Contractor shall make use of the tools in use by the Purchaser
- [SOW-129] Tools supporting requirements coverage, defect management and test management shall be selected and hosted by the Purchaser and used by the Contractor. For any internal work, the Contractor may use their own internal tools, but the tools used for the Contractor's internal work shall be able to natively interface with the tools selected and hosted by the Purchaser in order to keep all TV&V related data for the project in the Purchaser tools.

3.8.3 TV&V Events and Results

- [SOW-130] The Contractor shall conduct testing during the Project lifecycle compliant with the following requirements:
- (1) The Contractor is responsible for conducting all testing during the Project lifecycle. The Contractor shall provide evidence to the Purchaser of the results of these testing activities. The Contractor shall respond to any

Purchaser clarification requests regarding test results or performance within two working days

- (2) The Contractor shall conduct all testing activities for any architectural changes.
- (3) The Contractor shall support post go-live activities during the Operational Acceptance phase, to evaluate the project capability performance and establish benchmarks for future enhancements, including any changes made to fulfil the requirements.
- (4) The Contractor shall provide status reports to the Purchaser regarding verification and validation activities during the planning/design and development phases, via the use of a dashboard report within the test management tool set and through meetings. The Contractor shall provide report(s) to the Purchaser following the completion of any TV&V event.
- (5) Test results shall be recorded in the test management tool set. All results of all formal acceptance testing performed during a given day must be recorded in the test management tool. The Contractor shall provide these test results for any given day by the starting of the next business day (0800 AM), but as a minimum not later than 24 hours following the execution of any test.

[081] The Purchaser will approve the report and its findings within two business days

[082] Progress and results measurement shall be approved by the Purchaser and focused on KPIs.

3.8.3.1 Test Readiness Review (TRR)

[SOW-131] The Contractor shall conduct a Test Readiness Review (TRR) meeting at least one week prior to the events defined in the MTP. The TRR shall ensure that all entry criteria for the events have been met. Documentation that requires review by the Purchaser prior to a TRR, as defined in the Event Test Plan (ETP), shall be provided no less than 2 weeks prior to TRR.

[083] The Purchaser has the right to cancel the TRR and/or any formal test event if the evidence demonstrates that execution of the test event will not be effective.

[SOW-132] The Contractor shall demonstrate that all the internal tests and dry runs are successful with test reports and results delivered to the Purchaser at least 2 weeks prior to start of any Contractual test activities.

[SOW-133] Formal acceptance testing, including installation testing, shall be performed always on an environment with the up to date security settings, latest approved patches and antivirus applied and on a solution that has followed the security guidelines and policies.

3.8.3.2 Event Review Meeting

[084] The start and/or ending of any test session shall be subject to the Purchaser approval. In the event that critical issues are encountered which impact the process of the testing or if the other functions depends on the failed test cases, the Purchaser has the right to stop the testing for Contractor's investigation. The tests can only re-start if Purchaser agrees to continue testing from the point of failure or re-start testing from the beginning.

[SOW-134] The Contractor shall convene an Event Review Meeting (ERM) as defined in the ETP. The ERM shall ensure that the event results, defect categorization and a way forward to fixing the defects (if required) is agreed between the Contractor and the Purchaser. If agreement is not reached, the disputed items shall be escalated to the Purchaser's and Contractors' Project Managers.

3.8.3.3 TV&V Event

[085] An event starts with the Test Readiness Review (TRR) and finishes off with the Event Review Meeting (ERM).

[SOW-135] During formal TV&V phases, a daily progress debrief shall be scheduled. Participation to the daily progress debrief will be agreed between Purchaser and Contractor. The aim of the debrief is to get a common understanding on what tests were run, which passed, which failed, and whatever defects were reported during the day.

[SOW-136] For each TV&V event, the Contractor shall provide log/record of the event, including but not limited to individual test results, defects found, requirement coverage, test execution durations, deviations during execution and sign-off for each result by both the Contractor and Purchaser.

[SOW-137] At the end of the project, the Contractor shall provide the final version of all artefacts (regardless of format) created during the execution of all TV&V activities.

3.8.3.4 Reference environments

[SOW-138] The Contractor shall obtain the approval of the Purchaser regarding the environments the formal events will take place on and in requesting the approval, indicate what support is required from the Purchaser to configure and prepare the environment. This includes any data from the Purchaser required for the test event. The Reference Environment Configuration shall be formally controlled using configuration management tools, and each baseline that will enter into a contractual event shall be delivered to the Purchaser for approval prior to TRR.

[SOW-139] The Contractor shall ensure that all test/reference environments are under proper configuration management, especially configuration control. The Configuration Management toolset and process shall be approved by the Purchaser.

[SOW-140] Formal verification and validation activities, including formal integration testing, shall be executed on the reference environment.

3.8.3.5 Test Waivers

[086] The Contractor may request a Waiver if the Contractor has previously successfully completed qualification testing to national, or international standards for assemblies, subassemblies components or parts. The Purchaser, after review of test waivers and analysis of their impact, reserves the right to require test and certification of the modified equipment at no cost to the Purchaser. The Purchaser has the right to reject any test Waiver.

[SOW-141] In respect to a requested Test waiver, the Contractor shall certify that the test environment to be implemented is identical to that which was originally used for

testing, or inform the Purchaser of design/construction changes which affect form, fit or function.

[SOW-142] The Contractor shall record and log all waiver requests along with their resolution submitted for the Purchaser's approval.

3.8.3.6 Failed Events

[SOW-143] In the event of failed TV&V event and the need to return to a site for re-testing; travel and per diem expenses of NATO personnel shall be borne by the Contractor

3.8.4 Test Types

[087] Depending on the WP certain test types are to be performed. Section 4 documents the required test types for each WP.

3.8.4.1 System Integration Testing

[088] The purpose of system integration testing (SIT) is to validate the baselines coexistence with other capabilities and services, and test the dependencies between them. With multiple integrated capabilities, assuming that each has already passed system testing, system integration testing proceeds to test the required interfaces and interactions.

[089] The Purchaser will observe the system integration testing and reserves the right to participate in executing test cases to confirm compliance and to conduct its own test case verification after demonstration of a test case by the Contractor.

[090] Coalition Interoperability Assurance and Validation (CIAV) testing will be part of the system integration testing phase.

[SOW-144] The Contractor shall perform a test readiness review prior to conducting system integration testing.

[SOW-145] The Contractor shall develop for test artefacts in coordination with Purchaser SMEs.

[SOW-146] The test cases shall be based on operationally realistic test scenarios, with representative test data in terms of structure, content and size to emulate real-world conditions.

[SOW-147] The test cases, supported by the test scenarios, shall cover all internal and external interfaces delivered by a baseline to verify and validate the interoperability between them.

[SOW-148] The Contractor shall plan, prepare, organise and conduct system integration testing for each baseline, which shall take place at one of the Purchaser's facilities, using a Purchaser-specified integration test bed or operating environment.

[SOW-149] The Contractor shall conduct system integration testing dry-runs with Purchaser SMEs, prior to conducting the system integration testing.

[SOW-150] The Contractor shall deliver an updated baseline release that incorporates defect corrections and the lessons-learned from the system integration testing.

3.8.4.2 Data Migration Testing

- [091] The purpose of data migration testing (DMT) is to validate the proper migration of data from the legacy C2 system (LC2IS) to DEMETER.
- [092] The Purchaser will observe the data migration testing and reserves the right to participate in executing test cases to confirm compliance and to conduct its own test case verification after demonstration of a test case by the Contractor.
- [SOW-151] The Contractor shall perform a test readiness review prior to conducting data migration testing.
- [SOW-152] The Contractor shall develop for test artefacts in coordination with Purchaser SMEs.
- [SOW-153] The Contractor shall plan, prepare, organise and conduct data migration testing for WPs 1 and 2, which shall take place at one of the Purchaser's facilities, using a Purchaser-specified integration test bed or operating environment.
- [SOW-154] The Contractor shall conduct data migration testing dry-runs with Purchaser SMEs, prior to conducting the data migration testing.

The Contractor shall deliver an updated baseline release that incorporates defect corrections and the lessons-learned from the system integration testing.

3.8.4.3 IVVQ

- [093] IVVQ acts as a final verification of the required operational functionality as defined in the contracted requirements and proper functioning of the capability. It proves to the users that the capability is working according to their understanding of their own operational requirements and validates the fitness for purpose of the capabilities delivered.
- [SOW-155] The Contractor shall plan, prepare, organise and conduct this test, which shall take place at one of the Purchaser's facilities.
- [SOW-156] The Contractor shall develop test artefacts in coordination with Purchaser SMEs and representatives of the operational community.
- [SOW-157] The test cases shall use operationally realistic test scenarios, with representative test data in terms of structure, content and size to emulate real-word conditions.
- [SOW-158] The test cases, supported by the test scenarios, shall cover the scope delivered by a baseline to ensure that the requirements as contracted are met.
- [SOW-159] The test cases, supported by the test scenarios shall be designed such that it enables IVVQ to validate the software acceptance criteria.
- [SOW-160] The Contractor shall perform a test readiness review (see section prior to conducting IVVQ).
- [SOW-161] IVVQ shall be conducted by representatives of the operational community, IVVQ and Purchaser SMEs; Contractor personnel shall support them.

3.8.4.4 CRQ Testing and Security Testing

- [094] All software releases to be used on NATO networks will undergo a release management process, initiated by submitting a change request (CRQ), and will be subject to CRQ testing and Security testing.

- [095] CRQ process guidance is included in NCI Agency technical instructions and standard operating procedures [NCIA-AI-23.02], [NCIA-SOP-06.03.05] and [NCIA-SOP-23.01]. The CRQ process also applies to patch and corrective baseline releases.
- [096] The purpose of the IV&V testing is to demonstrate that the baseline release is compliant with the NATO network policies and meets the security requirements for use on NATO networks managed by the NCI Agency. The objective is to have the baseline release approved and included in the Agency Approved Software List (A2SL).
- [097] The process of IV&V testing is anticipated to take 6-8 weeks from submitting the baseline change request.
- [098] Independent security penetration testing will be conducted by the Purchaser as part of the A2SL admission process.
- [SOW-162] The Contractor shall be responsible for successfully obtaining the A2SL approval allowing use of the baseline release on the NATO networks (NS, NR and NU).
- [SOW-163] If any major software frameworks (operating system, database, or runtime environment) are added to the COTS at any point in time, the Contractor shall be responsible for obtaining separate approvals for addition to the A2SL of these frameworks.
- [SOW-164] The Contractor shall cover all applicable threat types and corresponding security test cases (e.g. Unauthorized user/Fake identity/Password cracking; Cross-site scripting (XSS); Buffer overflows; URL manipulation; SQL injection; Denial of service) within its security testing. Refer to Annex A for further details.
- [SOW-165] The Contractor shall support the Purchaser with submitting the CRQ to the CRQ Governance Board and deliver all required artefacts in support of the change request. These include:
- (1) Release of the COTS, including third-party software as required;
 - (2) Standard operating procedures user manual;
 - (3) Installation and configuration manual;
 - (4) Maintenance and administration manual;
 - (5) Test reports;
 - (6) Release notes;
 - (7) Release and deployment plan; and
 - (8) Support plan.
- [SOW-166] The Contractor shall use the latest Purchaser templates for request for changes and artefacts in support of it.
- [SOW-167] In case third-party software is used for the baseline, the Contractor shall deliver the software, licences and warranty documentation to the Purchaser prior to the submission of the request for change.
- [SOW-168] In order to allow deployment of a pre-release, for example for use during a workshop or user acceptance testing, the Contractor shall support the Purchaser with submitting the change request to the CRQ Governance Board for a limited authorization to operate (LATO) and deliver all required artefacts in support of the change request.
- [SOW-169] The Contractor shall support, if necessary at Purchaser facilities, the IV&V testing, and security testing performed by the Purchaser for each release submitted through the CRQ process.

[SOW-170] In order to avoid delays in obtaining A2SL due to failure in testing or vulnerabilities, the Contractor shall prepare and support pre-testing of the baseline release.

[099] The Purchaser will provide the Contractor with a test report after conclusion of each test session, documenting the test results. Any failures and possible remedial actions will be indicated.

The Contractor shall resolve any discrepancies and vulnerabilities and support additional independent verification and validation testing required to verify these fixes.

3.8.4.5 Coalition Interoperability Assurance and Validation

[100] CIAV will be used in order to validate FMN compliance of DEMETER.

[SOW-171] The Contractor shall be responsible for obtaining FMN approval through CIAV test event(s). Refer to Annex A for further specifications.

3.8.4.6 Site Acceptance Testing

[101] The purpose of the site acceptance test (SiAT) is to validate the proper working of the system after installation on each site.

[102] Therefore, it is not the intention of the SiAT to repeat all tests already done.

[103] The Purchaser will observe the SiAT and reserves the right to participate in executing test cases to confirm compliance and to conduct its own test case verification after demonstration of a test case by the Contractor.

[104] Testing the COTS in an exercise will be part of the SiAT.

[SOW-172] The Contractor shall perform a test readiness review prior to conducting site acceptance testing.

[SOW-173] The Contractor shall develop for test artefacts in coordination with Purchaser SMEs.

[SOW-174] The test cases shall be based on operationally realistic test scenarios, with representative test data in terms of structure, content and size to emulate real-world conditions.

[SOW-175] The test cases, supported by the test scenarios, shall cover the main functions and interfaces of DEMETER to proof that the installation on site has been successful.

[SOW-176] The Contractor shall plan, prepare, organise and conduct site acceptance testing for each baseline, which shall take place at one of the Purchaser's facilities, using a Purchaser-specified integration test bed or operating environment.

[SOW-177] The Contractor shall conduct site acceptance testing dry-runs with Purchaser SMEs, prior to conducting the site acceptance testing.

[SOW-178] The Contractor shall deliver an updated baseline release that incorporates defect corrections and the lessons-learned from the system integration testing.

3.9 Configuration Management

- [SOW-179] The Contractor shall implement a configuration management process consistent with [ACMP-2100] and the additional guidelines from ACMP standards within [STANAG-4427] and [NCIA-AD-06.00.16].
- [SOW-180] The Contractor shall deliver a Configuration Management Plan (CMP) compliant with Section 8.10, document its configuration management processes and describe how it intends to meet the configuration management requirements of the Contract.
- [SOW-181] The CMP, when accepted, shall serve as a working document to plan, guide, and measure the configuration management process.
- [SOW-182] The Contractor shall perform configuration management using the Azure DevOps tools furnished within the NSF. Any configuration management requirements that cannot be fulfilled due to limitations of the furnished Azure DevOps tools, shall be met by alternative means or tools by the Contractor with the approval of the Purchaser.
- [SOW-183] The Contractor shall allow the Purchaser access these tools for viewing and extracting configuration information.
- [SOW-184] The Contractor shall establish and maintain three (3) configuration baselines for each work package release (ref [NCIA-AD-06.00.16]), as follows:
(1) Functional Baseline (FBL or "as required");
(2) Allocated Baseline (ABL or "as designed");
(3) Product Baseline (PBL, or "as built").
See Section 3.9.1 for specifications of the configuration baselines.
- [SOW-185] The Contractor shall identify and define all top-level configuration items to be delivered under this Contract.
- [SOW-186] The top-level configuration items shall be broken down into a tree/hierarchy of its parts and sub-parts consisting of deliverables, the relevant documentation of these deliverables, all dependent third-party components and libraries and respective documentation.
- [SOW-187] The configuration items shall be organized around working and executable software units (i.e. applications or executable services) and each configuration item shall be assigned a unique identifier.
- [SOW-188] The Contractor shall establish a Configuration Management Database (CMDB) that persists the configuration items attributes, (inter-) relationships, dependencies, and configuration baselines. The CMDB shall be maintained in sync with the NSF.
- [SOW-189] The CMDB shall have support for tracing higher and subordinate configuration items using their identifiers or other attributes.
- [SOW-190] The Contractor shall ensure that the configuration baselines and configuration items are persistently stored, maintained and managed throughout the period of performance of the Contract.
- [SOW-191] It shall be possible from the CMDB, at any time, to generate Configuration Status Reports for any specified baseline where the report provides a full history on all configuration items in the baseline including information on changes, deviations, waivers, releases, etc.

Version 1.1

- [SOW-192] The CMDB and configuration management tools shall support generation of Configuration Status Accounting (CSA) reports in a readable and structured document format (Microsoft Excel or Word format).
- [SOW-193] A baseline in the CMDB shall:
- (1) Be defined by version controlled artefacts that all resides in the proper repositories in the NSF;
 - (2) Include any (off-the-shelf) software and (off-the-self) software license(s) where all software license(s) shall be registered with the NCI Agency as the end-user;
 - (3) Include all (supporting) documentation, e.g. off-the-shelf OEM manuals, operations and maintenance support documentation, training documentation, quality assurance documentation, security documentation, configuration management documentation, and warranty documentation.
- [SOW-194] It shall be possible from the CMDB and configuration management tools to generate a package (as one or several electronic files) with all the artefacts included in a PBL release.
- [SOW-195] The configuration management tools using the CMDB shall have support for comparison of baselines and precisely identify the changes to the individual items from one baseline to the other (including versions of third-party software components and libraries).
- [SOW-196] The Contractor shall be responsible for the Configuration Status Accounting (CSA) and reporting for all configuration items.
- [SOW-197] The Contractor shall perform Configuration Audits to check configuration items for compliance with their configuration documentation:
- (1) Functional Configuration Audit (FCA) for which the inputs are the Functional Baseline, the Allocated Baseline and the Product Baseline. The output is the Audit Conformity Report.
 - (2) Physical Configuration Audit (PCA) for which the inputs are the Product Baseline and the Service Baseline. The output is the Audit Conformity Report.
- [SOW-198] The Contractor shall invite the Purchaser's configuration management representative to the PCA and FCA with a minimum of two weeks' notice. When the Purchaser attends an audit, the Contractor shall answer any specific questions directed by the Purchaser's representatives, and shall record the minutes of the audit meeting.
- [SOW-199] The Contractor shall solve any deficiencies found during the configuration management audits within the agreed timeframe and update the baseline accordingly.
- [SOW-200] The Contractor's Product Baseline (PBL) version numbering strategy shall be compliant with [NCIA-AI-TECH-06.03.01].

3.9.1 Configuration Baselines

- [SOW-201] Functional Baseline: The Functional Baseline (FBL) shall be derived from the software requirements specifications and shall be established at the successful completion and accepted incremental baseline allocation.
- [SOW-202] Allocated Baseline: The Allocated Baseline (ABL) reflects the "as-designed" configuration of the system and its conformity to the Functional Baseline.

- [SOW-203] Product Baseline: The PBL shall be established after successful completion of the incremental development phase. It shall contain all delivered configuration items that comprise the baseline. It reflects the "as-built" configuration of the system. Besides the product itself, the PBL shall comprise:
- (1) System documentation artefacts, including the installation and configuration manual, maintenance and administration manual, coherent with the baseline release;
 - (2) User documentation artefacts, including online help, standard operating procedures manual and training material, coherent with the baseline release; and
 - (3) A product description document and the interface control document (ICD), coherent with the baseline release.
- [SOW-204] Where incremental development with multiple deliveries approach is used (WP3), the Contractor shall establish the first PBL for the first released product, and the second PBL for the second release combining the first release functionalities with the additional ones.

3.9.2 Change Proposals

- [105] In compliance with ACMP-2009, the Purchaser-led Change Control Board (CCB), will govern the configuration change process by reviewing and deciding on the Change Proposals. The relevant Contractor representatives will be invited to the CCB for consultation.
- [106] Change Proposals are proposals for changes relevant to tasks, deliverables, requirements, processes, or any other term of the Contract, which are submitted in written form by the Contractor independently, or upon request from the Purchaser, when such changes are necessary in light of varied facts or circumstances, which prevent the execution of the Contract in its form.
- [SOW-205] The Contractor shall prepare and submit change proposals to the CCB for approval that are compliant with the template provided in Annex D.1.
- [SOW-206] When approved, the Contractor shall implement the change proposal.
- [SOW-207] The Contractor shall place all submitted change proposals under configuration control.

3.9.3 Requesting Deviations/Waivers

- [107] A Request for Deviation (RFD) is defined as "planned departure" from a specific requirement with "departure" defined as the "inability of a product to meet one of its functional performance or technical requirements".
- [108] A Request for Waiver (RFW) is defined as "unplanned departure" from a specific requirement.
- [SOW-208] When required, the Contractor shall prepare and submit request for deviations/request for waivers to the Purchaser for approval that is compliant with the template provided in Annex D.2.
- [SOW-209] The Contractor shall submit permanent departures from contractual requirements by means of a change proposal rather than by request for deviation.
- [SOW-210] The Contractor shall place all submitted RFDs/RFWs under configuration control.

3.10 Quality Assurance

- [SOW-211] The Contractor shall establish, execute, document and maintain an effective Quality Assurance (QA) programme throughout the Contract's lifetime conform Section 8.11.
- [SOW-212] The QA programme shall apply to both the contractual requirements and to the appropriate AQAPs which apply to the contract according to [STANAG-4107] to provide confidence in the Contractor's ability to deliver products that conform to the Contractual requirements.
- [SOW-213] If any inconsistency exists between the SOW requirements and the references, the SOW requirements shall prevail.
- [SOW-214] The Contractor's QA effort shall apply to all services and products (both management and specialist) to be provided under the Contract. This includes all hardware, software, firmware and documentation being developed, designed, acquired, integrated, maintained, or used under the Contract (including deliverable and non-deliverable items like test and support hardware and software), without limitation.
- [SOW-215] The Contractor's QA efforts shall ensure that procedures are developed, implemented and maintained to adequately control the design, development, production, purchasing, installation, inspection, testing, configuration management and customer support of all services and all products, in accordance with the requirements of this Contract.

3.11 Defect Management Process

- [SOW-216] The Contractor shall use the Purchasers' categorization nomenclature for all defects and non-compliances
- [SOW-217] Should a failure occurs during a TV&V event/activity a defect shall be recorded in the Agency's test management and defect management systems. Once the event has concluded, the defect shall be reviewed during the event review meeting to agree on the severity, priority and category. The event test report shall then report the disposition of all defects recorded during the event and the defect management system shall be updated accordingly. Classification shall follow the definitions in the table below:

Table 3.3 - Definitions for Defect Categorization

Attributes	Definition
Severity	The severity of a defect is the degree of impact that the failure has on the development or operation of a component, a system or a user function. The severity shall initially be proposed by the tester but shall officially be set in agreement with all the stakeholders. When agreement cannot be reached, the Purchaser's PM will set the severity.
Priority	The priority of a defect defines the order in which defects shall be resolved. The priority of the defect shall initially be proposed by the tester but shall officially be set in agreement with all the stakeholders. When agreement cannot be reached, the Purchase's PM will set the priority.

Category	The type of observation identified during the execution of a test case.
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- [109] For the independent penetration/security tests, the Purchaser will provide an approved list of defects along with their Test Report.
- [110] An individual test will be a failure if a critical or major defect is discovered.
- [111] The test will be repeated for all failures when the associated defects are fixed.
- [112] The overall test event will fail if there is one or more Critical or Major defects discovered. The test event will pass if there are no Critical and Major defects.

- [SOW-218] All defects shall be entered to the testing tool of preference and will be tracked through this tool. Failures shall also be recorded in the Quality Log.
- [SOW-219] The Contractor shall include the failures in the Test Report (individually identified to ensure traceability and with sufficient detail to ensure reproducibility) and carry out a preliminary investigation to classify the severity of the failure as one of the levels shown in Table 3.4.

3.11.1.1 Severity

- [SOW-220] According to their severity, defects shall be classified as one of the following in Table 3.4:

Table 3.4 – Classification of defects based on severity

LEVEL	IMPACT	WORK-AROUND AVAILABLE	DEFINITION
1	CRITICAL	No	<p><i>Causes all testing to be halted – top priority to fix. The test execution schedule is compromised.</i></p> <p>A critical failure for which an acceptable work around does not exist. The defect totally prevents the system from performing operational processes and/or causes unrecoverable data loss. Applies to conditions under which one or more components are inoperative and jeopardize the ability to continue using the system. This condition generally is characterized by a complete or catastrophic system failure and requires immediate restoration or correction.</p>
2	MAJOR	Yes	<p><i>Causes one or more areas of functional testing to be halted but with some other functional areas tests unaffected.</i></p> <p>Test executed during this situation would likely require retesting when the blocking defect is fixed. The test execution schedule is likely to be compromised.</p> <p>A significant failure that causes severely impaired functions but does not prevent operational processing. Applies to conditions under which one or more components are partially inoperative, but are still usable by the users.</p> <p>A workaround might be available but it may require manual intervention.</p>
3	MODERATE	Yes	<p><i>Causes tests of none, one or a few less significant functional areas to be halted until a fix is available. Most testing continues and the execution schedule is unlikely to be adversely impacted.</i></p>

			<p>A functional failure that causes a specific aspect of the system to fail. There is a reasonably satisfactory work around which can be used during normal operations for a limited period of time. The system may be released provided the defect and work around is documented.</p> <p>Applies to conditions under which one or more components are usable with limited functions, but creates a manageable situation with respect to the normal operations. A work around is available and does not require any manual intervention.</p>
4	MINOR	Yes	The failure does not result in termination and does not damage the functioning of the system. The desired results can be easily obtained by working around the failure.
5	COSMETIC	Yes	The failure is related to the look and feel of the application, typos in a document or user interfaces (amongst others), and not part of the immediate usability or contractual requirements. The failure does not adversely affect the overall system operation.

3.11.1.2 Priority

[SOW-221] According to their priority, defects shall be classified as one of the following in the table below:

Table 3.5 - Priority Classes for Defect Classification

Priority	Description
Urgent	The defect shall be resolved as soon as possible. Required to complete independent verification and validation activities.
Medium	The defect shall be resolved in the normal course of development activities. It can wait until a new build or version is created.
Low	The defect is an irritant which should be repaired, but repair can be deferred until after more serious defects have been fixed.

3.11.1.3 Category

[SOW-222] According to their category, defects shall be classified with one of the values defined in the table below:

Table 3.6 - Defect Categories

Category	Description
Defect	An imperfection or deficiency in a work product where it does not meet its requirements or specifications. This category of defect could drive to the creation a Class II (Product Correction) Engineering Change Proposal (ECP).
Enhancement	This type of defect is used to record an Improvement to the product baseline. This category of defect would typically drive to the creation of a Class I (Product enhancement) ECP.
Document	This category is used to record defects encountered in the system documentation (test cases, test procedures, RTM, test plan, manuals, design, procedures...).

Category	Description
Clarification	This category is used to record deficiencies encountered during the test execution, which must be clarified.
Waiver	This category is used to record when a waiver is required to address a specific observation or defects.

3.12 Audits

- [113] The Purchaser reserves the right to perform reviews and quality audits at any of the Contractor facilities.
- [114] Review and audit activities do not relieve the Contractor from any contractual quality responsibilities.
- [SOW-223] The Contractor shall periodically, at least once a year, review the QA programme and audit it for adequacy, compliance and effectiveness.
- [SOW-224] The Contractor shall make available to the Purchaser's QA personnel and auditors all information and artefacts deemed necessary to perform reviews and quality audits, on their own initiative or on request by the Purchaser.
- [SOW-225] The Contractor shall fully support the Purchaser in performing reviews and quality audits at any of the Contractor facilities and activities and in particular:
- (1) Make available the necessary Contractor personnel for coordination meetings prior, during and post quality audit inspection visits and for answering questions and furnishing information related to the Contract;
 - (2) Host inspection visits by Purchaser's QA personnel and auditors; and
 - (3) Allow the Purchaser's QA personnel and auditors to inspect and monitor the Contractor's processes applicable to this Contract.

4 Work Packages 1, 2 and 3: Delivery of DEMETER

4.1 Approach

- [115] The required capabilities will be delivered in accordance with the contracted requirements.
- [SOW-226] The Contractor shall be responsible for the deployment of DEMETER to the NATO operational networks and test and integration environments, and implement the capabilities throughout the NCS, under the supervision of and with support from the Purchaser.
- [116] Successful conclusion of a WP is marked by the PSA of that WP.
- [117] The transition phase will focus on ensuring an efficient migration from the existing Land C2 system to DEMETER, with continuity of service and minimal degradation of services during the transition.
- [118] The PSA of WP2 will be followed by the closure phase during which the Purchaser will conduct the final validation of all deliverables and verify fulfilment of contractual obligations. The closure phase is concluded with the FSA, which also indicates the start of the one-year warranty period.
- [SOW-227] Starting with the PSA of WP1, the Contractor shall be responsible for maintenance and support until FSA is achieved.
- [119] After FSA, the Purchaser assumes full responsibility, with the exception of Contractor furnished maintenance and support services under warranty and during the optional maintenance and support services provided post FSA if the Purchaser decides to exercise the option.
- [120] The sections below describe all activities and requirements for WPs 1, 2 and 3. If a section does not apply to any of these three WPs, it is indicated for which WP(s) it is applicable.

4.1.1 Work Package 1

- [121] Figure 4.1 below represents the order of events for WP1.

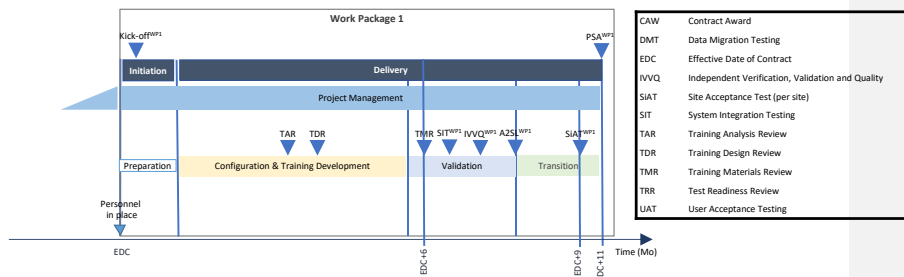


Figure 4.1 – WP1 Delivery of DEMETER to the initial sites and Training

- [122] The configuration phase will be followed by a validation phase, starting with system integration testing, then the IVVQ and security testing prior to deploying the baseline to

the operational environment and the SiAT, which will be conducted in a NATO exercise.

- [123] During the transition phase, the Contractor will also provide support and deliver training for the new capabilities to the different user communities after preparing/adapting the material in the previous phases.

4.1.2 Work Package 2

- [124] WP2 will commence with an initiation phase and kick-off meeting as shown in Figure 4.2.

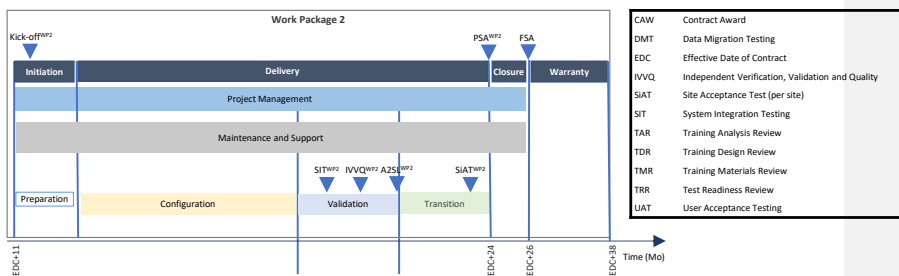


Figure 4.2 - WP2 Delivery of DEMETER to all remaining sites

- [125] The Contractor will deliver maintenance and support on the licenses delivered in WP1.
- [126] It is anticipated that a new version of the COTS will be available for WP2 and that interfaced systems may have changed. To cater for this, there will be a configuration phase, followed by a validation phase and a transition phase similar to WP1.
- [127] The Contractor will deliver one year warranty starting at FSA.

4.1.3 Work Package 3

- [128] Figure 4.3 illustrates the activities for the optional WP3.

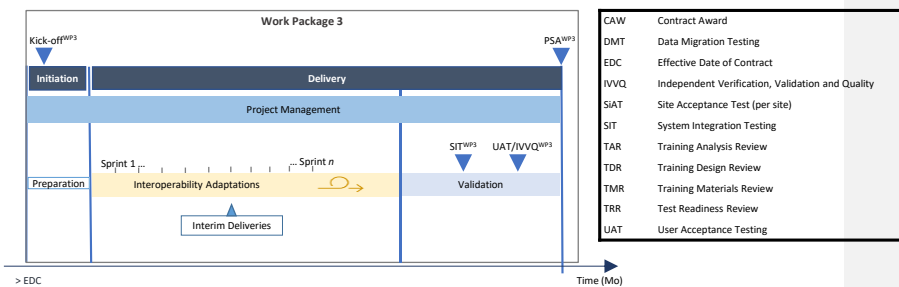


Figure 4.3 – WP3 Optional implementation of interoperability adaptations

- [129] The delivery phase of WP3 consists of design and build of the interoperability and other adaptations, as well as a validation phase.
- [130] The process for inclusion in the A2SL and deployment of the deliverables from WP3 will be part of WP2; the activities to be performed for this are included in the Validation

and Transition phases of WP2. Any additional costs related to WP3 must be included in the WP3 costing.

4.2 Initiation Phase

- [131] The objective of the initiation phase is to start the work, to review the Contractor's approach and to make the necessary preparations for the next phase, including completion of knowledge transfer from the Purchaser to the Contractor as well as conducting site surveys of the sites involved.
- [132] A kick-off meeting will be held at the start of the phase and this is where the Purchaser and Contractor Team review the Contractor's plans and approach to the development and delivery of the capabilities.
- [133] Some of the goals associated with this phase are:
- (a) Verify that the Contractor's project resources are assigned in line with defined qualification requirements and have completed the required knowledge transfer to start the work;
 - (b) Verify the Contractor's access to the NSF; and
 - (c) Validate the Contractor's proposed plans.

4.2.1 Kick-off Meeting

- [SOW-228] For WP1, the Contractor's key personnel shall meet with the Purchaser's project team for a kick-off meeting within four weeks after CA.
- [SOW-229] For WP2, the Contractor's key personnel shall meet with the Purchaser's project team for a kick-off meeting within one week after the start of the initiation phase of WP2.
- [SOW-230] For WP3, the Contractor's key personnel shall meet with the Purchaser's project team for a kick-off meeting within one week after the start of the initiation phase of WP3.
- [SOW-231] For WP1, the Contractor shall deliver to the Purchaser no later than two weeks prior to the start of the kick-off meeting the meeting invitation, including agenda and the following Contractor documentation:
- (1) PMP, including PMS (Section 6.4);
 - (2) RAID Register, with populated Risk Register (Section 6.5);
 - (3) Deliverable Requirements Traceability Matrix (DRTM) (Section 8.13);
 - (4) Training Plan (Section 4.3.2.1);
 - (5) Configuration Management Plan (Section 6.6);
 - (6) Quality Plan (Section 8.11);
 - (7) Master Test Plan (Section 3.8.2.1); and
 - (8) Integrated Product Support Plan (Section 8.12).
- [SOW-232] For WP2 and WP3, the Contractor shall deliver updated versions of abovementioned documents.
- [SOW-233] During the kick-off meeting, the Contractor shall provide an introduction and present its PMP, its approach and schedule. The Contractor's presentation shall:
- (1) Demonstrate that the schedule is realistic and that a team of skilled personnel has been allocated that matches the identified resource qualifications; and
 - (2) Demonstrate the initial DRTM.

- [134] During the kick-off meeting, the Purchaser shall provide feedback to the Contractor on the provided information and the documentation submitted prior to the meeting. The agenda should include sufficient time to discuss each of the artefacts.

4.2.2 Site Surveys (WP1 and WP2)

- [SOW-234] The Contractor shall conduct site surveys in order to gather all information needed for successful execution of this project.
- [SOW-235] The Contractor shall prepare and deliver site survey reports, summarizing the conclusions of the surveys and highlighting any actions or support to be delivered by the Purchaser.

4.2.3 Entry and Exit Criteria

- [SOW-236] The Contractor shall comply with the following entry criteria for the initiation phase:
- (1) The Contractor has delivered to the Purchaser a named-list of project team members;
 - (2) Contractor resources and personnel are in place to commence the initiation phase;
 - (3) The Purchaser has no concerns with the key personnel and project team composition;
 - (4) The planned knowledge transfer to Contractor personnel during the ramp-up period has been completed; and
 - (5) The Contractor has delivered to the Purchaser no later than two (2) weeks prior to the start of the kick-off meeting, the meeting invitation and Contractor documentation.
- [SOW-237] The Contractor shall comply with the following exit criteria for a successful conclusion of the initiation phase:
- (1) The kick-off meeting has been held and the submitted meeting minutes are accepted by Purchaser;
 - (2) Contractor resources and personnel are in place to commence the next phase;
 - (3) The Purchaser comments/concerns regarding the plans and documentation have been addressed, there are no pending concerns and the documents have been baselined; and
 - (4) The Risk Register and the Issue Register, as part of the RAID Register are properly initialized with manageable risks and issues, and contains suitable mitigation/action plans. Action items and decisions have been recorded.
- [135] If the Contractor fails to meet the exit criteria, then the Purchaser will not give the Contractor the permission to proceed.

4.3 Delivery Phase

- [136] The delivery phase for WPs 1 and 2 consist of configuration, validation and transition phases.
- [137] Training development and delivery is part of the delivery phase of WP1.
- [138] The delivery phase for WP3 consists of the design and build of contracted interoperability adaptations on an NCI Agency approved integration platform (e.g. SOA-IdM or IntCore), other adaptations and validation.

[139] In order to conduct verification and validation activities, the Contractor will deploy, in coordination with the Purchaser, the configured DEMETER release onto the NATO test and integration environments and if needed to the NATO operational network (for sites see Section 4.3.5.1).

4.3.1 Configuration (WP1, WP2)

[140] Based on the results from the site surveys, the Contractor will configure the COTS to be able to work on the NATO Networks at the specified site(s).

[SOW-238] The Contractor shall configure and dry-run test DEMETER, implementing and satisfying the contracted requirements.

[141] There is a set of operational overlays that form the Recognised Ground Picture (RGP). These are LC2IS formatted data that require migration to DEMETER. Refer to [XSD-LC2IS] for the XSD of the overlays to be migrated.

[142] Also LC2IS users and roles need to be migrated.

[SOW-239] The Contractor shall design and develop migration scripts to migrate the following from the current Land C2 system to DEMETER:

- (1) Overlays
- (2) Users and roles

[SOW-240] The Contractor shall comply with the following entry criteria:

- (1) The Contractor has concluded the previous phase successfully.

[SOW-241] The Contractor shall comply with the following exit criteria for a successful conclusion:

- (1) The Contractor shall present the successful results of test dry-runs conducted by the Contractor.

4.3.2 Training (WP1)

[143] Accompanied with the deliveries of WP1, the Contractor will develop and provide training for users, support staff and trainers of the capabilities of new DEMETER application.

[144] Section 8.9.2 discusses training related definitions.

[SOW-242] The Contractor shall plan, execute and control the DEMETER Training Process as defined in [NATO-Bi-SC-DIR-075-007].

[SOW-243] The Contractor shall perform the Training Needs Analysis (TNA) to justify all the training activities for DEMETER.

[SOW-244] The Contractor shall apply the NATO Systems Approach to Training as defined in [NATO-Bi-SC-DIR-075-007]. The Contractor shall perform all required analysis, design, development, implementation and evaluation tasks according to the guidance provided in [NATO-Bi-SC-DIR-075-007].

[SOW-245] The Contractor shall provide DEMETER training for users, support staff and trainers (train the trainer) through a combination of face-to-face, live online, self-paced online, hybrid or blended learning in accordance with the Maintenance and Support Concept described in Section 8.12 and in line with [NATO-Bi-SC-DIR-075-007] and DEMETER specific training requirements

- [SOW-246] The Contractor shall demonstrate that all required personnel has been trained in accordance with the training plan.
- [SOW-247] The Contractor shall be able to design, develop, deliver and perform the following types of training:
- (1) Face-to-face;
 - (2) Live online;
 - (3) Self-paced online;
 - (4) Hybrid Learning; and
 - (5) Blended Learning
- The exact distribution and weight of the different training methodologies shall be proposed based on the TNA results for Purchaser approval, and updated as requested by the Purchaser.
- [SOW-248] The Training Courses shall utilise a combination of lecture and hands-on exercises to ensure students completing a course can perform to the level agreed to in the Training Plan.
- [145] The Purchaser will provide if required the following basic facilities: rooms, power supply, tables, chairs, network connectivity.
- [SOW-249] The Contractor shall provide all other facilities, services and equipment (including servers and workstations for students and teachers, network equipment, all required software, etc.) necessary to carry out the Training activities.
- [SOW-250] The Training Courses shall be provided on the training version of the databases, without interference to operational activities.
- [SOW-251] The DEMETER Training Courses shall provide training for the various categories of roles based on the TNA or specific direction from the Purchaser.
- [SOW-252] The Contractor shall develop and maintain a Training Plan and associated materials and activities as defined in the next sections.

4.3.2.1 Training Plan

- [SOW-253] The Contractor shall develop and maintain the DEMETER Training Plan as described in Section 8.8.
- [SOW-254] The Training Plan shall be updated as required accordingly with the TNA development and finalization.
- [146] The acceptance of the Training Plan by the Purchaser signifies only that the Purchaser agrees to the Contractor's approach in meeting the requirements. This acceptance in no way relieves the Contractor from its responsibilities to meet the requirements stated in this Contract.
- [SOW-255] The Contractor's Training Plan shall guide all the activities, milestones and actors associated with the Training of DEMETER.

4.3.2.2 Training Need Analysis

- [SOW-256] The Purchaser will establish a Training Needs Analysis Working Group (TNA WG) to which the Contractor shall appoint his own personnel with the appropriate subject matter expertise. The TNA WG shall conduct assigned TNA tasks in line

with [NATO-Bi-SC-DIR-075-007]. The TNA tasks for the TNA WG shall include as a minimum:

- (1) Target Audience Analysis;
- (2) Task Analysis;
- (3) Development of performance and Learning objectives; and
- (4) Training Strategy proposal.

- [SOW-257] The Training design shall be based on the results of the TNA to be performed by the TNA WG.
- [SOW-258] The TNA WG shall identify the required prerequisites for training participants, as part of the TNA.
- [SOW-259] The TNA WG shall base the scope, delivery methods, and duration of DEMETER training and materials on the TNA. The contractor shall update the Training Plan based on the results of the TNA.
- [SOW-260] The Contractor shall provide its organization, methodology and procedures within the Training Plan for Purchaser approval. This shall include the details for the planning and execution of Task Analysis, Difficulty, Importance and Frequency (DIF), GAP, user engagement methods (e.g. surveys, questionnaires, working groups etc.) and other activities as applicable.

4.3.2.2.1 Target Audience Analysis

- [SOW-261] The Contractor shall conduct a Target Audience Analysis in accordance with [NATO-Bi-SC-DIR-075-007], utilizing any information already determined by the Purchaser Training Staff and produce a summary population table.
- [SOW-262] The Contractor shall assess the current skills of operational staff that will use/operate DEMETER and the importance and difficulty of tasks via discussions with Purchaser-identified experts.

4.3.2.2.2 Task Analysis

- [SOW-263] The Contractor shall conduct a Task Analysis in accordance with [NATO-Bi-SC-DIR-075-007], to identify and list all user/operator and maintenance tasks for each system, subsystem and integrated system and to provide a structured and sequenced diagram of performance statements including specific tasks, subtasks and supporting task elements.
- [SOW-264] The Task Analysis shall include identified roles of users who will use DEMETER to accomplish their tasks.
- [SOW-265] The Task Analysis shall include a DIF Analysis to determine the priority and training effort to be applied to the Performance Objectives (PO).
- [SOW-266] The DIF analysis shall identify the difficulty and importance of each major task to be performed by each category of roles and the frequency with which the task will be performed.
- [SOW-267] The Task Analysis shall refine a prior developed (as part of a Training Requirements Analysis (TRA) Report), or perform a new Performance Gap Analysis to assess the gap between the current skills of the target audience and the tasks they will be expected to perform in the use and support of the system, in order to determine which performance gaps can be addressed by training.

4.3.2.2.3 Performance Objectives

[SOW-267-1] The contractor shall develop Performance Objectives for those tasks for which trainable performance gaps have been determined and document them in accordance with Annex J of [NATO-Bi-SC-DIR-075-007].

Deleted:

[SOW-267-2] The contractor shall document the results of the analysis in the Course Control Document II (CCD II) - Course Proposal in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 5 and Annex L.

4.3.2.2.4 Training Strategy

[SOW-268] The Contractor shall develop a Training Strategy for each course as identified as a requirement and document them in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 5. The Training Strategy shall address how the DEMETER training requirements will likely be resolved, including an estimate of the duration for a course and the annual production, and identification of the proposed learning environment, e.g. face-to-face, live online, self-paced, hybrid or blended learning.

[SOW-269] The contractor shall document the results of this analysis in CCDs I & II - Course Proposal in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 5 and Annex L.

4.3.2.2.5 TNA Initial Report

[SOW-270] The Contractor shall deliver an initial TNA Report in accordance with [NATO-Bi-SC-DIR-075-007], which shall include the following:

- (1) A description of the TNA approach and activities conducted during the TNA workshops;
- (2) User engagement (methodology, timelines based on the TNA development, inputs and output expected from the users, questionnaires, surveys etc.);
- (3) An account of the Task Analysis performed;
- (4) The results of the Performance Gap Analysis, Task Analysis, DIF Analysis, Target Audience Analysis (including the identification of student prerequisites);
- (5) The list of POs; and
- (6) Training strategy selected for all courses identified as requirement.

4.3.2.2.6 Instructional Analysis

[SOW-271] The contractor shall conduct an Instructional Analysis in accordance with Bi-SC DIR 75-7, Chapter 6 that includes but is not limited to, the following activities:

- (1) Identify the main teaching points associated with enabling elements by breaking out the skills and knowledge into sub-components in order to achieve the Performance Objectives identified;
- (2) Identify all components and sub-components of the tasks that make up the performance objective, including supporting skills and knowledge elements as well as other attributes, such as attitudes; and
- (3) Identify the main points (the teaching points) associated with the supporting (enabling) elements.

4.3.2.2.7 Enabling/Learning Objectives

[SOW-272] The contractor shall take all the Performance Objectives that require Education and Individual Training (E&IT) and create a list of Enabling/Learning Objectives (ELO) in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 6 and Annex N.

4.3.2.2.8 Training Assessment and Evaluation

[SOW-273] The Contractor shall propose assessment and evaluation methodology to the purchaser as part of the Training Plan.

[SOW-274] The contractor shall develop an assessment plan structured according to the template provided in Bi-SC DIR 75-7, Table 6-2 that specifies how achievement of the POs will be assessed and how the student progress based on the assessment of the ELOs will be monitored.

[SOW-275] The Contractor's Training Assessment methodology shall be based on [NATO-Bi-SC-DIR-075-007] sections 7-6, 7-7 and [ASOP 07.01.25] for assessment approaches and instruments and include:

- (1) Examination methodologies and certification;
- (2) Minimum score to achieve for successfully passing the course;
- (3) A pass/fail policy, based on results of achievement tests;
- (4) Test/retest policies;
- (5) Course(s) to be done to get the certification for each role; and
- (6) Description of Role's certification process.

[SOW-276] The Contractor shall ensure that each student is instructed at the end of each course (residential or Computer Based Training (CBT)) to complete and return the course evaluation feedback form provided as part of the training course.

4.3.2.2.9 Instructional Strategies

[SOW-277] The contractor shall define instructional strategies in accordance with the guidance provided in [NATO-Bi-SC-DIR-075-007], Chapter 6, by identifying and selecting:

- (1) Instructional methods such as demonstration-performance, case studies or lectures;
- (2) Training Materials; and
- (3) Learning environment e.g., face-to-face, live online, self-paced, hybrid or blended learning.

[SOW-278] The contractor shall formulate a proposal for instructional strategy based on the selected instructional methods, media and the learning environment in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 6.

[SOW-279] The contractor shall document the CCD III - Programme of Classes in accordance with [NATO-Bi-SC-DIR-075-007], Chapter 5 and Annex R to define the training solution which shall include the ELO and provide the details supporting the overall instructional strategy including the final structure of the content, teaching points, the instructional method, the time allocated to complete the ELO and student assessment details.

4.3.2.3 TNA Final Report

[SOW-280] The Contractor shall deliver a TNA Report (TNA-R) in accordance with [NATO-Bi-SC-DIR-075-007], that shall include the following:

- (1) A description of the TNA approach and activities;

- (2) An account of the Task Analysis performed;
- (3) The results of the Performance Gap Analysis, Task Analysis, DIF Analysis, Target Audience Analysis, and the Instructional Strategy Analysis;
- (4) The final list of Performance Objectives (POs);
- (5) The final list of Enabling/Learning Objectives (ELOs); and
- (6) The List of Teaching Points developed for each ELO Training Materials.

[SOW-281] The Contractor shall provide all the appropriate training documentation to train the Purchaser support personnel to test, operate and maintain DEMETER and its support equipment.

[SOW-282] Based on the outcome of the TNA Final Report, the following Training Materials as required shall be generated by the Contractor.

- (1) Training Syllabus;
- (2) Student Manuals and Handouts;
- (3) Instructor Guides;
- (4) Master Lesson Plans;
- (5) Training Presentations;
- (6) Training Scenarios;
- (7) Training Database;
- (8) Training Certificate;
- (9) Course evaluation feedback form;
- (10) Quick Reference Guides;
- (11) Frequently Asked Questions (FAQ);
- (12) Introductory Video;
- (13) Lesson exercises/quizzes/exams with answer sheets;
- (14) Training System installation and configuration procedures;
- (15) Question database and sample tests;
- (16) Self-paced online learning content (eLearning/micro-learning); and
- (17) Training aids of all types including real equipment, references and job aids.

[SOW-283] The Contractor's Training Materials for the DEMETER courses shall provide all the information required to conduct the courses and maintain the Training Materials.

[SOW-284] The Training Materials shall be developed in accordance with the results of the TNA.

[SOW-285] The Purchaser will provide comments to improve the Training Materials. The Contractor shall implement the changes directed by the Purchaser and provide updated Training Materials as part of reviews.

4.3.2.4 eLearning – Micro-Learning

[SOW-286] The Contractor shall develop a set of self-paced online learning modules in the form of eLearning and micro-learning as identified in the Training Plan to enable end users and self-service users to perform the tasks associated with their roles.

[SOW-287] The eLearning/micro-learning shall be provided for baseline numbers, and then updated until FSA.

[SOW-288] The eLearning/micro-learning shall complement the Face-to-Face training by defining and explaining the key concepts and terminology of DEMETER, and by providing additional practice opportunities.

[SOW-289] All eLearning Training Materials shall be prepared in compliance with the Sharable Content Object Reference Model (SCORM) Edition 2004.

Version 1.1

- [SOW-290] The eLearning Package shall allow modifications by the Purchaser to reflect changes in the training concept and/or content without any additional cost to NATO.
- [SOW-291] The Contractor shall provide to Purchaser, all the eLearning assets including the SCORM packages, source code files, graphic and multimedia assets.
- [SOW-292] The eLearning package shall be user transparent, efficient and integrating the specific features for instructor and student without requiring special training in authoring systems technology or help from SMEs.
- [SOW-293] The contractor shall provide performance support materials (micro-learning) to support users after the training during their work, with the following characteristics: bite-sized learning chunks designed to model or explain concrete tasks, ideally embedded in-application performance support, including a search function to make all performance supporting materials findable at the point of need.

4.3.2.5 Training Delivery

- [SOW-294] The Contractor shall plan, prepare and deliver the training modules and training courses in a physical classroom at Purchaser designated facilities.
 - [SOW-295] The Contractor shall coordinate with Purchaser the requirements and availability of training facilities at the Purchaser’s facilities no later than three (3) months prior to the planned training.
 - [SOW-296] The Contractor shall prepare and deliver the invitations for the training no later than three months prior to the planned training.
 - [SOW-297] The Contractor shall provide each course participant with a copy of the student manual; other (student) materiel physical or electronically as required by the course.
 - [SOW-298] The duration, locations and number of sessions shall be agreed upon in the Training Plan and should be sufficient to cover all users in all roles as described in Table 4.1.
- [147] The Purchaser may decide unilaterally to decrease or increase the number of iterations per training course, which will result in a decrease or increase of the price based on the price per course as specified in the bidding sheets and the number of courses.

Table 4.1 – Number of iterations for the DEMETER initial training

Course Type	Max # of seats per iteration	# of iterations Training
User courses	12	25
Functional Administrator courses	6	5
System Admin courses	6	3
Train the trainer courses	10	1

- [SOW-299] The Contractor shall submit to the Purchaser a Training Course Evaluation Report (TCER) for each training. The TCER shall contain the following:
 - (1) Student attendance and performance record;
 - (2) Consolidated student feedback from feedback forms;

- (3) Problems encountered (if any);
- (4) Actions taken or recommended; and
- (5) Suggested follow-up actions.

[SOW-300] The Contractor shall, as directed by the Purchaser's Project Manager, revise the Training Materials for each course to reflect instructors' and consolidated student feedback from the initial session of each course.

[SOW-301] The Contractor shall produce Training Certificates for each training session and student in accordance with NCI Academy Standard Operating Procedure [ASOP-07.01.25] NCI Academy Grading and Assessment. The certificates shall be delivered not later than two (2) weeks following the completion of the training.

4.3.2.6 Hand-over to the Purchaser

[SOW-302] Accompanied with the delivery of WP1, the Contractor shall deliver the associated complete set of training materiel to the Purchaser.

[SOW-303] As part of the hand-over process, the Contractor shall train the Purchaser trainers to allow Purchaser instructors to deliver all training courses.

4.3.2.7 Training Analysis Review (TAR)

[148] The purpose of the TAR is to conduct the initial TNA and develop Course Control Documents I & II of the courses identified proposed as training solutions. TAR shall be in line with [NATO-Bi-SC-DIR-075-007].

[SOW-304] The Contractor shall provide the deliverables listed below for TAR:

- (1) The initial version TNA Report; and
- (2) Course Control Documents I & II for the proposed training solutions.

[SOW-305] The Contractor shall comply with the following entry criteria to enter this milestone:

- (1) The Contractor has delivered the required deliverables; and
- (2) The Purchaser has reviewed all deliverables.

[SOW-306] The Contractor shall comply with the following exit criteria for a successful conclusion of this milestone:

- (1) The Purchaser has approved the content; and
- (2) The Purchaser has verified that the deliverables are in line with [NATO-Bi-SC-DIR-075-007].

4.3.2.8 Training Design Review (TDR)

[149] The purpose of the TDR is to design the training solutions which are the outcome of TAR.

[SOW-307] The Contractor shall provide the deliverables listed below for TDR:

- (1) Course Control Documents III for the proposed training solutions updated with the scope of the baseline;
- (2) The final version TNA Report; and
- (3) Updated Training Plan.

[SOW-308] The Contractor shall comply with the following entry criteria to enter this milestone:

- (1) TAR has been successful;
- (2) The Contractor has delivered the required deliverables; and

(3) The Purchaser has reviewed all deliverables.

- [SOW-309] The Contractor shall comply with the following exit criteria for a successful conclusion of this milestone:
- (1) The Purchaser has approved the content; and
 - (2) The Purchaser has verified that the deliverables are in line with [NATO-Bi-SC-DIR-075-007].

4.3.2.9 Training Material Review (TMR)

[150] The purpose of the TMR is to develop the material in support of the training solutions.

[SOW-310] The Contractor shall provide the Training Materials deliverables as listed in Section 3.7.6 for each course.

[SOW-311] The Contractor shall comply with the following entry criteria to enter this milestone:

- (1) TDR has been successful;
- (2) The Contractor has delivered the required deliverables; and
- (3) The Purchaser has reviewed all deliverables.

[SOW-312] The Contractor shall comply with the following exit criteria for a successful conclusion of this milestone:

- (1) The Purchaser has approved the content; and
- (2) The Purchaser has verified that the deliverables are in line with [NATO-Bi-SC-DIR-075-007].

4.3.3 Interoperability Adaptations (WP3)

[151] Intention of this phase is to develop the interoperability adaptations on an NCI Agency approved integration platform (e.g. SOA-IdM or IntCore).

[SOW-313] The Contractor shall design and build interoperability adaptations on an NCI Agency approved integration platform (e.g. SOA-IdM or IntCore) based on interfaces defined in Annex B as well as other adaptations.

[SOW-314] The Contractor shall use an iterative development approach.

[SOW-315] The Contractor shall break up the iterative development phase into a sequence of sprints.

[152] Each consecutive sprint shall implement a new scope of requirements and consolidate it with the resulting capabilities from the previous sprint. The aim will be to deliver a "shippable capability" (i.e. a working piece of software that is ready to be deployed and thus include documentation and other relevant support artefacts) at the end of each time-boxed sprint.

[153] The Purchaser may define the priority of the work to be delivered in this WP.

[SOW-316] The Contractor shall follow the priorities as defined by the Purchaser and include all activities required for requirements analysis, design, development, integration, testing, documentation, etc. within the scope of a single sprint in order to deliver a shippable capability at the end of each time-boxed sprint.

4.3.4 Validation

- [154] The validation phase for each of the WPs consists of system integration testing (SIT) which will be combined with CIAV, IVVQ testing and the CRQ/Security tests prior to deployment in the operational environment and the SiAT, which may be combined with one or several NATO exercise(s). Also participation in NATO exercises such as Coalition Warrior Interoperability Exercise (CWIX) may be required.
 - [155] As Figure 4.4 illustrates, the testing will follow a sequence of formal verification and validation activities, either led and performed or supported by the Contractor.
 - [156] The Purchaser reserves the right to develop additional test cases and conduct its own independent testing.
- [SOW-317] The Contractor shall lead, perform and support the activities as illustrated in Figure 4.4, Figure 4.5 and Figure 4.6.

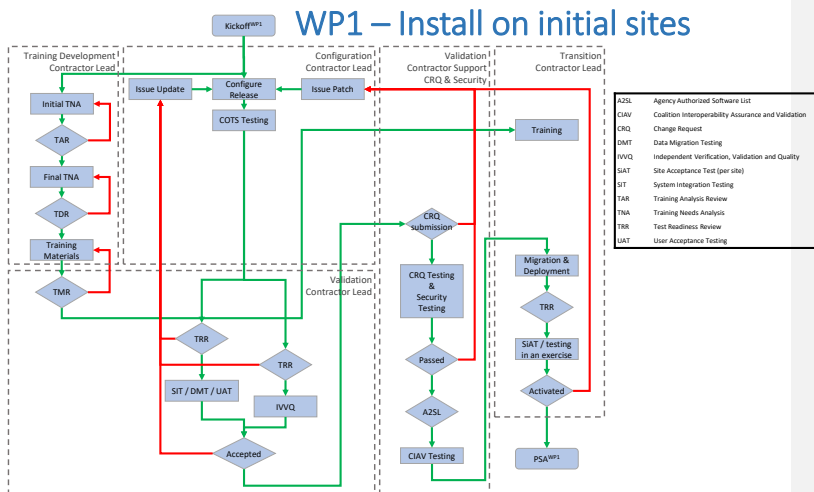


Figure 4.4 - Testing, Verification and Validation Process for WP1

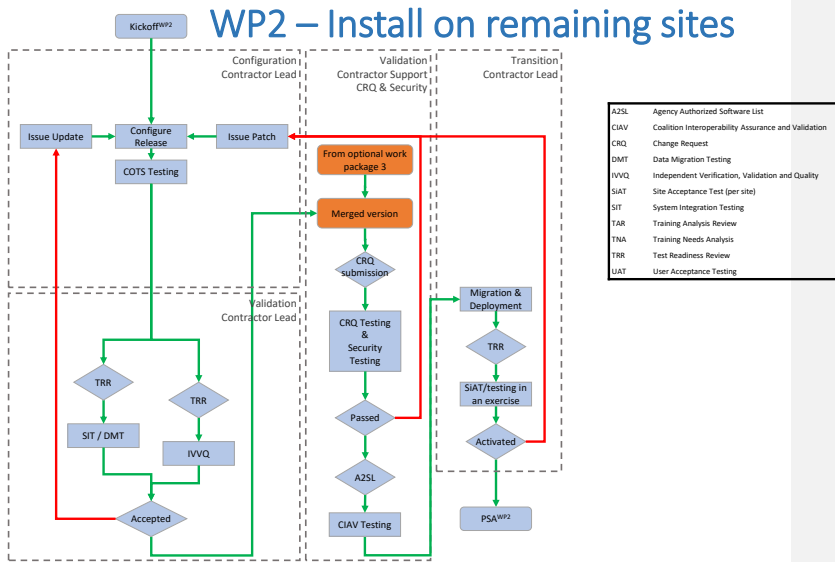


Figure 4.5 – Testing, Verification and Validation Process for WP2

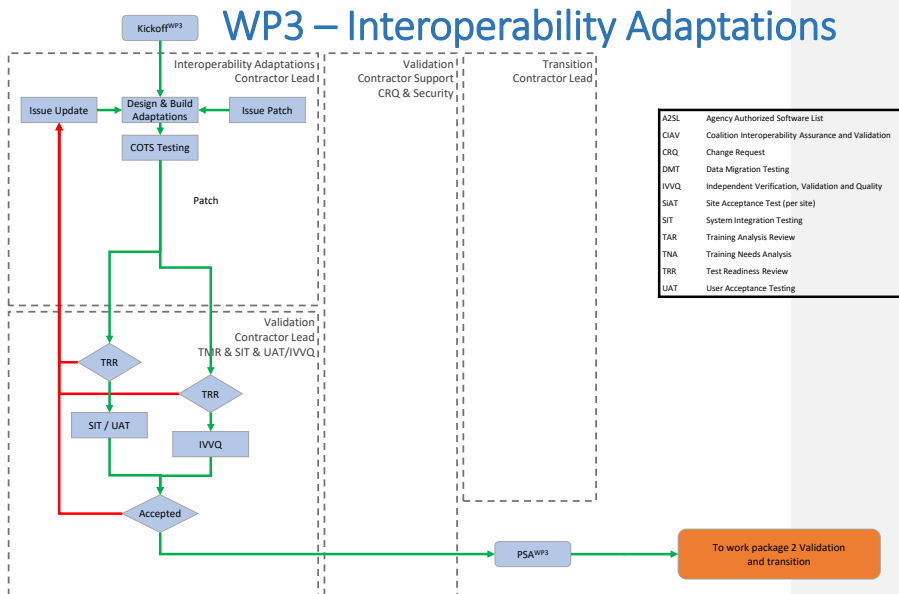


Figure 4.6 – Testing, Verification and Validation Process for WP3

4.3.4.1 Entry and Exit Criteria

- [SOW-318] The Contractor shall comply with the following entry criteria for the validation phase:
- (1) The Contractor has concluded the previous phase successfully.
- [SOW-319] The Contractor shall comply with the following exit criteria for a successful conclusion of the validation phase:
- (1) The Contractor has successfully conducted the training material review (only applies to WP1);
 - (2) The Contractor has successfully conducted the system integration testing with no remaining critical defects and 4 or less high defects;
 - (3) The Contractor has successfully conducted the user acceptance testing / IVVQ with no remaining critical defects and 4 or less high defects;
 - (4) The Contractor has successfully passed the CRQ and security testing and the baseline release is on the A2SL;
 - (5) The Contractor has delivered a release build, including source code (for WP3 only), any third-party software, licences and warranty documentation. This shall include any third-party software and components as per Section 3.6;
 - (6) The documentation artefacts supporting the CRQ have been reviewed and accepted by the Purchaser;
 - (7) The Contractor has delivered revisions of the system documentation artefacts including the installation and configuration manual, maintenance and administration manual, coherent with the baseline release that have been reviewed and accepted by the Purchaser;
 - (8) The Contractor has delivered revisions of the user documentation artefacts, including online help and standard operating procedures manual, coherent with the baseline release that have been reviewed and accepted by the Purchaser;
 - (9) The Contractor has delivered the product description and interface control document (ICD) coherent with the baseline release that have been reviewed and accepted by the Purchaser;
 - (10) The Contractor has delivered meeting reports of meetings held during this phase; and
 - (11) The Contractor has delivered test reports of the test activities conducted during this phase.

4.3.5 Transition

- [157] Following successful completion of the validation phase, the transition phase will commence. The objective of the transition phase is to deploy the approved baseline release onto the NATO operational network, training platform, and relevant test and reference environments, and deliver training and support.
- [158] The transition phase, and thus the WP, will be concluded with a PSA once all services and deliverables have been delivered and accepted by the Purchaser.

4.3.5.1 Deployment

- [159] The deployment, i.e. installation, migration and activation, of a baseline release on the NATO operational networks, training platform, (integration) test beds and reference environments will be the responsibility of the Contractor, supervised by the Purchaser.

- [160] Back-end deployments are required in the datacentres in Mons, Belgium and Lago Patria, Italy, as well as on the enhanced node in Izmir, Turkey and must be accessible from all NATO locations.

Table 4.2 - Overview Operational Sites, Reference Environment and Testbeds

Back-end installation locations	WP1	WP2
Operational		
Datacentre Mons, BEL		x
Datacentre Lago Patria, ITA		x
Enhanced node: Izmir, TUR	x	x
Deployable CIS in Europe		x
Exercises		
Joint Force Training Centre, Bydgoszcz, POL		x
Joint Warfare Centre, Stavanger, NOR		x
Testing		
NCI Agency Support and Reference Environment, The Hague, NLD	x	x
NCI Agency Bi-SC AIS IVVQ Testbed, The Hague, NLD	x	x
NCI Agency NSF, The Hague, NLD	x	x
End user operational locations accessing DEMETER	WP1	WP2
Land Command Izmir	x	x
HQ JFC Naples, ITA	x	x
HQ JFC Brunssum, NLD		x
HQ JFC Norfolk, USA		x
SHAPE Mons, BEL		x

- [SOW-320] The Contractor shall ensure that the deployment of an instance of a baseline release includes:
- (1) Installation of the baseline release;
 - (2) Integrate the newly installed operational baseline with the available core and other functional services as defined in the selection criteria;
 - (3) Migrate the existing data and users to the newly installed operational baseline; and
 - (4) Activate the newly installed operational baseline and verify the correct installation and configuration (site acceptance testing).
- [SOW-321] The Contractor shall deploy an instance of each release submitted for IV&V (CRQ process) to the Bi-SC AIS IVVQ Test Bed from the Purchaser's facilities. These deployments could be conducted remotely if agreed with by the Purchaser.
- [SOW-322] The Contractor shall deploy an instance of each release for system integration testing activities to the NCI Agency Support and Reference Environment from the Purchaser's facilities.
- [SOW-323] The Contractor shall deploy an instance of each release to the NCI Agency Support and Reference Environment, from the Purchaser's facilities. These deployments could be conducted remotely if agreed with by the Purchaser.
- [SOW-324] The Contractor shall deploy instances of limited approval (LATO) baseline releases to the NATO operational network from the Purchaser's facilities for user

acceptance testing and training as required throughout the period of performance of the Contract.

- [SOW-325] The Contractor shall deploy and activate multiple instances of an approved baseline release (up to four: operational instance, exercise instance, training instance and test instance) to the NATO operational network for the operational sites listed in Table 4.2. In general, the deployment shall be conducted from the Purchaser's facilities. Specific components, e.g. Desktop Client (if applicable), may require local support on each site.
- [SOW-326] The Contractor shall be responsible for ensuring that the deployed instances are installed and correctly configured, fully functional and accessible across the NATO network domain, i.e. from all connected sites (Table 4.2), with satisfying performance as specified in the contracted requirements.
- [SOW-327] The Contractor shall deploy and activate an instance of an approved baseline release to the NCI Agency Support and Reference Environment from the Purchaser's facilities.
- [SOW-328] The Contractor shall coordinate the deployment sequence and timeframes with the Purchaser and site POCs to accommodate for specific requirements, exercises, holiday periods and other considerations.
- [SOW-329] The Contractor shall deliver a deployment report for each deployment, documenting deployment specific details of the activities conducted and results of the activation tests performed.
- [SOW-330] In case issues or defects are discovered during the transition, the Contractor shall deliver an updated baseline release or patch to resolve the issue/defect and support the request for change process to obtain approval.

4.3.5.1.1 Release and Deployment Plan

- [SOW-331] The Contractor shall deliver a Release and Deployment Plan (RDP) in accordance with section 8.8.

4.3.5.2 Partial System Acceptance

- [161] Each WP will be concluded with a PSA, which will be granted when the Purchaser has verified completeness of the entire delivery and has determined that it meets the requirements of the Contract.
- [SOW-332] The Contractor shall develop and deliver a PSA report, which shall reference relevant Contract Line Identification Numbers (CLINs) and includes:
- (1) Traceability of the delivered and deployed baseline(s) and artefacts;
 - (2) Traceability of services delivered;
 - (3) Deliverable requirements traceability matrix, including completion status; and
 - (4) Overview of outstanding non-critical defects with a correction action plan for addressing these defects.
- [SOW-333] The Contractor shall request PSA in writing to the Purchaser, supported by a PSA report and meeting invitation.
- [SOW-334] The Contractor's personnel shall meet with the Purchaser's project team for a PSA meeting. At the discretion of the Purchaser, meeting by video conference may also be acceptable.

- [SOW-335] During the meeting, the Contractor shall include in its presentation:
- (1) An overview of the key dates of the Contract, amendments and engineering change proposals;
 - (2) A summary of the scope, with overview of main deliverables and services delivered, highlights and main achievements;
 - (3) Key dates of project milestones and acceptance;
 - (4) Invoicing log, including listing outstanding payments;
 - (5) Outstanding CLINs delivered to be formally accepted; and
 - (6) Defect correction action plan and approach to maintenance and support services to be furnished until FSA.
- [SOW-336] The Contractor shall prepare and deliver a written report of the meeting in the form of meeting minutes that shall be reviewed and signed by the representatives of the Contractor and Purchaser respectively.

4.3.5.3 Maintenance and Support

- [SOW-337] On passing PSA of WP1 until successfully achieving FSA, the Contractor shall provide maintenance and in-service support, service released or patches in accordance with the provisions stipulated in Section 5.3.

4.3.5.4 Entry and Exit Criteria

- [SOW-338] The Contractor shall comply with the following entry criteria for the transition phase:
- (1) The Contractor has concluded the previous phase successfully;
 - (2) The Contractor has coordinated the provision of training at the Purchaser's facilities (WP1); and
 - (3) The Contractor has delivered and sent the invitation for the training to be delivered (WP1).
- [SOW-339] The Contractor shall comply with the following exit criteria for a successful conclusion of the transition phase:
- (1) The Contractor has completed the deployment of multiple instances of the baseline releases on the NATO operational network and the instances are fully functional and operational;
 - (2) The Contractor has completed the deployment of multiple instances of the baseline releases to the NCI Agency Support and Reference Environment and the reference and test beds and the instances are fully functional and operational;
 - (3) The Contractor has delivered deployment reports for each deployment;
 - (4) The Contractor has resolved all CRITICAL and MAJOR defects discovered during this phase and provided updated baseline releases, as required;
 - (5) The Contractor has delivered revisions of the system documentation artefacts including the installation and configuration manual, maintenance and administration manual, coherent with the baseline release that have been reviewed and accepted by the Purchaser;
 - (6) The Contractor has delivered revisions of the documentation, coherent with the baseline release that have been reviewed and accepted by the Purchaser;
 - (7) The Contractor has completed the delivery of training (WP1);
 - (8) The Contractor has delivered training course evaluation reports of all training courses conducted during this phase (WP1);

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- (9) The Contractor has incorporated feedback and lessons-learned in the training scenarios and training packages and has delivered an updated version (WP1);
- (10) The Contractor has delivered meeting reports of meetings held during this phase;
- (11) The Purchaser has verified completeness of the entire delivery and has determined that it meets the requirements of the Contract;
- (12) The Purchaser comments/concerns regarding the defect correction action plan and approach to maintenance and in-service support to be provided until FSA have been addressed;
- (13) The PSA meeting has been held and the submitted meeting minutes are accepted by Purchaser; and
- (14) The PSA has been granted.

4.4 Closure Phase

- [SOW-340] The objective of the closure phase is for the Purchaser to conduct the final validation of all deliverables, confirming complete hand-over, and verify that all contractual requirements (except warranty) have been met by the Contractor.
- [SOW-341] FSA will be granted when the Purchaser has verified completeness of the entire delivery and has determined that it meets the requirements of the Contract. Subsequently, on successful achievement of the FSA, the warranty period will commence.
- [SOW-342] The Contractor shall develop and deliver a FSA report, which shall reference relevant CLINs and includes:
- (1) Traceability of delivered and deployed baselines and associated artefacts;
 - (2) Traceability of any other artefact delivered;
 - (3) Traceability of services delivered;
 - (4) Updated deliverable requirements traceability matrix, including completions status; and
 - (5) Overview of outstanding non-critical defects with a correction action plan for addressing these defects under warranty.

4.4.1 Close-out Meeting

- [SOW-343] The Contractor shall request FSA in writing to the Purchaser, supported by a FSA report and close-out meeting invitation.
- [SOW-344] The Contractor's personnel shall meet with the Purchaser's project team for a close-out meeting. At the discretion of the Purchaser, meeting by video conference may also be acceptable.
- [SOW-345] During the close-out meeting, the Contractor shall include in its presentation:
- (1) An overview of the key dates of the contract, amendments and engineering change proposals;
 - (2) A summary of the scope, with overview of main deliverables and services delivered, highlights and main achievements;
 - (3) Key dates of project milestones and acceptance;
 - (4) Invoicing log, including listing outstanding payments;
 - (5) Outstanding CLINs delivered to be formally accepted; and
 - (6) Defect correction action plan and approach to maintenance and in-service support to be provided during the warranty period.

[SOW-346] The Contractor shall prepare and deliver a written report of the close-out meeting in the form of meeting minutes that shall be reviewed and signed by the representatives of the Contractor and Purchaser respectively.

4.4.2 Entry and Exit Criteria

[SOW-347] The Contractor shall comply with the following entry criteria for the closure phase:

- (1) The Contractor has concluded the previous phase successfully;
- (2) The Contractor has verified and confirmed hand-over of all deliverables under this Contract;
- (3) The Contractor has delivered the FSA report and is requesting FSA; and
- (4) The Contractor has delivered the Certificate of Conformity.

[SOW-348] The Contractor shall comply with the following exit criteria for a successful conclusion of the closure phase:

- (1) The Purchaser has assessed completeness of the entire delivery and has determined that it meets the requirements of the Contract;
- (2) The Purchaser comments/concerns regarding the defect correction action plan and approach to maintenance and in-service support to be furnished during the warranty period have been addressed;
- (3) The close-out meeting has been held and the submitted meeting minutes are accepted by Purchaser; and
- (4) The FSA has been granted.

5 Integrated Product Support

5.1 General

- [SOW-349] The Contractor shall establish an integrated product support (IPS) process, using the [ALP-10] or [ASD/AIA SX000i] specification as guidance, and perform IPS throughout the period of performance of the Contract.
- [SOW-350] The Contractor shall align delivery of all IPS related deliverables and services with the incremental delivery approach of the Contract.

5.2 Integrated Product Support Plan

- [SOW-351] The Contractor shall deliver an integrated product support plan (IPSP) compliant with Section 8.12, and document its IPS process tailored to the Contract, including activities and milestones to deliver integrated product support deliverables and services.
- [SOW-352] The Contractor shall document the planned maintenance and support activities in the IPSP, based on the definitions, concepts and requirement set forth in the Contract.
- [162] The in-service support plan documents the schedule, organization and resources of support during the in-service phase (from the first baseline release until FSA, during warranty and during the optional maintenance and support furnished post the warranty period), considering the maintenance and support definitions and concept.
- [SOW-353] The Contractor shall deliver an in-service support plan (ISSP) as an annex to the IPSP compliant with Section 8.12.1.

5.3 Maintenance and Support

5.3.1 Definitions

- [163] The support concept is the set of activities and processes in charge of managing the various levels of support and to escalate the problem to the appropriate level in accordance with the defined responsibilities.
- [164] It is based on the incident management process defined in ISO/IEC 20000, the Information Technology Infrastructure Library (ITIL) framework, software supportability concept of [ASD-S3000L]/[ASD-AIA-SX000i] or equivalent.
- [165] Support Level: the extent of technical assistance provided for an information technology capability to its users. The service management is divided into three different levels of service, which interface each other to activate the proper level of support appropriate for the type of incident that occurred or the request that has been made in accordance with the event happened on the system.
- [166] First Level Support: implements the incident management process in accordance with the ITIL framework or equivalent. As part of the incident management, the service desk receives the issue from the user, puts it into a standard format (incident or service/change request), performs an initial assessment and distributes it to the predefined actors to solve it.

- [167] **Second Level Support:** implements the problem management process in accordance with the ITIL framework or equivalent. The problem management process receives the trouble tickets from the service desk and performs the following tasks (not limited to):
- (a) (Re-)evaluation of trouble ticket category, criticality and priority;
 - (b) Identification of the root cause of the issue (e.g. by issue replication testing);
 - (c) Identification of workarounds;
 - (d) Identification and initial planning of possible short, medium and long-term solutions (e.g. workarounds, patches, or new baseline or configuration item releases);
 - (e) Create problem analysis report and change request including schedule of implementation, and synchronization with the baseline maintenance process;
 - (f) Presentation of the problem analysis report and change requests to the change control board (CCB) for approval;
 - (g) Monitor and control the approved change request during implementation;
 - (h) Trigger third level support and/or third level maintenance process to implement the change request, in case the incident cannot be solved at second level; and
 - (i) Perform the post-change request implementation review.
- [168] **Third Level Support:** implements the deployment and release management process in accordance with the ITIL framework or equivalent. The deployment and release management process receives the approved change request from the second level support and performs the following tasks (not limited to):
- (a) Activating third level maintenance when new solutions shall be developed;
 - (b) Development of the solution (i.e. new configuration item fix, repair, replacement, patch, or release);
 - (c) Testing of the solution (i.e. issue/defect replication testing, regression testing);
 - (d) Update of baseline content and status;
 - (e) Submit the solution for IV&V testing;
 - (f) Release of the solution; and
 - (g) Delivery and deployment of the solution.
- [169] **Maintenance Level:** the echelon at which maintenance tasks are performed on an information technology capability. The levels are distinguished by the relative sophistication of skills, facilities and equipment available at them. Thus, although typically associated with specific organizations and/or geographic locations, in their purest form, the individual maintenance levels denote differences in inherent complexity of maintenance capability. For all maintenance levels it is intended that:
- (a) All proactive maintenance tasks are defined in the maintenance and administration manual (Section 8.16) and scheduled in the maintenance plan; and
 - (b) Reactive maintenance activities are triggered by reported incidents, or service/change requests.
- [170] **First Level Maintenance:** this constitutes the very basic maintenance activities including the software failure recovery by simple diagnostics, as well as activating the second level of maintenance when it is needed. It includes the initial preventive maintenance procedures and any additional service/capability and/or site-specific procedures that are defined in the corresponding operations and maintenance manual. First level maintenance procedures do not require specialised tools and/or specialised personnel.
- [171] **Second Level Maintenance:** this constitutes isolation and resolution of system-level maintenance and management of defect/bug reports and repair including the simple software customizations, software reloading/installation, execution of scripts, management of users/profiles usually performed by system administrators, activating

the third level of maintenance when it is needed. It includes the initial preventive maintenance procedures and any additional service/capability and/or site-specific procedures that are defined in the corresponding manual. Second level maintenance procedures do not require specialised tools.

- [172] Third Level Maintenance: this constitutes activities that involve a change to the system baseline, such as software patches or new releases including the bug recording and reporting, advanced troubleshooting and configuration changes with the changing environment. It includes specialised hardware repair, if applicable. Third level maintenance is activated by third level support and can be initiated either to define the solution to a problem (corrective maintenance) or to maintain up to date software baseline (adaptive maintenance) e.g. security patches, operating system upgrades, minor software configuration changes due to operational/interface needs and refactoring. It includes the initial preventive maintenance procedures and any additional procedures that are defined in the corresponding manual. Third level maintenance procedures often require specialised tools and/or Personnel such as software architects, programmers, advanced system administrators and specialists.
- [173] Fourth Level Maintenance: this is the responsibility of the software original developer under warranty and through separate agreements post warranty. It is activated from the third level of maintenance and covers the four types of maintenance (corrective, adaptive, perfective and preventive maintenance) and change requests. It requires software maintenance, testing (both in simulated and emulated environments), patch creation, release and deployment services.

5.3.2 Maintenance and Support Concept

- [174] The NCI Agency's service support team for DEMETER, or its mandated representatives or third parties, will be performing maintenance and support services in parallel with the Contractor.
- [SOW-354] The Contractor shall support and collaborate with the NCI Agency's service support and maintenance team or its mandated representatives or third parties.
- [SOW-355] The Contractor shall integrate any changes and modifications made by the NCI Agency's service support and maintenance team or its mandated representatives or third parties.
- [SOW-356] The Contractor shall deliver a maintenance and support concept, i.e. a collection of processes that are designed to ensure the operational efficiency of the operational baseline, including:
- (1) Processes and procedures;
 - (2) Maintenance and support tasks at all levels;
 - (3) Maintenance and support environment;
 - (4) Locations;
 - (5) Constraints;
 - (6) Organization and personnel skills; and
 - (7) Roles and responsibilities (responsible, accountable, consulted and informed, RACI).
- [SOW-357] The maintenance and support concept shall refer to applicable requirements.
- [SOW-358] The maintenance and support concept shall define the second and third level support process interfaces to the other processes, including the existing NCI

Agency Service Desk (first level support) and various NATO sites and organizations.

- [SOW-359] The maintenance and support concept shall define the delivered baselines maintenance and support processes and flow amongst the various NATO facilities, organizations, groups, and people. This shall include the flow and interfaces between various maintenance and support levels.
- [SOW-360] On passing PSA of WP1 until successfully achieving FSA, the Contractor shall provide in-service support and maintenance services for the first DEMETER baseline and any follow-on deployed baselines. This support shall include:
 - (1) Second and third level support; and
 - (2) Third and fourth level maintenance, including implementation of fixes to defects and subsequently produce emergency patches and minor updates in between baseline releases to ensure that the operational baselines running in production fulfils its availability requirements.
- [SOW-361] The Contractor shall deliver the support and maintenance documentation artefacts, training, and resources in order to allow the Purchaser to fully operate the solution, to perform first, second and third level support and maintenance from PSA of the final baseline onwards.
- [SOW-362] Starting from PSA of WP1, until the end of the warranty period, all maintenance activities beyond Purchaser capabilities/skills (as per maintenance concept and Contractor delivered training and documentation) required to restore operational baselines from a critical failure shall be performed by Contractor provisioned dedicated on-site interventions and/or off-site resolutions.
- [SOW-363] The Contractor shall maintain and deliver renewed/extended licenses of the third-party software and components in accordance with Section 3.6 and ensure that these licenses cover the full period of performance.
- [SOW-364] The Contractor shall monitor the availability of third-party software and component upgrades and patches in accordance with the requirements stipulated in Section 3.6.
- [SOW-365] When agreed by the Purchaser, the Contractor shall introduce and integrate upgrades and patches of all third-party software and components in accordance with the requirements stipulated in Section 3.6.
- [SOW-366] For any critical failure or defect that is beyond the capability of the Purchaser, the Contractor shall ensure system restoration within eight (8) working hours from the moment of Purchaser notification by providing workarounds; and within four (4) business days for critical defect fixing including the fault identification, software recoding, patch creation, software testing and delivery of the new patch release. Corrective baseline or patch releases shall be done quarterly for non-critical bugs.

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5.4 Supply Support

5.4.1 System Inventory

- [SOW-367] The Contractor shall provide the Purchaser's IPS point of contact with an inventory and distribution list (IDL), in electronic Microsoft Excel format at least fourteen (14) days before each baseline release.

- [SOW-368] The inventory and distribution list shall be site-specific (as required) with reference to relevant CLIN, and shall include all deliverables furnished under this Contract, as follows:
- (1) Date of distribution;
 - (2) All software artefacts, i.e. all software applications, components, tools, (if applicable), etc.;
 - (3) All hardware devices, if applicable;
 - (4) All licences, if applicable, including license key and renewal dates;
 - (5) All documentation artefacts, i.e. manuals, drawings, reports, etc.; and
 - (6) All training packages.

5.4.2 Packaging, Handling, Storage, Transportation

- [SOW-369] The Contractor shall deliver all deliverables, including all spares and repaired goods, DDP (Delivery Duty Paid) Incoterms 2020 to the NATO destinations, at Contractor's expense. The Purchaser shall not be held liable for any storage, damage or any other charges involved in transportation prior to delivery at destination.
- [SOW-370] The Contractor shall be responsible for the availability of proper storage facilities and availability of material handling equipment that may be required for the shipment at the destination.
- [SOW-371] The Contractor shall liaise with the destination and coordinate availability of proper storage facilities and material handling equipment through the Purchaser's integrated product support officer.
- [SOW-372] In case classified items need to be transported, the Contractor shall adhere to the regulations concerning transportation of classified materials.
- [SOW-373] The Contractor shall be responsible for the transfer and delivery of installation packages of all software, firmware and modifications thereof provided under this Contract to the respective destination.
- [SOW-374] In case electronic storage media (CD/DVD, USB storage device, etc.) is used to deliver or transfer deliverables, then the Contractor shall physically label this media with the contract information, CLIN, identification, release date and security classification. The label shall be durable and non-erasable to ensure proper identification is warranted at all times.
- [SOW-375] Fourteen (14) days prior to the delivery of any shipment, the Contractor shall provide the Purchaser with a notice of shipment comprising the following details:
- (1) Shipment date;
 - (2) Purchaser contract number;
 - (3) CLIN;
 - (4) Consignor's and consignee's name and address;
 - (5) Items description and quantity; and
 - (6) Number of 302 Forms used (if applicable).

5.4.3 Customs

- [SOW-376] The Contractor shall be responsible for customs clearance and/or export licences of all deliveries into their destination countries.
- [SOW-377] The Contractor's shall be responsible for taking into account the time needed at customs, including eventual delays in obtaining customs clearance, and arrange

Version 1.1

NATO UNCLASSIFIED
Releasable to Finland and Sweden

IFB-CO-115791-DEMETER
Book-II-Part-IV-SOW

for timely ship. The Purchaser shall not be held responsible for delays incurred, even when utilising Purchaser provided Customs Form 302 (if applicable).

6 Warranty

- [SOW-378] The Contractor shall warrant that all deliverables and all services furnished under this Contract conform to the requirements and are free of any defect in code or workmanship for a period of one year starting at FSA.
- [SOW-379] The Contractor shall integrate the provision of corrective maintenance within its warranty services.
- [SOW-380] When, at any time before the end of the warranty period, the Contractor becomes aware that a defect exists in any of the deliverables or services furnished under this Contract, the Contractor shall coordinate with the Purchaser and promptly correct the defect in accordance with the warranty provisions.
- [SOW-381] The Contractor shall correct all defects and deliver a corrective baseline release at the end of each quarter throughout the warranty period.
- [SOW-382] At the end of the warranty period, the Contractor shall deliver a final baseline release including the fixes for all the remaining defects.
- [SOW-383] In case of a critical defect, the Contractor shall deliver analysis of the defect to the Purchaser and deliver a workaround within maximum eight (8) business hours, and the fixed solution by means of a patch release within four (4) business days after the Contractor has become aware of the defect.
- [SOW-384] The Contractor shall integrate the provision of on-site service support within its warranty services to be provided off-site from the Contractor's facilities, or on-site at the Purchaser facilities as required in case the issue cannot be resolved remotely or to support warranty releases and deployment and hand-over thereof. In case on-site support provision at the Purchaser facilities is required, the Contractor's response time at Purchaser site shall be within two business days from the moment of Purchaser notification.
- [SOW-385] The Contractor shall warrant all third-party software and components used during the warranty period. If required, the Contractor shall renew/extend the third-party software and component licences to cover the full warranty period.
- [SOW-386] The Contractor shall monitor the availability of third-party software and component upgrades and patches in accordance with the requirements stipulated in Section 3.6.
- [SOW-387] When agreed by the Purchaser, the Contractor shall introduce and integrate upgrades and patches of all third-party software and components in accordance with the requirements stipulated in Section 3.6.
- [SOW-388] The Contractor shall ensure that the warranty conditions remain valid even if the software is relocated/redeployed to an equivalent platform while under warranty.
- [SOW-389] The Contractor shall conduct testing and perform the configuration and change management processes for each patch and maintenance baseline release
- [SOW-390] The Contractor shall support the change request process for each patch and corrective baseline release.
- [SOW-391] The Contractor shall support the IV&V testing in accordance with Section 3.8.4.4.
- [SOW-392] The Contractor shall support the Purchaser in assessing the impact of issues, defects and identification and proposing workarounds and a fixed solution.

Version 1.1

NATO UNCLASSIFIED
Releasable to Finland and Sweden

IFB-CO-115791-DEMETER
Book-II-Part-IV-SOW

- [SOW-393] The Contractor shall detail all the warranty requirements in its in-service support plan, including the roles and responsibilities.
- [SOW-394] The Contractor shall provide a specific point of contact for all warranty and support requests.

7 Work Package 4: Optional Maintenance and Support

- [175] This optional WP describes the requirements for the continued annual Contractor furnished maintenance and support services to be exercised for up to ten (10) years post-FSA.
- [SOW-395] On exercising this optional WP, the Contractor shall provide fourth level maintenance services (see Section 5.3) off-site from the Contractor's facilities where this support includes:
- (1) Support to NCI Agency's second and third level support process with identification of the root cause of the issue (i.e. problem identification and analysis);
 - (2) In case of a critical defect, the Contractor shall deliver analysis of the defect to the Purchaser and deliver a workaround within maximum eight (8) business hours (8:00 – 18:00, Central European Time), and the fixed solution by means of a patch release within four (4) business days after the Contractor has become aware of the defect;
 - (3) Provide modification of the software to keep it usable in a changed or changing environment (adaptive maintenance). This includes moving from one hardware platform to another, updating infrastructure software and insertion of other software components developed by third-parties;
 - (4) Detect latent faults, analysing patterns and discover potential vulnerable areas in the software and provide preventive fixes (preventive maintenance);
 - (5) Support to testing and CRQ process in accordance with Section 3.8.4.4;
 - (6) Support the user acceptance testing in accordance with Section **Error! Reference source not found.**;
 - (7) Conduct testing and perform the configuration and change management processes for each patch and maintenance baseline release; and
 - (8) Support the release and transition process for each patch and maintenance baseline release.
- [SOW-396] The Contractor shall integrate the provision of on-site service support within its maintenance services to be provided off-site from the Contractor's facilities, or on-site at the Purchaser facilities as required in case the issue cannot be resolved remotely or to support warranty releases and deployment and hand-over thereof. In case on-site support provision at the Purchaser facilities is required, the Contractor's response time at Purchaser site shall be within two business days from the moment of Purchaser notification.
- [SOW-397] To enable the interfacing between DEMETER and other capabilities and services, the Contractor shall provide support to Purchaser or its contractors responsible for implementing such interfaces with DEMETER.
- [SOW-398] The Contractor shall maintain and deliver renewed/extended licenses of the third-party software and components in accordance with Section 3.6 and ensure that these licenses cover the full period of performance.
- [SOW-399] The Contractor shall monitor the availability of third-party software and component upgrades and patches in accordance with the requirements stipulated in Section 3.6.

Version 1.1

NATO UNCLASSIFIED
Releasable to Finland and Sweden

IFB-CO-115791-DEMETER
Book-II-Part-IV-SOW

[SOW-400] When agreed by the Purchaser, the Contractor shall introduce and integrate upgrades and patches of all third-party software and components in accordance with the requirements stipulated in Section 3.6.

8 Documentation Artefacts and Definitions

[176] This section covers the requirements for documentation artefacts to be delivered.

[SOW-401] For documentation artefacts that have not been specified in further detail under this Contract, the Contractor shall deliver a template with an outline of the relevant documentation artefact for Purchaser review and agreement prior to developing the documentation artefact.

[177] In case the Contractor deems necessary, and supported with proper justification, the Contractor may propose amendments to the outline and contents of documentation artefacts for Purchaser agreement.

8.1 Distribution

[SOW-402] The Contractor shall deliver all documentation artefacts in an electronic format, unless otherwise instructed, as follows:

- (1) Documentation artefacts intended for review by the Purchaser shall be delivered in an editable (i.e. Microsoft Office) format; and
- (2) Final versions of documentation artefacts shall be delivered in Adobe PDF format with OCR (Object Character Recognition) capability, together with the editable source file.

[SOW-403] The Contractor shall distribute all documentation artefacts, unless otherwise instructed, as follows:

- (1) All documentation artefacts: to the Purchaser's PM;
- (2) In case of technical documentation artefacts, i.e. design documentation, user stories, manuals, etc.: to the Purchaser's technical lead; and
- (3) In case of contract documentation artefacts, including invoices, change requests, etc.: to the Purchaser's contracting officer, and if required by the Purchaser's contracting officer, an additional printed copy.

[SOW-404] The Contractor shall not include any statements limiting the rights to use or reproduce the documentation artefact delivered under this Contract. The Purchaser reserves the right to make additional copies of any documentation artefact delivered.

[SOW-405] The Contractor shall ensure that the Purchaser always has access to the latest version of any documentation artefact from the moment the documentation artefact comes into existence, i.e. use the NSF for production and configuration management platform.

[SOW-406] The Contractor shall maintain the documentation artefacts and keep them current throughout the period of performance of the Contract.

[SOW-407] The Contractor shall place the documentation artefacts under configuration control throughout the period of performance of the Contract.

8.2 Review and Updates

[178] The Purchaser will, when reviewing documentation artefacts, provide comments and suggest changes to the Contractor within two weeks of receipt of the documentation artefact. When the Purchaser requires more time to complete its review, the Purchaser will inform the Contractor.

- [179] The Purchaser will reserve the right to return without further review a documentation artefact that shows significant deficiencies.
- [SOW-408] All documentation artefacts shall be subject to Purchaser review and acceptance.
- [SOW-409] The Contractor shall not rely on the Purchaser review to fill in deficiencies or obtain missing Purchaser information.
- [SOW-410] In case the Contractor considers that the Purchaser's comments and suggestions require further clarification, the Contractor shall arrange for a meeting to address the items of concern.
- [SOW-411] The Contractor shall submit revisions of documentation artefacts for review, addressing the Purchaser's comments and suggestions within two weeks after receipt of the Purchaser's feedback.
- [SOW-412] The Contractor shall submit revision documentation artefacts for review with each modification identified through the "track changes" feature or otherwise being marked as change.
- [SOW-413] In case there is a change to an already delivered artefact, the Contractor shall be responsible for updating all documentation artefacts pertaining to the specific delivered artefact where the documentation artefacts are affected by the change.

8.3 Standards and Conventions

- [SOW-414] The Contractor shall deliver all documentation artefacts compliant with the standards and conventions of the sections below. Third-party software and component documentation artefacts, such as a vendor-supplied user manual, are exempt from these requirements and shall be delivered in the original, unaltered, format.

8.3.1 File Format

- [180] The Purchaser's default software packages for managing documentation artefacts are:
- (a) Microsoft Office Professional 2016 or later;
 - (b) Microsoft Project 2010;
 - (c) Microsoft DocFX;
 - (d) Adobe PDF Reader; and
 - (e) Microsoft Windows compatible Zip compression and packaging format.
- [SOW-415] Documentation artefacts shall be delivered in a file format that is compatible with the Purchaser's default software packages.
- [SOW-416] Documentation artefacts shall be delivered in a file format that is best suited for review and maintenance by the Purchaser. In general, the following guidelines apply:
- (1) Microsoft Word shall be used for text documents;
 - (2) Microsoft Excel shall be used for tabular or matrix data;
 - (3) Microsoft Project shall be used for schedule; and
 - (4) Microsoft PowerPoint shall be used for briefings and presentations.
- [SOW-417] Documentation artefacts shall adhere to the following filename convention [NU|NR]_[Name]_[vX.Y].[filename extension] and the elements used in the filename convention shall be as follows:
- (1) [NU|NR] is the classification of the file: NATO UNCLASSIFIED or NATO RESTRICTED. Note: Classified files shall not be stored within the NSF;

- (2) [Name] is the Contractor proposed, Purchaser agreed designation of the documentation artefact;
- (3) [vX.Y] is the version number in the range (v0.1, v0.2,..., v0.9, v0.10, v0.11,...) for drafts submitted to the customer, and with vX.0 only for the final deliverables; and
- (4) [filename extension] is the standard filename extension. Note: large files or large file sets may be compressed using a standard zip-compatible format. In these cases, the ".zip" filename extension shall be used to indicate a compressed file format.

[SOW-418] The source files of documentation artefacts shall be stored and managed without version number in the filename. Only submitted and final versions shall have a version number and shall be stored separately from their source files.

8.3.2 Language, Style and Formatting Conventions

[SOW-419] Documentation artefacts shall be written in the English language.

[SOW-420] Documentation artefacts shall be written using standard English abbreviations only and the use of non-common English acronyms shall be avoided.

[SOW-421] The use of capitalization of words/terms within documentation artefacts beyond English spelling and grammar rules, shall be avoided.

[SOW-422] Documentation artefacts shall be written using the following number, date and time conventions:

- (1) The convention to be used for numbers is for a comma to be the thousands separator and a period to be the decimal separator (e.g. 1,365,276.24);
- (2) The convention to be used for dates (e.g. quoting dates of meetings) is in the order of day-month-year and not month-day-year; and
- (3) The convention to be used for times shall be 24-hour clock format.

[SOW-423] Documentation artefacts shall be based on style templates, which shall be proposed by the Contractor and agreed by the Purchaser.

[SOW-424] Documentation artefacts shall adhere to the same presentation style (cover pages, headers, footers, headings and paragraphs, font types and sizes, etc.).

[SOW-425] The layout and make-up of documentation artefacts shall be suitable for electronic reading in PDF format.

[SOW-426] The documentation artefact cover page (or equivalent cover slide or cover sheet) shall identify:

- (1) The document title, contract title, contract number, and originator;
- (2) Configuration management information, version number, issue date and NCAGE, if applicable;
- (3) The name and version number of the software it refers to, if applicable; and
- (4) Classification within headers and footers with the highest classification of information contained in the entire document.

[SOW-427] Documentation artefacts shall contain a table of contents. It shall be noted that depending on the type of artefact, a table of contents might not be required. The exclusion of a table of contents shall be agreed by the Purchaser prior to developing the documentation artefact.

[SOW-428] Documentation artefacts shall use sans-serif fonts (e.g. Calibri, Arial, Helvetica, etc.), and obey the following principles:

- (1) Headings shall be numbered and use bold font styles of sizes higher than the body text (the higher the heading in the document hierarchy, the larger the font size);
- (2) No document shall use headings below level 6 (i.e. 1.1.1.2.3.1 Heading Text);
- (3) Body text (under the headings) shall not use font sizes smaller than Calibri 12 pt. (or equivalent size if another font is selected);
- (4) Any graphic material produced, including network diagrams, shall not use font sizes smaller than Calibri 10 (or equivalent size if another font is selected); and
- (5) Larger font sizes than those specified above shall be selected if the corresponding text or drawing is to be reduced in size when embedded in the document, in order to guarantee that the PDF output keeps the font size as specified.

[SOW-429] Documentation artefacts developed in Microsoft Word shall be printable, if required, and therefore the page format shall be A4, printable in loose-leaf form.

[SOW-430] Where documentation artefacts contain many complex specialized or strongly domain oriented terminologies, these shall be defined in a glossary.

8.4 Project Management Plan

[SOW-431] The PMP shall describe the project organization and identify key personnel in the project organization, their qualifications, and their responsibilities.

[SOW-432] The PMP shall describe all aspects of the project implementation, including the Contractor's project management approach, project control processes, used standards, and external relationships necessary to provide the deliverables.

[SOW-433] The PMP shall describe personnel assignments with specification of the personnel target capacity required at Effective Date of Contract. Note: Target capacity is to be understood as full-time equivalent (FTE) by role/function, for example x FTE full-stack software developer; it is not needed to identify Contractor personnel by name, except for key personnel.

[SOW-434] The PMP shall specify and dimension the number of NSF user accounts, the Microsoft Azure Cloud Services and additional tooling that are required throughout the period of performance of the Contract (see Section 3.5).

[SOW-435] The PMP shall describe the Contractors' approach for establishing the project organization, bringing the project team at target capacity, and conducting knowledge build-up and preparations. The approach shall include justifications and identify assumptions and constraints in order for the Purchaser to assess the feasibility of the approach.

[SOW-436] The PMP shall identify all major Contractor operating entities and any Subcontractors involved in the work and describe the portion of the overall effort and deliverables allocated to them.

[SOW-437] The PMP shall describe how the various project management processes (quality management, configuration management, risk management, issue management, etc.) are integrated, either via a tool set and/or internal project management practices.

[SOW-438] The PMP shall describe the Contractor's and Subcontractors' approach to security management, including personnel and facility security.

Version 1.1

- [SOW-439] The PMP shall identify assumptions and constraints.
- [SOW-440] The PMP shall describe methodology used for cost and schedule estimation.
- [SOW-441] The PMP shall include a product breakdown structure (PBS) identifying all services and deliverables, with reference to the CLINs for traceability.
- [SOW-442] The PMP shall include a PMS (see 8.4.1) as an annex.
- [SOW-443] The PMP shall define all major milestones and major activities, all expected Purchaser involvements and all expected purchaser furnished property and services and associated timelines.
- [SOW-444] The PMP shall be sufficiently detailed to ensure that the Purchaser is able to assess the Contractor plans, capabilities, and ability to satisfactorily implement the entire scope in conformance with the requirements of the Contract.
- [SOW-445] Each revision of the PMP shall be accompanied by a summary of the changes together with impact statement for Purchaser assessment.

8.4.1 Project Master Schedule

- [SOW-446] The PMS shall define all major milestones and major activities, with reference to the element of the product breakdown structure, the breakdown and durations of each activity, and the Contract end date.
- [SOW-447] The PMS shall specify a level-of-effort (LOE) in number of person-days for each of the activities/deliverables.
- [SOW-448] The PMS shall include a Gantt chart where the start and finish dates of the WPs and phases are depicted, and it shall from this schedule be possible to identify the timeframe when a specific deliverable is planned to be delivered.
- [SOW-449] The PMS shall include all major milestones, phases and activities within a WP, including:
 - (1) CAW and EDC (note: for this project CAW=EDC);
 - (2) Phase start and finish dates;
 - (3) All contract milestones, including product or sub-product delivery timelines;
 - (4) All major milestones and activities;
 - (5) Other milestones and activities that requiring Purchaser and/or user involvement; and
 - (6) All sprints, including planning and review meetings.
- [SOW-450] The PMS shall depict the sequence, start and finish dates, durations, and relationships among milestones and activities.

8.5 Risks, Actions, Issues, Decisions Register

- [SOW-451] The RAID register shall be used to record and track all project risks, action items, issues and decisions.
- [SOW-452] The RAID register shall be exportable to Microsoft Excel.

8.5.1 Risk Register

- [SOW-453] The Risk Register within the RAID register shall list all project risks and for each risk indicate the following information (but not limited to):
 - (1) Risk identifier: unique code to allow grouping of all information on this risk;

- (2) Risk category (e.g. management, technical, schedule, quality and cost risks);
- (3) Description: brief description of the risk pointing on the uncertain event (risk), and its cause or causes;
- (4) Impact: description of the effect on the project if this risk were to occur;
- (5) Impact assessment: estimate the impact of the risk using five (5) level scale
- (6) Probability: estimate of the likelihood of the risk occurring using five (5) level scale;
- (7) Risk rating (High, Medium, Low);
- (8) Proximity: how close in time is the risk likely to occur;
- (9) Response strategy: avoidance, mitigation, acceptance, transference;
- (10) Response plan(s): what actions have been taken/will be taken to counter this risk;
- (11) Owner: who has been appointed to keep an eye on this risk;
- (12) Status: e.g. closed, reducing, increasing, no change;
- (13) Date of last update: when was the status of this risk last reviewed;
- (14) Originator: who submitted the risk; and
- (15) Date identified: when was the risk first identified.

8.5.2 Action Register

[SOW-454] The Action Register within the RAID register shall list all action items, and for each action item indicate the following information (but not limited to):

- (1) Action identifier: unique identifier of the action item;
- (2) Description: brief description of the action item;
- (3) Owner: who is responsible for the action item;
- (4) Date identified: when was the action item was raised;
- (5) Due date: when the action item is expected to be completed;
- (6) Status: e.g. open, closed, obsolete; and
- (7) Date status update: when the action item's status changed.

8.5.3 Issue Register

[SOW-455] The Issue Register within the RAID register shall list all issues that require formal management by the project and for each issue indicate the following information (but not limited to):

- (1) Issue identifier: unique identifier of the issue;
- (2) Issue type (request for change, project issue, problem or concern);
- (3) Description: brief description of the issue and its impact;
- (4) Severity: Statement of the severity of the issue;
- (5) Owner: who is responsible to deal with the issue;
- (6) Date raised: when was the issue first raised/encountered;
- (7) Originator: who identified the issue;
- (8) Status: e.g. closed, reducing, increasing, no change; and
- (9) Date status update: when the issue's status changed.

8.5.4 Decision Register

[SOW-456] The Decision Register with in the RAID register shall list all taken decisions and for each decision indicate the following information (but not limited to):

- (1) Decision identifier: unique identifier of the decision;
- (2) Description: brief description of the decision;
- (3) Date approved: when was the decision taken approved; and

(4) Approved by: reference to the Purchaser's approver.

[SOW-457] All decisions entered on the register shall be submitted for Purchaser approval and the status shown on the register.

8.6 Project Highlight Report

[SOW-458] The Contractor's PHR shall include at least:

- (1) Summary of contract activities during the preceding period, including the status of current and pending activities;
- (2) Progress of work and schedule status against the PMS, highlighting any changes since the preceding report;
- (3) Status of action items and decisions;
- (4) Description of any identified problems, anomalies and high risk areas with proposed solutions and corrective actions;
- (5) Test(s) conducted and their results;
- (6) Provisional financial status and predicted invoices;
- (7) Changes in key Contractor personnel, as approved by the Purchaser;
- (8) Summary of Change Requests requested, recommended or approved;
- (9) Summary of any analysis conducted; and
- (10) Plans and dates for activities during the next reporting period.

8.7 Master Test Plan

[SOW-459] The Contractor shall identify and describe in the MTP which best practices and international standards will be applied and how.

[SOW-460] The Contractor shall produce a Master Test Plan (MTP) to address the plans for each TV&V activities listed in this document. The Purchaser will monitor and inspect the Contractor's MTP activities to ensure compliance.

[SOW-461] The Contractor shall describe how the Quality Based Testing is addressed and implemented in the MTP. Figure Product Quality Criteria is based on ISO 25010 and should be used as product quality criteria model.

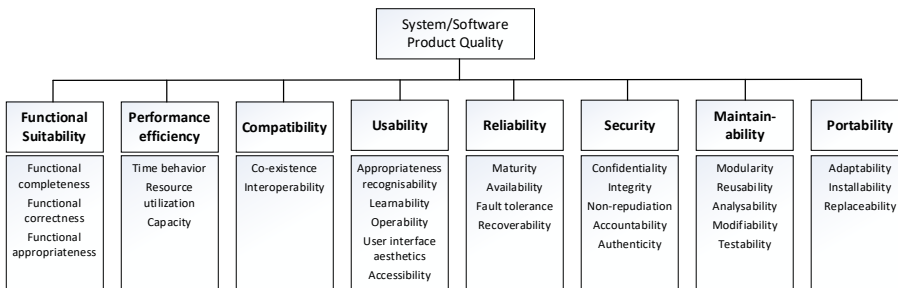


Figure 8.1 - Product Quality Criteria

[SOW-462] The Contractor shall describe all formal TV&V activities in the MTP with a testing methodology and strategy that fit the development methodology chosen by the project.

- [SOW-463] The Contractor proposed testing methodology shall describe the method of achieving all the test phases successfully.
- [SOW-464] The Contractor shall describe in the MTP how the following objectives will be met:
- (1) Compliance with the requirements of the Contract;
 - (2) Verification that the design produces the capability required
 - (3) Compatibility among internal system components
 - (4) Compliance with external system interfaces and/or systems
 - (5) Compliance with the SRS requirements
 - (6) Confidence that system defects are detected early and tracked through to correction, including re-test and regression approach
 - (7) Compliance with Purchaser policy and guidance (i.e. security regulations, etc.)
 - (8) Operational readiness and suitability
 - (9) Product Quality Criteria (Figure 8.1)
 - (10) Identify which platform(s) to be used for the test events and the responsibilities for operation and maintenance of the environment.
- [SOW-465] The Contractor shall describe in the MTP the Contractor's test organization and its relationship with the Contractor's Project Management Office and Quality Assurance (QA) functions.
- [SOW-466] The Contractor shall describe in the MTP "Entry", and "Exit" criteria for each of the formal TV&V events. The Contractor shall seek approval of all criteria related to an event not later than the Test Readiness Review (TRR) meeting of the event.
- [SOW-467] The Contractor shall provide the schedule in the MTP location and scope for all the events to be run, specifying to which phase they belong, and for the provision of the test related deliverables and detail the conduct of testing. When the Contractor identifies that multiple events are required for a phase, this shall also be specified in the MTP.
- [SOW-468] Together with the MTP, the Contractor shall provide a defect reporting and management process to be applied during the TV&V activities.
- [SOW-469] The Contractor shall describe how defects/non-conformances encountered during TV&V events will be reported, managed and remedied

The MTP shall include the Contractor's approach to Test Reviews including Test Readiness Reviews and Event Review Meetings for each TV&V event.

8.8 Release and Deployment Plan

- [SOW-470] The RDP shall document the Contractor's approach to all deployment and activation tasks, and describe (key) personnel involved and how it intends to meet the deployment and activation requirements of the Contract.
- [SOW-471] The RDP shall detail the overall schedule of deployment and activation activities, including required off-site and on-site preparations, baseline installation and configuration activities, data migration activities, and activation activities.
- [SOW-472] The RDP shall cover the deployment of each baseline release of each module and include an agreed process for transitioning from the current baseline to the newly installed baseline.

Version 1.1

- [SOW-473] The RDP shall include “back-out” procedures for deactivating and removing the newly installed baseline and restoring existing services if any part of the new baseline is found to be interfering with the operation of other Purchaser capabilities.
- [SOW-474] The RDP shall include activation test procedures and test cases that verify that the newly baseline has been installed and configured correctly and is fully functional, including the interfaces to/with external capabilities and services.

8.9 Training

8.9.1 Training Plan

- [SOW-475] The Contractor’s Training Plan shall describe in a coherent way how training will be developed, delivered, and maintained throughout the life of the capability.
- [SOW-476] As a minimum, the Training Plan shall cover the following:
- (1) Summary of the Training Program scope (product, user types, baselines and the contractual scope);
 - (2) Training Organization;
 - (3) Training Methodology and Planning:
 - (a) Analysis
 - (b) Design
 - (c) Development
 - (d) Conduct
 - (e) Evaluation
 - (4) Approach to TNA;
 - (5) Training delivery Student pre-requisites for each role:
 - (a) Training courses
 - (b) Training schedule (in line with PMS)
 - (c) Training facilities
 - (6) Training courses development:
 - (a) Training materials
 - (b) Updating Training Materials
 - (7) Course quality assessment and evaluation.
- [SOW-477] The Training Plan shall describe the training documentation for each course, including but not limited to the course plans, time schedules, and instructors in addition to CCD III.
- [SOW-478] The Training Plan shall describe the quality management process for training.
- [SOW-479] The Training Plan shall propose a training schedule, in relation to the overall Contract schedule.
- [SOW-480] The Contractor shall recommend in this plan the delivery types of training (i.e. face-to-face, live online, self-paced online, hybrid or blended learning) and the rationale for those recommendations for each type of training (User, Administrator, train the trainer, etc.).
- [SOW-481] The Training Plan shall describe the process for student assessment and Training Evaluation.

8.9.2 Definitions

8.9.2.1 Training Delivery Types

- [181] Face-to-face learning: Students and instructor are physically present in the same training facilities at the same time (synchronously).
- [182] Live online learning: Students and instructor are in different geographical locations, and they connect to the same digital training environment at the same time (synchronously). Live online was previously known as Remote Delivery.
- [183] Self-paced online learning: Learning activity that is not led by an instructor where students access online learning materials individually, at a time of their own choosing, (asynchronously) and from any geographical location. They spend as much time on the training activity as they choose or is required. Self-paced online learning can range from full modules of several hours of training time (eLearning) to 'micro-learning' that only covers a few minutes of focused instruction or performance support.
- [184] Hybrid learning: The instructor is physically present in one of the training facilities, together with a number of students. In addition, there are students in other geographical locations who connect virtually to the same physical classroom, at the same time (synchronously).
- [185] Blended learning: Multiple delivery types are used within the bounds of achieving the same course objectives, most commonly using self-paced online as a precursor to live online, Mobile Training Team (MTT), or face-to-face.

8.9.2.2 Training Materials definitions

- [186] Training Syllabus: Training Syllabus consists of the following elements:
- Course title;
 - Course description;
 - Learning objectives, as identified in the TNA;
 - Instructional methodologies to be employed in the delivery of the course;
 - Total number of instructional hours;
 - In-class assignments or laboratories;
 - Evaluation tools; and
 - Performance standards.
- [187] Student Manuals: Student Manuals are reference handbooks to be used and retained by the students. The Student Manual describes the concepts, functions, and features presented in the course, including links or references to the relevant documentation included in the system.
- [188] Handouts: Handouts are additional aids that can supplement the student manuals when covering areas identified as difficult and/or particularly important. Handouts cover alternative approaches and provide realistic examples of task execution.
- [189] Instructor Guides: Instructor guides are the procedures and specific instructions for use by the instructors during the planning, preparation, execution as well as close out of specific training activities. The Instructor Guide is best structured as a series of outline lessons, providing key points for the instructor to stress, some sample questions to ask, appropriate times to inject student progress tests and practical exercises, other instructional tips, and any activity aiding student learning of the related training objective.

- [190] Master Lesson Plans: Master lesson plans are generally used to provide detailed guidance and the required supporting materials (e.g., electronic presentations) in order to minimize the preparation time for the instructor cadre.
- [191] Training Presentations: Training presentations reflect the Course Lesson Plan and include all of slides for delivery of the course content.

8.9.2.3 Additional terms and definitions

- [192] eLearning: Self-paced online learning, covering a complete or partial course.
- [193] Micro-learning: Self-paced online learning that focuses on one or two learning objectives, and usually covers a few minutes of focused instruction or performance support.
- [194] Online tutorial: Online manuals or online help e.g. in pdf format. These are systems related documents and are not part of the training.
- [195] TNA: a series of activities within the Global Programming – Development Methodology which results with a set of Education and Training (E&T) solutions that satisfy a Requirements Package. This defines the objectives required to eliminate gaps and the necessary plans which result in the delivery of E&T solutions.
- [196] Course Control Documents (CCDs): A set of documents used to define a NATO E&IT solution based on an E&IT requirement. Alternative formats include: Programme of Instruction, Qualification Standard, Training Plan, Curriculum and Syllabus.
- [197] NCI Agency Learning Management System (LMS): The LMS managed by NCI Academy. LMS is used to host the SCORM compliant eLearning content.

8.10 Configuration Management Plan

- [SOW-482] The CMP shall comply with the requirements and the format defined within [ACMP-2009-SRD-41].
- [SOW-483] The Contractor shall analyse the Purchaser's configuration management procedures and tools, and incorporate those in the software configuration management process.
- [SOW-484] The CMP shall define software configuration management process of the functional and physical characteristics of the configuration items, including interfaces and configuration identification documentation.
- [SOW-485] In preparing the CMP the Contractor shall:
- (1) Ensure that all required elements of configuration management are documented in such a manner as to provide a comprehensive configuration management program;
 - (2) Identify the means by which continuity of effort and understanding is achieved between the Contractor (prime) and its Subcontractors, if any, and between the project manager and the configuration manager, and internally within the organization, for the allocated configuration items, integrating, interfacing or otherwise related configuration items, supplier organizations, test and evaluation activities, and managers; and
 - (3) Establish his internal configuration management requirements for the Contract.
- [SOW-486] The CMP shall identify explicitly any format and content requirements in [ACMP-2009-SRD-41] deemed by the Contractor to be not applicable for the Contract.

The relevant sections shall be marked not applicable (N/A) followed by a short justification why the requirement is considered not applicable. Note: Requirements in [ACMP-2009-SRD-41] that are readily expected to be declared N/A for a software acquisition are found in:

- (1) Paragraph 3.2.1 - Hardware Configuration Item Identification;
- (2) Paragraph 3.7 - Drawing library; and
- (3) Paragraph 5.1.3 - Interface Control Working Group.

- [SOW-487] The CMP shall define the configuration management organization including the configuration manager role and any other supporting configuration management personnel.
- [SOW-488] The CMP shall be tailored, specifically addressing how configuration management shall be performed using an incremental delivery approach and iterative development process and integrate with NSF.
- [SOW-489] The CMP shall identify the alternative means and tools proposed by the Purchaser beyond the Azure DevOps tools furnished by the NSF in order to meet the configuration management requirements.
- [SOW-490] The CMP shall identify and define all top-level configuration items to be delivered under this Contract and where these top-level configuration items are traced to deliverables as defined in the product breakdown structure and SSS.
- [SOW-491] As per requirements specified in Section 3.9, the CPM shall include the definitions of:
- (1) The types of configuration baselines; and
 - (2) Configuration Status Accounting (CSA), Functional and Physical Configuration Audits, by specifying the inputs, outputs, timing and the resources.
- [SOW-492] The CMP shall define the template for engineering change proposals (ECP), which as a minimum shall include the elements specified by the template in Annex D.1.
- [SOW-493] The CMP shall define the template for RFD /RFW, which as a minimum shall include the elements specified by the template in Annex D.2.

8.11 Quality

8.11.1 Definitions

- [198] Unless otherwise specified in the SOW, [STANAG-4107] and underpinning AQAPs, [ISO-9000:2015], PRINCE2 and ITIL definitions shall apply.
- [199] QA is a process and set of procedures intended to ensure that a product or service, during its definition, design, development, test and deployment phases will meet specified requirements.
- [200] Quality Control (QC) is a process and set of procedures intended to ensure that a manufactured product or performed service adheres to a defined set of quality criteria and meets the requirements of the customer.
- [201] Under the Contract, the terms "QA process" will also include Quality Control process.
- [202] A "project document" is a document developed and maintained to help in the management of the project. Typically the plans (amongst which, the Quality Assurance Plan (QAP)) are project documents.

- [203] The term "NATO Quality Assurance Representative" (NQAR) shall apply to any of the Purchaser appointed Quality Assurance Representative.
- [204] The term "Contractor Quality Assurance Representative" (CQAR) shall apply to any of the Contractor appointed Quality Assurance Representative.

8.11.2 Roles and responsibilities

- [205] During the entire Contract implementation, the NQAR(s) assures the Contractor's and Sub-Contractor's compliance with all Quality related contractual requirements. The Purchaser, through its NQAR(s), is the authority concerning all Quality related matters.
- [SOW-494] The Contractor shall be responsible for assurance and control of quality for all deliverables and associated Contractual products, processes and services through the life-cycle of the Contract.
- [SOW-495] The CQAR shall be accountable for the provision of the QA Plan and the compliance to the defined QA process.
- [SOW-496] The CQAR(s) shall define the major quality checkpoints that will be implemented while executing the project and the quality process to be used at each checkpoint.
- [SOW-497] The CQAR(s) shall be responsible for assessing that the Contractual requirements have been complied with, prior proposing the Contractual services and products.
- [SOW-498] The CQAR shall report to a distinct manager within the Contractor's organisation at a level equivalent to or higher than the Project Manager.
- [SOW-499] The CQAR shall be the point of contact for interface with and resolution of quality matters raised by the NCI Agency or its delegated NQAR.
- [SOW-500] The Contractor shall support any NCI Agency or its delegated NQAR activity focused on monitoring Contractor activities at Contractor's facilities or other sites related to the development, testing and implementation. In particular, the Contractor shall:
- (1) Make himself/herself available to answer questions and provide information related to the project;
 - (2) Allow the Purchaser representatives to inspect and monitor testing activities, and management, technical and quality processes applicable to the project; and
 - (3) Transfer to the Purchaser representatives all information deemed necessary to perform the QA activities, on his/her own initiative or on request by the Purchaser representative.
- [SOW-501] The Contractor shall ensure that CQAR(s) have the required qualifications, knowledge, skills, ability, practical experience and training for performing their tasks.
- [SOW-502] The CQAR(s) shall have sufficient responsibility, resources, authority and independence to review and evaluate activities, identify problems and initiate or recommend appropriate corrective actions.
- [SOW-503] The CQAR(s) shall participate in the early planning and development stages to ensure that all quality related requirements are specified in plans, standards, specifications and documentation.

Version 1.1

- [SOW-504] After establishment of attributes, controls and procedures, the CQAR(s) shall ensure that all elements of the QA Process are properly executed, including inspections, tests, analysis, reviews and audits.
- [SOW-505] The Contractor, through its CQAR(s), shall be responsible for product quality control and for submitting to Purchaser acceptance products, supplies and services which conform to contractual requirements only.
- [SOW-506] The Contractor shall maintain and, when required, deliver objective evidence of this conformance.
- [SOW-507] The Contractor shall give written notice to the NQAR(s) at least four weeks in advance that the services and/or products are being presented for review, testing, verification, validation and acceptance.
- [SOW-508] Testing shall only be permitted by using test procedures and plans approved by the Purchaser.

8.11.3 Quality Management System

- [SOW-509] The Contractor shall establish, document and maintain a Quality Management System (QMS) in accordance with the requirements of [ISO-9001:2015].
- [SOW-510] The Contractor's and Sub-Contractor's QMS relevant to performance under the Contract shall be subject to continuous review and surveillance by the cognizant NQAR(s).
- [SOW-511] The Contractor shall include in orders placed with its Sub-Contractor(s) and Supplier(s), the QMS requirements necessary to ensure the supplies and services covered by the Sub-Contract(s) and/or Purchase Orders conform to the requirements of the prime Contract.
- [SOW-512] The Contractor shall specify in each order placed with its Sub-Contractor(s) and Supplier(s), the Purchaser's and its NQAR(s) rights of access to all premises where contractual work is performed, in order to carry out audits, inspections, tests and other functions as may be required by the NQAR(s).
- [SOW-513] If sub-contracted quality resources are used, the Contractor's Quality Management process shall describe the controls and processes in place for monitoring the Sub-Contractor's work against agreed timelines and levels of quality.

8.11.4 Quality Assurance process

- [SOW-514] The Contractor's QA process shall ensure that procedures are developed, implemented and maintained to adequately control the development, design, production, testing and configuration of all deliverables.
- [SOW-515] The requirements for these processes shall be derived from the Contract, the QMS, the applicable AQAPs and referenced best practices, in that sequence of priority.
- [SOW-516] The Contractor shall perform verification and validation of the Contractual deliverables before proposing them for the Purchaser review and approval.
- [SOW-517] The Contractor's QA process shall be described in the QA Plan as outlined below. The process is subject to approval by the Purchaser.

Version 1.1

- [SOW-518] The Contractor shall demonstrate, with the QA process, that the processes set up for design, develop, test, produce and maintain the product will assure the product will meet all the requirements.
- [SOW-519] The Contractor shall assure that all the test and procedures used to demonstrate the requirements will be monitored and controlled under the QA process.
- [SOW-520] On request, the Contractor shall provide the Purchaser with a copy of any Sub-Contracts or orders for products related to the Contract.
- [SOW-521] The Contractor shall periodically review the QA process and audit it for adequacy, compliance and effectiveness, and report any changes to the Purchaser NQAR(s).
- [SOW-522] The Contractor shall ensure that all contractual requirements, including NATO supplements, are included in internal audits.

8.11.5 The Quality Assurance Plan

- [SOW-523] The Contractor shall provide a QAP for review to the Purchaser in accordance with the requirements identified in the [AQAP-2105] (Reference to the [STANAG-4107]) and the SOW requirements.
 - [SOW-524] The Contractor's QAP shall be compatible and consistent with all other plans, specifications, documents and schedules, which are utilised under the Contract.
 - [SOW-525] All Contractor procedures referenced in the QAP shall either be submitted with the plan, or described in the plan and made available for review by the Purchaser upon demand.
 - [SOW-526] The QAP and all related QA procedures, and all their versions/revisions, shall be subject to NQAR(s) approval based on an agreed checklist.
- [206] The acceptance of the QAP by the Purchaser only means that the Purchaser agrees to the Contractor's approach in meeting the requirements. This acceptance in no way relieves the Contractor from its responsibilities to meet the requirements stated in this Contract.
- [SOW-527] The Contractor shall review his QA programme periodically and audit it for adequacy, compliance and effectiveness.
 - [SOW-528] The Contractor shall ensure that all contractual requirements, including NATO supplements, are included in internal audits.
 - [SOW-529] The Contractor shall inform the NQAR(s) of deficiencies identified during internal audit unless otherwise agreed between the NQAR and/or the Purchaser and the Contractor.
 - [SOW-530] The Contractor shall include a risk management section within the QAP including the risks connected to the sub-Contractors of the Contractor.
 - [SOW-531] The Contractor shall make its quality records, and those of its Sub-Contractors, available for evaluation by the NQAR(s) throughout the duration of the Contract.
 - [SOW-532] The Contractor shall update the document, as required, from the delivery date of the initial QAP through Final Operating Capability (FOC), under Configuration control. The Contractor shall provide a copy of each new version of the QAP to the Purchaser for review and approval.

8.11.6 Quality for Project Documents

- [SOW-533] A formal change management process shall be applied to all project documents, including documents naming conventions as defined by the Purchaser and coordinated with the Contractor.
- [SOW-534] Project documents shall be configuration controlled. Each version of a project document is subject to Purchaser approval (unless otherwise specified).
- [SOW-535] The Contractor shall ensure that any change related to the project documents are controlled, with the identity, approval status, version and date of issue are clearly identified.
- [SOW-536] Project documents file names shall not contain any variable part, like version number, reviewer initials or maturity status. Version numbers and maturity status shall be marked in the document content and/or attributes.

8.11.7 Risks

- [SOW-537] The Contractor and Sub-Contractor shall provide objective evidence, that risks are considered during planning, including but not limited to Risk Identification, Risk analysis, Risk Control and Risk Mitigation.
- [SOW-538] The Contractor shall start planning with risk identification during Contract review and updated thereafter in a timely manner. The Purchaser reserve the right to reject Risk Plans and their revisions.

8.11.8 Defects

- [SOW-539] The Contractor shall establish and implement a quality/product assurance Issue Tracking System (ITS) to ensure prompt tracking, documentation and correction of problems and deficiencies, during the lifecycle of the Contract.
- [SOW-540] The ITS shall implement a lifecycle (status, responsibilities, relationship to affected Contract requirements, if applicable, and due dates) for each recorded defect.
- [SOW-541] If the Contractor becomes aware at any time before acceptance by the Purchaser that a defect exists in any supplies, the Contractor shall log it in the ITS, coordinate with the Purchaser and promptly correct it.
- [SOW-542] The Contractor shall demonstrate that all deficiencies are solved / closed before product acceptance.
- [SOW-543] When the Contractor establishes that a Sub-Contractor or a Purchaser Furnished Equipment (PFE) product is unsuitable for its intended use, it shall immediately report to and coordinate with the Purchaser the remedial actions to be taken.
- [SOW-544] The Contractor shall ensure that only acceptable products, intended for delivery, are released. The Purchaser reserve the right to reject non-conforming products.

8.11.9 Support Tools

- [SOW-545] All tools used by the Contractor in the context of project execution shall be available for demonstration to the Purchaser, upon Purchaser request.
- [SOW-546] The Contractor shall also make available to the Purchaser for review upon request, associated records and documentation, including but not limited to,

control, authorization for use, calibration, validation, qualification, as applicable, per respective Contract requirement.

8.11.10 Certificates of Conformity

- [207] A Certificate of Conformity (CoC) is a document, signed by the Supplier / Vendor of a product, stating that the product conforms to contractual requirements and regulations. A CoC template is available in [AQAP-2070] (Reference to the [STANAG-4107]).
- [208] The CoC, provides evidence that the items produced or shipped comply with test procedures and quality specifications prescribed by the customer.
- [209] The Contractor is accountable for the conformance to requirements, of products provided to the Purchaser.
- [SOW-547] The Contractor shall deliver all the CoC's for COTS products (software, including firmware and hardware) released by the COTS Vendors.
- [SOW-548] The CoCs delivered by the Contractor shall be part of the acceptance data package of the product.
- [SOW-549] The Contractor shall provide a CoC at release of product to the Purchaser unless otherwise instructed.

8.12 Integrated Product Support Plan

- [SOW-550] The integrated product support plan (IPSP) shall specify how integrated product support will be designed, managed, procured and delivered, and how it intends to meet the integrated product support requirements of the Contract.
- [SOW-551] The IPSP shall in general comply with the requirements and the format defined within [AI-16.31.03].
- [SOW-552] The IPSP shall to meet the following requirements. Any requirements deemed by the Contractor to be not applicable for the Contract shall be marked not applicable (N/A) followed by a short justification why the requirement is deemed not applicable.
- (1) **Introduction** - The IPSP shall provide general information on the purpose and scope of the IPSP and top-level supportability issues such as software description, management organization, milestone schedule, and indicate any applicable documents.
 - (2) **Supportability** - The IPSP shall describe the strategies for attaining IPS objectives within the context of the Contract. A description of the operational requirements and supportability objectives will provide essential information to ensure that supportability is thoroughly planned.
 - (3) **Operational and supportability requirements** - The IPSP shall briefly describe the mission scenarios and requirements, operational environment, security requirements, transportability requirements and employment.
 - (4) **Acquisition strategy** - The IPSP shall describe the anticipated third-party software and components (COTS and FOSS) acquisition approach.
 - (5) **Personnel requirements** - The IPSP shall describe actions to limit the requirements for a high degree of skill to support and maintain the software.
 - (6) **IPS element plans** - Provide details on plans for the IPS element (i.e. DEMETER with its documentation and training materiel).
 - (a) Maintenance planning

- (i) Describe the maintenance concept for the software including all levels of maintenance. Identify trade-offs to be performed and maintenance considerations peculiar to the software.
 - (ii) Identify maintenance tasks required to sustain the end item at a defined level of readiness, include all critical and high driver tasks.
 - (iii) Describe maintenance environment.
 - Describe the maintenance environment, limitations, constraints, and requirements projected for the deployment timeframes.
 - State the nature and extent of maintenance to be performed by each level of maintenance.
 - Identify the organizational and logistic support structure that will be responsible for providing direct and general supply support and maintenance support.
- (b) Personnel
- (i) Describe the operation and maintenance personnel requirements.
 - (ii) Describe skill requirements for personnel necessary to operate, maintain, and support the end item. Consider the following:
 - Present skills that may be used with little or no retraining.
 - New skills required (skill evaluation and justification).
 - Assigned duties.
 - Task, skill, behaviour, and user interface analyses.
 - (iii) Identify safety and human factors constraints to help minimize problems with the user interface during operation, maintenance, and transport.
- (c) Training
- (i) Describe how training requirements will be met and who is responsible for meeting those requirements in reference to the Training Plan (Section 4.3.2.1).
 - (ii) Describe training requirements and plans unique to operation and maintenance of software.
- (d) Packaging, handling, storage, and transportation (PHS&T)
- (i) Describe requirements, management responsibilities, and procedures used to ensure that PHS&T requirements are identified and met in a timely manner.
 - (ii) Describe anticipated PHS&T modes and constraints.
 - (iii) Describe PHS&T assets required and those expected to be available/in-place.
- (e) Supportability in fielding and operational life
- (i) Initial fielding - Briefly describe planning for initial fielding and achieving initial operational capability. Summarize the procedure and schedule for preparation of all materiel fielding documentation. Provide information on how fielding will be implemented.
 - (ii) Transition - If applicable, provide a description of how and when the Integrated product support will be transferred from the Contractor to the Purchaser. Show how components usage, skills, training, procedures, technical data, and so forth will be obtained and used. Provide sufficient detail to assure that all

necessary data is provided in time to adequately provision, train, and maintain the software after transition.

8.12.1 In-Service Support Plan

- [SOW-553] The In-Service Support Plan (ISSP) is an annex to the IPSP and shall cover the following as a minimum:
- (1) The Contractor's support organization, roles, responsibilities, processes and procedures (from the first baseline release till FSA, during warranty and during the optional maintenance and support post the warranty period);
 - (2) Description of the capability of interest in scope of integrated support;
 - (3) Description of the integrated support concept, including the maintenance concept, warranty concept, support concept, service management & control concept, including but not limited to the incident, problem management, release and deployment management;
 - (4) Description of the parties involved, their responsibilities for the various levels of support (with indication of start and end dates), interfaces, response times and points of contact;
 - (5) Description and allocation of operation, service management & control and corrective, preventive, adaptive and perfective maintenance tasks required to operate and maintain the capability; and
 - (6) Procedures to follow in case of failures; Contractor response times for analyses and resolution.

8.13 Deliverable Requirements Traceability Matrix

- [SOW-554] The DRTM shall be established to track the status of deliverables and contractual requirements throughout the contract lifecycle and prove that requirements have been fulfilled, verified and validated.
- [SOW-555] The DRTM shall allow tracing of contractual requirements, to sprints, to design artefacts, to product backlog items, to test cases, to deliverables, and back.
- [SOW-556] The DRTM shall for each contractual requirement include the agreed WP allocation.
- [SOW-557] The DRTM shall include a Verification Cross Reference Matrix (VCRM) identifying the method(s) for verifying the requirements and trace requirement with test cases. The verification methods are defined in Table 8.1 - Verification Methods.
- [SOW-558] The DRTM shall track the verification and validation status (e.g. Verified, Not Verified...) of all requirements.
- [SOW-559] The DRTM shall track the verification and validation results of all requirements against test cases and test/verification/validation execution, with identification of the deliverable and baseline release, and include references to objective evidence supporting the assessment of each entry.
- [SOW-560] The DRTM shall for each requirement that has been invoiced by the Contractor, record the Contractor's invoice number and the invoice date.
- [SOW-561] The DRTM shall be delivered as an Excel spreadsheet where the information is organized and can be pivoted, filtered and sorted by column values as well as in the tooling provided by the Purchaser such that it is updated immediately as soon as changes are made.

[SOW-562] The DRTM Excel spreadsheet shall include a view that is importable into the DOORS application.

Table 8.1 - Verification Methods

Method	Description
Analysis	The processing of accumulated data obtained from other qualification methods. Examples are reduction, interpretation, or extrapolation of test results; analysing the performance of design by running simulations. This method can be used if a test scenario cannot be created at the test environment.
Test	The operation of the software element or component, using instrumentation or other special test equipment to collect data for later analysis. Controlled condition, configurations, and inputs are used in order to observe the response. Results are quantified and analysed. This method can be used where user interaction is involved and when computations with input data are necessary.
Demonstration	The operation of the software element or component, that relies on observable functional operation not requiring the use of instrumentation, special test equipment, or subsequent analysis. This method is used to prove a capability meets a requirement.
Inspection	The visual examination of software code, documentation, etc. This method can be used where testing is not possible (e.g. the maximum number of items used as a limitation inside the code).
Special Case	Any special qualification methods for the software element, such as special tools, techniques, procedures, facilities, and acceptance limits.

8.14 Interface Control Document

- [SOW-563] The ICD shall document the service interfaces provisioned by the baseline (existing, updated or new), as well as the external service interfaces that the capabilities interact with. Service interfaces also include file-based exchange services.
- [SOW-564] The ICD includes machine-readable interface files, in a standardized format/representation, i.e. OpenAPI for describing RESTful services, etc.
- [SOW-565] The ICD shall include service specifications to document the services so that software developers implementing functionality that consumes the service will have sufficient information to build functionality that can successfully interact with the service.
- [SOW-566] The service specifications shall, when applicable, include documentation of, or reference to, a conceptual information model.
- [SOW-567] The service specifications shall include documentation of the business logic and business rules implemented by the service.
- [SOW-568] The service specification shall include documentation on the service non-functional/ performance characteristics (e.g. response times).

8.15 Installation and Configuration Manual

[SOW-569] The installation and configuration manual shall describe the procedures to install, configure and activate the applications and shall cover the following topics at minimum:

- (1) General introduction and description of the capabilities and of functional components and interfaces, with appropriate drawings;
- (2) Prerequisites:
 - (a) Platform requirements, including storage space;
 - (b) Access rights to perform the installation;
 - (c) Required interfaces to external services; and
 - (d) Accounts and settings, i.e. ports, to operate and to maintain.
- (3) Configuration of the platform and third-party software and components required to operate the capabilities;
- (4) Configuration file information (location, content, available settings and purpose);
- (5) Recovery procedures;
- (6) Migration and update procedures as far as these are not covered by the automatic installation routines;
- (7) Installation and configuration tasks, detailed step by step with screenshots of the feedback, displayed after each action;
- (8) Backup, restore and maintenance procedures to be enabled;
- (9) Activation checklist to verify correct installation and configuration; and
- (10) Troubleshoot information and techniques to solve installation and configuration problems.

[SOW-570] For third-party products, maximum advantage shall be taken of the vendor-supplied third-party software and component documentation artefacts, however specific settings and procedures pertaining to the baseline delivered shall be covered by this manual, and in case there is no vendor-supplied documentation, this manual shall include all possible information needed to configure, manage and maintain the third-party product.

8.16 Maintenance and Administration Manual

[SOW-571] The maintenance and administration manual shall describe the procedures to perform the maintenance tasks as defined in the maintenance concept, and shall cover the following topics as a minimum:

- (1) General introduction and description of the capabilities and of functional components and interfaces, with appropriate drawings;
- (2) A full product breakdown of configuration items, including third-party software and components;
- (3) Scheduled (preventive, adaptive and perfective) and unscheduled (corrective) maintenance procedures defining step-by-step how to perform the first, second and third level maintenance tasks and service management and control (SM&C) tasks for the configuration items;
- (4) Usage of third-party applications or tools (if any) needed to configure, manage and maintain the capabilities;
- (5) Configuration, use and the locations of the log files;
- (6) Disaster recovery procedures, including backup and restore procedures;
- (7) Database maintenance plan, including executable scripts; and
- (8) Troubleshoot information and techniques to check for and solve a full range of (potential) problems or to enable workarounds.

- [SOW-572] Each procedure described within the maintenance and administration manual shall incorporate the results of the operations and maintenance task analysis (OMTA) and include the following topics as a minimum:
- (1) The support level to be assigned;
 - (2) Location/facility involved (if the operation is performed remotely, it has to be specified);
 - (3) Task duration and frequency, reusing Mean-Time Between Failure (MTBF) and Mean-Time to Repair (MTTR) data available (if applicable);
 - (4) Personnel skills required;
 - (5) Labour required;
 - (6) Tools required (if any); and
 - (7) The steps to perform the procedure.
- [SOW-573] The task described within the maintenance and administration manual shall make reference to the different Purchaser operations and maintenance roles and identify where the interfacing between Contractor and Purchaser takes place.
- [SOW-574] For third-party products, maximum advantage shall be taken of the vendor-supplied third-party software and component documentation artefacts, however specific settings and procedures pertaining to the baseline delivered shall be covered by this manual, and in case there is no vendor-supplied documentation, this manual shall include all possible information needed to configure, manage and maintain the third-party product.

8.17 Release Notes

- [SOW-575] The release notes shall summarise the changes and the new features provided with the release and shall cover the following at minimum:
- (1) Identification of the release, its media, and its associated artefacts;
 - (2) Overview;
 - (3) Intended audience;
 - (4) What's changed in this release:
 - (a) List of new features (with reference work item);
 - (b) List of enhancements (with reference work item);
 - (c) List of fixes (with reference to work item);
 - (d) List of updates to used third-party components which impact functionality; and
 - (e) List of other changes (with reference work item).
 - (5) Installation:
 - (a) Summary of new installation procedures; and
 - (b) Summary of upgrade installation procedures.
 - (6) Security caveats; and
 - (7) Known issues and workarounds.

9 References

[210] These reference documents are providing contextual information that is relevant to this project. They shall be used by the Contractor to support his activity.

Table 9.1 - References

[ACMP-2009-SRD-41]	Examples of Configuration Management Plan Requirements, Ed.A V1, Mar 2017
[ACMP-2100]	The Core Set of Configuration Management Contractual Requirements, Ed.A V.2, Mar 2017
[AD-070-001]	ACO Directive 070-001 Allied Command Operations Security Directive, Dec 2021
[AI-16.31.03]	NCIA - Agency Instruction 16.31.03, Requirements for the preparation of IPSP, Sep 2022
[ALP-10]	NATO Guidance on Integrated Logistics Support for Multinational Armament Programs, Ed.C V1, 2017
[AQAP-2070]	NATO Mutual Government Quality Assurance (GQA) Process
[AQAP-2105]	NATO Requirements for Quality Plans, Ed.C V1, Jan 2019
[AQAP-2110]	NATO Quality Assurance Requirements for Design, Development and Production, Ed.D V1, Jun 2016
[AQAP-2210]	NATO Supplementary SQA Requirements to AQAP-2110 or AQAP-2310, Ed.A V2, Sep 2015
[AQAP 4107]	Mutual Acceptance of Government Quality Assurance and Usage of the Allied Quality Assurance Publications, Edition A, Version 2, Nov 2018
[ASD-AIA-SX000i]	International Specification for Integrated Product Support (IPS), Issue No.3.0, Apr 2021
[ASD-S3000L]	International Procedure Specification for Logistic Support Analysis (LSA), Issue No.2.0, Apr 2021
[ASOP-07.01.25]	NCI Academy Standard Operating Procedure - Grading and Assessment, May 2020
[ISO-9000:2015]	Quality management systems – Fundamentals and vocabulary
[ISO/IEC/IEEE-29119]	International Standard for Software Testing, 2022
[ISO/IEC/IEEE-29148]	International Standard for Systems and software engineering – Life cycle processes – Requirements engineering, 2011
[NATO-Bi-SC-DIR-075-007]	NATO Bi-SC Education and Individual Training Directive (E&ITD) 075-007, Sep 2015
[NCIA-AD-06.00.16]	NCIA - Agency Directive 06.00.16, Configuration Management, Feb 2020
[NCIA-AI-23.02]	NCIA - Agency Instruction 23.02, Deployment Management Planning, Oct 2019
[NCIA-AI-TECH-06.03.01]	NCIA - Agency Instruction 06.03.01, Identification of Software Assets, Jun 2016
[NCIA-SOP-06.03.05]	NCIA – Agency Standard Operating Procedure 06.03.05, Software Patch Management, Oct 2020
[NCIA-SOP-23.01]	NCIA – Agency Standard Operating Procedure 23.01, Enterprise IT Change Management, Mar 2020
[R-ICD-NIRIS]	Track Store Open API interface – original version to be provided

[R-ICD-FasInterop]	TOPFAS/LOGFAS ADL-FPH ORBAT Scemas version 2022.7
[R-ICD-Intel-FS-DM]	CO-115718-I2BE, INTEL-FS Spiral 2 NAF 4.0 L7 Information Model Data Dictionary - All Entities, Nov 8, 2022 4:58 PM
[R-ICD-TOPFAS-DM]	TOPFAS Increment-2 Software Design Specification Annex 1: Database Model (Desktop), 8/5/2020
[R-ICD-TOPFAS-Excel]	Empty Plan Collecting Sheet Months All Collectors, Dec 2022
[R-ICD-TOPFAS-ICD]	TOPFAS Increment-2 Software Design Specification Annex 3: Interface Control Document (Desktop), 15/09/2020
[SOA-IdM]	SOA-IDM Service Oriented Architecture (SOA) and Identity Management (IdM) Platform - Wave 1 <ul style="list-style-type: none"> - Interface Control Document (ICD) V15.0, Jun 2021 - System Design Specification (SDS) V9.3, May 2021
[STANAG-4107]	Mutual Acceptance of Government Quality Assurance and Usage of the Allied Quality Assurance Publications
[STANAG-4427]	Edition 3 - Configuration Management in System Life Cycle Management
[XSD-LC2IS]	Interface Control Document (ICD) for LC2IS Inc 2 Contract no CO-14463-LC2IS F0057 62794795 558 Rev M <ul style="list-style-type: none"> - Annex E LC2IS Inc 2 XML Schema Definition

[211] All documents are unclassified or NATO Unclassified, unless indicated otherwise.

10 Abbreviations and Acronyms

Abbreviation	Description
ABL	Allocated Baseline
ACMP	Allied Configuration Management Plan
AD	Agency Directive
API	Application Programming Interface
AQAP	Allied Quality Assurance Publication
BM	Battlespace Management
CA	Contract Award
CBT	Computer Based Training
CCB	Configuration Control Board
CCD	Course Control Document
CIAV	Coalition Interoperability Assurance and Validation
CIS	Communication and Information System
CLIN	Contract Line Item Number
CMDB	Configuration Management Database
CMP	Configuration Management Plan
COA	Course of Action
CoC	Certificate of Conformity
CONOPS	Concept of operations
COP	Common Operational Picture
COTS	Commercial-Off-The-Shelf
CPM	Contractor Project Manager
CQAR	Contractor Quality Assurance Representative
CRQ	change request
CSA	Configuration Status Accounting
CWIX	Coalition Warrior Interoperability Exercise
DDP	Delivery Duty Paid
DIF	Difficulty, Importance and Frequency
DMT	Data migration testing
DRTM	Deliverable Requirements Traceability Matrix
E&T	Education and Training
ECP	engineering change proposals
EDC	Effective Date of Contract
ELO	Enabling/Learning Objectives
FAQ	Frequently Asked Questions
FBL	Functional Baseline
FCA	Functional Configuration Audit
FFT	Friendly Force Track
FLC2	Future Land Command and Control
FMN	Federated Mission Networking
FOC	Final Operating Capability
FOSS	Free and open-source software
FSA	Final System Acceptance
FTE	Full-time Equivalent
GQA	Government Quality Assurance

Abbreviation	Description
HQ	Headquarters
ICD	Interface Control Document
IDL	inventory and distribution list
ILS	Integrated Logistics Support
IPS	Integrated Product Support
IPSP	Integrated Product Support Plan
ISO	International Organization for Standardization
ISSP	in-service support plan
IT	Information Technology
ITA	Italy
ITB	integration testbed
ITIL	Information Technology Infrastructure Library
ITS	Issue Tracking System
ITSM	IT Service Management
IVVQ	Independent Verification Validation and Quality
JFC	Joint Force Command
LATO	limited authorization to operate
LMS	Learning Management System
LOE	Level-of-effort
LSA	Logistic Support Analysis
LTS	long-term support
MTBF	Mean-Time Between Failure
MTP	Master test plan
MTT	Mobile Training Team
MTTR	Mean-Time to Repair
NATO	North Atlantic Treaty Organisation
NCI Agency	NATO Communications and Information Agency
NCIA	NATO Communications and Information Agency
NCS	NATO Command Structure
NFS	NATO Force Structure
NLD	Netherlands
NOR	Norway
NQAR	NATO Quality Assurance Representative
NR	NATO RESTRICTED
NS	NATO SECRET
NSF	NATO Software Factory
NSIP	NATO Security Investment Programme
NU	NATO UNCLASSIFIED
NVG	NATO Vector Graphics
OCR	Object Character Recognition
OEM	Original Equipment Manufacturer
OMTA	operations and maintenance task analysis
OSS	Open-Source Stack
PBL	Product Baseline
PBS	Product breakdown structure
PCA	Physical Configuration Audit

Abbreviation	Description
PCR	Project Checkpoint Review
PFE	Purchaser Furnished Equipment
PHR	Project Highlight Report
PHS&T	Packaging, handling, storage, and transportation
PM	Project manager
PMP	Project Management Plan
PMS	Project Master Schedule
PO	Performance Objectives
POL	Poland
PRINCE2	PRojects IN Controlled Environments (2nd edition)
PSA	Provisional System Acceptance
PSA ^{WP1}	PSA for WP1
PSA ^{WP2}	PSA for WP2
PSA ^{WP3}	PSA for WP3
QA	Quality Assurance
QAP	Quality Assurance Plan
QC	Quality Control
QMS	Quality Management System
RACI	responsible, accountable, consulted and informed
RAID	Risks, Assumptions, Issues, Decisions
RDP	Release and Deployment Plan
RFD	Request for Deviation
RFW	Request for Waiver
RGP	Recognized Ground Picture
SA	Situational Awareness
SiAT	Site Acceptance Test
SCORM	Sharable Content Object Reference Model
SIT	System integration test
SM&C	service management and control
SOA-IDM	Service Oriented Architecture (SOA) and Identity Management (IdM)
SOW	Statement of Work
SRS	Software Requirements Specification
SSS	Schedule of Supplies and Services
STANAG	Standard NATO Agreements
SW	Software
TAR	Training Analysis Review
TCER	Training Course Evaluation Report
TDR	Training Design Review
TMR	Training Material Review
TNA	Training Needs Analysis
TRA	Training Requirements Analysis
TRR	Test Readiness Review
TUR	Türkiye
TVVA	Testing, Verification, Validation and Assurance
UAT	User Acceptance Test

Abbreviation	Description
USA	United States of America
VCRM	Verification Cross Reference Matrix
WG	Working group
WP	Work Package

Annex A Software Requirements Specifications

[212] The software requirements specification (SRS) will be provided as a separate file.

Annex B Interfaces

- [213] Table 10.1 lists the interfaces to and from DEMETER that are not based on common standards.
- [214] ICD documents are included for reference in order for the Contractor to be able to assess the complexity and scope; ICD documents may be updated during contract execution.

Table 10.1 – DEMETER non-standard interfaces

Group	Information Product	System	DEMETER Role	Communication Means	Description	Reference	#
Common Operational Picture (COP)	Recognized Air Picture	NIRIS	Consumer	API	As-is API requires development	[R-ICD-NIRIS]	1
	Recognized Logistics Picture	LOGFAS	Consumer	File over HTTP	Interop.2022/07	[R-ICD-FasInterop]	2
	Recognized Intelligence Picture	INTEL-FS	Consumer	XML Web Service	Open Api Content	[R-ICD-Intel-FS-DM]	3
Plans	Order of Battle	TOPFAS/LOGFAS	Consumer	Files over HTTP	Interop.2022/07	[R-ICD-FasInterop]	4
	CONOPS	TOPFAS				[R-ICD-TOPFAS-DM] [R-ICD-TOPFAS-ICD] [R-ICD-TOPFAS-Excel]	5
	OPLAN	TOPFAS	Consumer	XML Web Service	OData (till 2027), Open API (from 2024)	[R-ICD-TOPFAS-DM] [R-ICD-TOPFAS-ICD] [R-ICD-TOPFAS-Excel]	6
Course of Action (COA)	COA	NIP/TOPFAS	Producer/Consumer	Files over HTTP	LC2IS Data Over Odata or Open API	[R-ICD-TOPFAS-DM] [R-ICD-TOPFAS-ICD] [R-ICD-TOPFAS-Excel]	7
Infrastructure	Identity	IdM	Producer/Consumer	XML Web Service	SOA-IDM	[SOA-IdM]	8
Cross Domain	Security Labelling	Mail Guard	Producer	SMTP/EMAIL PAYLOAD	Mail Guard	[R-ICD-IEGC]	9

		IEG	Producer	XML Web Service		[R-ICD-IEGC]	10
Service Management and Control	SMC	ITSM	Producer	XML Web Service	Interface to ITSM for incident development	[R-ICD-ITSM]	11
Situation and Problem	Red ORBAT	INTEL-FS	Producer/ Consumer	XML Web Service	Open API/Odata	[R-ICD-Intel-FS-DM]	12
	Red COA	INTEL-FS	Producer/ Consumer	XML Web Service	Open API/Odata	[R-ICD-Intel-FS-DM]	13
	ICP - RFI Process	INTEL-FS	Producer/ Consumer	XML Web Service	Open API/Odata	[R-ICD-Intel-FS-DM]	14

[215] Table 10.2 lists the interfaces to and from DEMETER that are expected to be part of the COTS as they are based on standards as specified.

Table 10.2 – DEMETER standard interfaces

Group	Information Product	System	DEMETER Role	Communication Means	Description
Situational Awareness (SA) / Recognized Ground Picture (RGP)	Recognized Ground Picture		Producer	XML Web Service	Part of NVG
				Files over HTTP	Part of NVG
				Informal Messaging	ADatP 3
Common Operational Picture (COP)	Recognized Maritime Picture	TRITON/ MCCIS	Consumer	XML Web Service	NVG, ADatP 3
				Informal Messaging	NVG, ADatP 3
	Recognized Air Picture	NIRIS	Consumer	TCP/IP - UDP	Link16
	Recognized Logistics Picture	LOGFAS	Consumer	XML Web Service	EVE Web Services - ESS NVG
	Battle Space Object		Producer	XML Web Service	ADatP 4733 NVG

Battlespace Management (BM)				Files over HTTP	ADatP 4733 NVG
				Military Messaging	ADatP 3
Friendly Force Track (FFT)	FFT	National Systems	Consumer	IP1 (TCP/IP Client/Server)	ADatP 34
Synch Matrix	Synchronisation Matrix	NIP	Producer	Files over HTTP	Document/Power Point
Plans	Order of Battle	National Systems	Producer/Consumer	XML Web Service	WSMP, MIM 4 IES
	CONOPS	NIP	Consumer	Files over HTTP	Portal Link
	OPLAN	NIP	Consumer	Files over HTTP	Portal Link
	Assesment		Producer	NVG/APP-11 ? (al OWNSITREP)	Document/Power Point, ADatP 4733 NVG, ADatP 3
ORDERS	ORDERS	NIP	Producer/Consumer	Files over HTTP	WSMP, MIM 4 IES , ADatP3
Simulation	Order of Battle	JTLS/NATO Simulations	Producer	Files over HTTP	ADatP3
	Tasking	JTLS/NATO Simulations	Producer	Files over HTTP	ADatP3
	Battle Space Object	JTLS/NATO Simulations	Consumer	Military Messaging	ADatP3
Infrastructure	Data	SQL Database Cluster	Consumer	TCP/IP	As-is
	Files/Lists	NIP	Producer/Consumer	Files over HTTP	As-is
PKI	NPKI	E-PKI	Consumer	HTTP + files	NATO PKI Service

Service Management and Control	SMC	SCOM/ ZABBIX	Producer	XML Web Service	Interface to Service Monitoring
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[216] The following figure illustrates this in a diagram. Note that the version numbers mentioned are for illustrative purposes only as these will evolve over time.

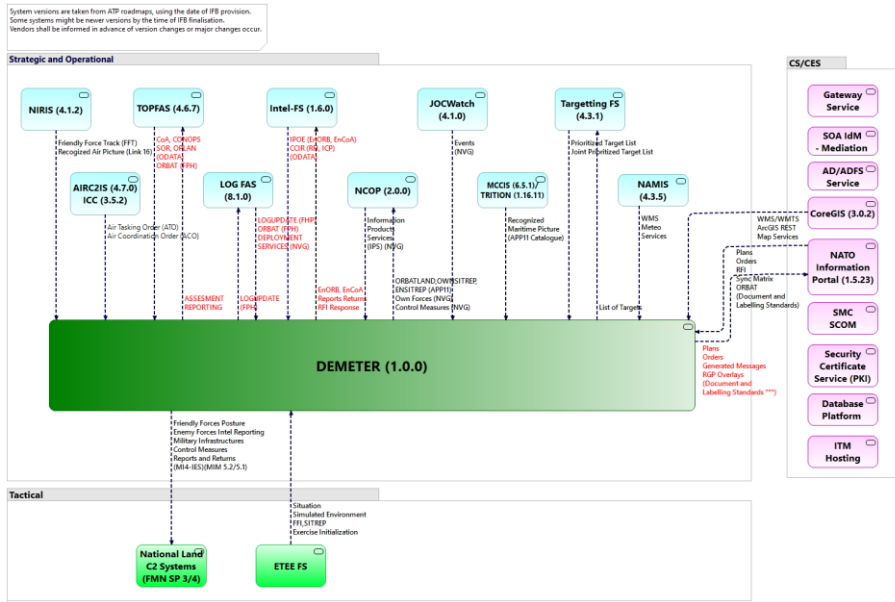


Figure 10.1 – DEMETER interfaces

Annex C Agency Approved Software (A2SL) – Required Documents

[217] The documents required to be submitted in order to obtain approval for the DEMETER application to be included on the A2SL is shown below.

	MAJOR / MINOR RELEASES	PATCH RELEASES	
COMMON REQUIREMENTS	A&T Portfolio	✓	✗
	Funding availability	✓	✓
	System Media	✓	✓
	Release information (Release Notes / Product Guide / Version Description document)	✓	✓
	Installation Instructions	✓	✓
	User Manual ¹	✓	✗
	Administration Manual ²	✓	✗
	Security Settings ³	✓	✗
	Support Plan	✓	✗
	Deployment Plan	✓	✓
	Design Description ⁴	✓	✗
	ADDITIONAL REQUIREMENTS FOR NOTS	Requirement Traceability Matrix	✓
Functional Test Report		✓	✗
User Acceptance Test Report ⁵		✓	✗
ADDITIONAL REQUIREMENTS FOR NEW SOFTWARE	CONOPS	✓	✗

1 - User Manual is required for systems that have a human interface.

2 - Administration Manual is only required if the deployment and maintenance of the release necessitates special administration operations.

3 - Security Settings are required when the target environment needs to be configured in accordance with Cyber Security requirements.

4 - Interface Design and Architecture Descriptions are required when the system interoperates with other systems.

5 - In case of Interim Approval request or customer feedback on UAT is available via other records or communication, User Acceptance Test (UAT) Report is not required upon submission.

Annex D Templates

D.1 Engineering Change Proposal Template

[218] The ECP template will be provided separately.

D.2 Request for Deviation / Request for Waiver Template

[219] The RFD/RFW template will be provided separately.

Engineering					Populated by the Bidder			
Order	Lvl	No	Traceability	Evaluation Criteria Description	Bidding Instructions Reference	SOW Reference	Bid Reference	Bidder's comment
		E01		NATO exercise/operation proven Your software already been proven in NATO exercise and/or operation.	3.5.6	N/A	N/A	N/A
1	3							
2	4	E01.01		DEMETETER has been used in NATO or National military operations, exercises or experimentations		N/A		
		E02		Battlespace Management (BM) How well is the solution able to conduct Terrain Management in order to conduct Battlespace Management?	3.5.6	N/A	N/A	N/A
2	3							
2	4	E02.01	E.1.4.1	DEMETETER shall conduct Battle Space Management (BSM) within the land domain.		N/A		
		E03		Situational Awareness (SA) How well is the solution able to develop and maintain Situation Awareness with NATO applications (e.g. JOCWatch and NCOP)?	3.5.6	N/A	N/A	N/A
3	3							
3	4	E03.01	P.1.1.3	DEMETETER shall contribute Situational Awareness (SA) by provision of planning information.		N/A		
3	4	E03.02	P.1.6.7	DEMETETER shall update Situational Awareness (SA)		N/A		
3	4	E03.03	E.1.1.1	DEMETETER shall build situational awareness (SA) within the land domain.		N/A		
3	4	E03.04	E.1.1.3	DEMETETER shall monitor execution of land operations in accordance with the Operation Plan (OPLAN) and ORDERS.		N/A		
3	4	E03.05	E.2.1.1	DEMETETER shall monitor situational awareness (SA).		N/A		
		E04		Interoperability How well is the solution interoperable (Standard supported: MIP, FFT, NVG, ADatP-3, etc.) in accordance with Federated Mission Networking Spiral 4 (from 2025 to 2027), Spiral 5 (from 2028 to 2029) and with NATO application?	3.5.6	N/A	N/A	N/A
4	3							
4	4	E04.01	A.2.2.2	DEMETETER shall share Situational Awareness (SA) and assessment products, across domains and functional areas.		N/A		
4	4	E04.02	A.2.2.3	DEMETETER shall share assessment products to flanking formations.		N/A		
4	4	E04.03	A.2.2.4	DEMETETER shall share assessment products with subordinate commands.		N/A		
4	4	E04.04	A.2.2.5	DEMETETER shall share assessment products with external actors.		N/A		
4	4	E04.05	A.2.2.6	DEMETETER shall share assessment products with partners.		N/A		
4	4	E04.06	NFR 1.13.1	DEMETETER shall be interoperable between the NCS (NATO Command Structure) and their forces.		N/A		
4	4	E04.07	NFR 1.13.2	DEMETETER shall be interoperable between the NCS (NATO Command Structure) and the NFS (NATO Force Structure) HQs.		N/A		
4	4	E04.08	NFR 1.13.3	DEMETETER shall be interoperable between NCS (NATO Command Structure) and the non-NATO military entities.		N/A		
4	4	E04.09	NFR 1.13.4	DEMETETER shall provide interoperability both with internal and external stakeholders, and for multinational units and Troop Contributing Nations (TCNs).		N/A		
4	4	E04.10	NFR 1.13.5	DEMETETER shall provide Interoperability with critical joint NATO FS (Functional Services), and national systems.		N/A		
4	4	E04.11	NFR 1.13.6	DEMETETER shall be interoperable with the NATO C2 CIS and the Community of Interest (CoI) Services within the NATO C2 architecture, IAW NATO Security Policy (Security within the North Atlantic Treaty Organization), C-M(2002)49; & C3B - Consultation Command & Control Board, AC322-D(2019)0034 (INV)		N/A		
4	4	E04.12	NFR 1.13.7	DEMETETER shall be compliant with the NATO C3, and the NATO Interoperability Standards and Profiles (NISP).		N/A		
4	4	E04.13	NFR 1.13.8	DEMETETER shall be compliant with the Alliance interoperability requirements as documented in the current and emerging Federated Mission Networking (FMN) Spiral Specifications to achieve federated interoperability.		N/A		
4	4	E04.14	NFR 1.13.9	DEMETETER shall be compliant with NATO Vector Graphics ADatP 4733 standard. NVG 2.0.2		N/A		
4	4	E04.15	NFR 1.13.9	DEMETETER shall be compliant with the Allied Data Processing (ADatP)-36, a Friendly Force Tracking Interoperability standard.		N/A		
4	4	E04.16	NFR 1.13.9	DEMETETER shall be compliant with ADatP-3 baseline standards.		N/A		
		E05		NATO Common Operational Picture (NCOP): How well is the solution able to produce and disseminate the Recognised Ground Picture (RGP) with NATO Situation Awareness applications (e.g. NCOP)?	3.5.6	N/A	N/A	N/A
5	3							
5	4	E05.01	E.1.1.2	DEMETETER shall contribute to joint Situational Awareness (SA) by exposing Recognized Ground Picture (RGP) to NATO Common Operational Picture (NCOP)		N/A		
5	4	E05.02	E.1.4.2	DEMETETER shall contribute to Joint Battle Management (JBM) feeding NATO Common Operational Picture (NCOP).		N/A		
		E06		Security How well is the solution compliant with security regulations (e.g. CM(2002)49 (Security within the North Atlantic Treaty Organization [NATO]) and enable cross security domain access?	3.5.6	N/A	N/A	N/A
6	3							
6	4	E06.01	NFR 1.1.1	DEMETETER shall be compliant with NATO Security Policy (Security within the North Atlantic Treaty Organization), C-M(2002)49		N/A		
		E07		Collaborative editing How well is the solution able to simultaneously handle documents with collaborative functionalities and able to simultaneously develop staff product in support of decision making cycle and report assessment to the commander?	3.5.6	N/A	N/A	N/A
7	3							
7	4	E07.01	P.2.2.5	DEMETETER shall provide the ability to prepare the mission analysis briefing.		N/A		
7	4	E07.02	P.2.2.6	DEMETETER shall provide the ability to present the mission analysis briefing.		N/A		
7	4	E07.03	P.2.2.7	DEMETETER shall develop additional commander's planning guidance.		N/A		
7	4	E07.04	P.2.2.8	DEMETETER shall issue additional commander's planning guidance.		N/A		
7	4	E07.05	P.2.2.9	DEMETETER shall develop and issue a Warning Order (WNGO).		N/A		
7	4	E07.06	P.2.2.10	DEMETETER shall deliver an initial commander's back brief.		N/A		
7	4	E07.07	P.1.6.1	DEMETETER shall support the decision making cycle in a collaborative workspace.		N/A		
7	4	E07.08	E.1.4.3	DEMETETER shall produce Operational Staff Work (OSW).		N/A		
7	4	E07.09	E.2.3.1	DEMETETER shall perform a rapid Planning Process for unpredicted occurrences.		N/A		
7	4	E07.10	E.2.4.1	DEMETETER shall produce rapid Orders for unpredicted occurrences.		N/A		
		E08		NATO Information Portal How well is the solution able to access, receive and import information products MS Office or PDF files originating from NATO portals?	3.5.6	N/A	N/A	N/A
8	3							

8	4	E08.01	P.1.1.1	DEMETER shall access planning information in the NATO's Information Portal (NIP).			N/A		
8	4	E08.02	P.1.1.2	DEMETER shall receive planning information from the NATO's Information Portal (NIP).			N/A		
8	4	E08.03	P.1.1.5	DEMETER shall distribute processed planning data.			N/A		
8	4	E08.04	P.1.3.2	DEMETER shall import data from NATO's Information Portal (NIP) from staff products, for the Concept of Operations (CONOPS).			N/A		
8	4	E08.05	P.1.4.2	DEMETER shall import staff products data from NATO's Information Portal (NIP), for the Operation Plan (OPLAN).			N/A		
8	4	E08.06	P.1.5.2	DEMETER shall import staff products data from the NATO's Information Portal (NIP), for the ORDERS.			N/A		
		E09		ORDERS	3.5.6		N/A		
				How well is the solution able to consume, exchange, collaborate on ORDERS documents (file type of MS Office or PDF) and able to produce, approve, disseminate and provide read receipt of ORDERS documents?			N/A		N/A
9	3	E09.01	P.1.5.1	DEMETER shall enable workflow to produce the ORDERS.			N/A		
9	4	E09.02	P.1.5.3	DEMETER shall provide the ORDERS data for Situational Awareness (SA).			N/A		
9	4	E09.03	P.1.5.4	DEMETER shall produce the ORDERS in a collaborative workspace.			N/A		
9	4	E09.04	P.1.5.5	DEMETER shall archive the ORDERS.			N/A		
9	4	E09.05	P.1.5.6	DEMETER shall manage the security classification of the ORDERS.			N/A		
9	4	E09.06	P.1.5.7	DEMETER shall provide version control for the ORDERS.			N/A		
9	4	E09.07	P.1.5.8	DEMETER shall provide the ability to approve the ORDERS.			N/A		
9	4	E09.08	P.1.5.9	DEMETER shall provide the ability to sign off the ORDERS.			N/A		
9	4	E09.09	P.1.5.10	DEMETER shall disseminate the approved the ORDERS.			N/A		
		E10		Risk analysis	3.5.6		N/A		
				How well is the solution enable operators to identify, analyse and evaluate operational risks?			N/A		N/A
10	3	E10.01	A.2.3.1	DEMETER shall identify risks.			N/A		
10	4	E10.02	A.2.3.2	DEMETER shall analyse risks.			N/A		
10	4	E10.03	A.2.3.3	DEMETER shall evaluate risks.			N/A		
		E11		Usability	3.5.6		N/A		
				How well is the solution user friendly (menu, shortcut, drag and drop, in English, etc.) and easy to learned?			N/A		N/A
11	3	E11.01	NFR 1.8.1	DEMETER shall be intuitive.			N/A		
11	4	E11.02	NFR 1.8.2	DEMETER shall be user friendly.			N/A		
11	4	E11.03	NFR 1.8.3	DEMETER shall be easy to learn.			N/A		
		E12		Availability	3.5.6		N/A		
				How well is the solution able to work on static or deployed environment and in limited bandwidth environment?			N/A		N/A
12	3	E12.01	NFR 1.2.1	Future Land C2 shall provide continuity of command and control of Land operations 24/7 in all static and deployed environments, even with limited network bandwidth environments and on NATO's Deployable CIS (DCIS).			N/A		
12	4	E12.02	NFR 1.2.2	DEMETER shall have an availability rate of 99.5% - Key Performance Indicator - Determined by reliability, maintainability, serviceability, performance and security.			N/A		
		E13		Efficiency:	3.5.6		N/A		
				How well does the solution enable Information Exchange Requirements (IER) of military forces?			N/A		N/A
13	3	E13.01	NFR 1.4.1	DEMETER shall meet the Information Exchange Requirements (IERs) [MC 593/1, MC 0640] of the forces by the transfer of data through network and bandwidth management.			N/A		
13	4	E13.02	NFR 1.4.2	DEMETER shall be aligned with NATO Enterprise Communications and Information (C&I) Vision, C-M(2017)0062			N/A		
		E14		Scalability	3.5.6		N/A		
				How well is the solution scalable (number of users, number of servers with replication/synchronisation, etc.)?			N/A		N/A
14	3	E14.01	NFR 1.12.1	DEMETER shall adopt the modular concept in accordance with ISO/IEC 25010 System and Software Engineering - System and Software Quality Models.			N/A		
14	4	E14.02	NFR 1.12.2	DEMETER shall be scalable as the threat environment evolves.			N/A		
14	4	E14.03	NFR 1.12.3	DEMETER shall be upgradeable, to adapt the capability as the threat environment evolves.			N/A		
14	4	E14.04	NFR 1.12.4	DEMETER shall be scalable to conduct a wide range of simultaneous, parallel and consecutive operations, at various locations, including deployed sites at multiple classification levels.			N/A		
		E15		Confidentiality	3.5.6		N/A		
				How well is the solution compliant with NATO security regulations (e.g. Information Management, Cyber Defence, security of web application, system security)?			N/A		N/A
15	3	E15.01	NFR 1.3.1	DEMETER shall be compliant with confidentiality policies in the NATO Information Management Policy (NMIP), CM (2007)0118			N/A		
15	4	E15.02	NFR 1.3.2	DEMETER shall be compliant with NATO Policy on Cyber Defence, C-M (2011)0042			N/A		
15	4	E15.03	NFR 1.3.3	DEMETER shall be compliant with Primary Directive on INFOSEC, AC/35-D/2004-REV3 (NATO Security Policy supporting directive)			N/A		
		E16		Integrity	3.5.6		N/A		
				How well is the solution enables Information Assurance and Information Management to process and display information?			N/A		N/A
16	3	E16.01	NFR 1.5.1	DEMETER shall be compliant with NATO Information Assurance Policy, C-(2008)0113(INV)			N/A		
16	4	E16.02	NFR 1.5.2	DEMETER shall meet integrity expectations to be compliant with NATO Information Management Policy (NMIP), C-M(2007)0118.			N/A		
16	4	E16.03	NFR 1.5.3	DEMETER shall process information accurately to enable detailed planning, rapid decision-making, execution, and assessment.			N/A		
16	4	E16.04	NFR 1.5.4	DEMETER shall process information reliably to enable detailed planning, rapid decision-making, execution, and assessment.			N/A		
16	4	E16.05	NFR 1.5.5	DEMETER shall process information in a timely manner to enable detailed planning, rapid decision-making, execution, and assessment.			N/A		
16	4	E16.06	NFR 1.5.6	DEMETER shall display information accurately to enable detailed planning, rapid decision-making, execution, and assessment.			N/A		

16	4	E16.07	NFR 1.5.7	DEMETER shall display information reliably to enable detailed planning, rapid decision-making, execution, and assessment.		N/A		
16	4	E16.08	NFR 1.5.8	DEMETER shall display information in a timely manner to enable detailed planning, rapid decision-making, execution, and assessment.		N/A		
17	3	E17		Survivability How well does the solution enable data to be secured, stored and archived regularly?	3.5.6	N/A	N/A	N/A
17	4	E17.01	NFR 1.7.1	DEMETER shall perform Land Component operations in the Area of Responsibility (AoR), when disconnected		N/A		
17	4	E17.02	NFR 1.7.2	DEMETER shall fully recover from communications degradation or failure.		N/A		
17	4	E17.03	NFR 1.7.3	DEMETER shall have information survivability given loss of facilities.		N/A		
17	4	E17.04	NFR 1.7.4	DEMETER shall be able to archive information for the purposes of backup in case of failure and recovery in accordance with NATO Information Management Policy (NIMP). CM(2007)0118.		N/A		
18	3	E18		Flexibility How well is the solution able to be adapted to difference environments (static, deployable, remote), configurable (users, roles, etc.)?	3.5.6	N/A	N/A	N/A
18	4	E18.01	NFR 1.9.1	DEMETER (across DOTMLFPI) shall be able to adapt to different environments.		N/A		
18	4	E18.02	NFR 1.9.2	DEMETER (across DOTMLFPI) shall be able to adapt to different configurations.		N/A		
18	4	E18.03	NFR 1.9.3	DEMETER (across DOTMLFPI), shall be able to adapt to different user roles.		N/A		
19	3	E19		Training How well does the solution come with Training packages (Train the trainer, CBT, etc.)?	3.5.6	N/A	N/A	N/A
19	4	E19.01	D.1.3.1	DEMETER shall refine both Land C2 Training Needs Analysis, and Land C2 Training Requirements Analysis.		N/A		
19	4	E19.02	D.1.3.2	DEMETER shall include training and certification that is realistic, flexible and tailorable to missions for all collective and individual Land Users operator, aligned with the Joint/Land C2 CONOPS and relevant doctrine.		N/A		
19	4	E19.03	D.1.3.3	DEMETER shall include training that is integrated and coherent with other C2 related training in a joint environment (interoperability must reduce integration timeliness and increasing readiness for response).		N/A		
19	4	E19.04	D.1.3.4	DEMETER shall include training that sustains and refreshes Land C2 operators.		N/A		
19	4	E19.05	D.1.3.5	DEMETER shall include training and certification for all administrators of the Future Land C2 capability aligned with the Joint/Land C2 CONOPS and relevant doctrine.		N/A		
20	3	E20		Modifiability How well is the solution upgradable (modular, remains operational during upgrade, etc.)?	3.5.6	N/A	N/A	N/A
20	4	E20.01	NFR 1.11.1	DEMETER shall be modularly upgradable, with non-changing modules remaining operational and supporting the capability.		N/A		
20	4	E20.02	NFR 1.11.2	DEMETER shall be upgradable without affecting interoperability and compatibility.		N/A		
21	3	E21		Order of Battle (ORBAT) How well is the solution able to consume, produce, exchange, and collaborate Order of Battle (ORBAT) Information with NATO planning applications (e.g. TOPFAS and LOGFAS) and able to export defined attributes of Order of Battle (ORBAT) Information with NATO planning applications (e.g. TOPFAS and LOGFAS)?	3.5.6	N/A	N/A	N/A
21	4	E21.01	P.1.1.7	DEMETER shall consume the Order of Battle (ORBAT) attributes.		N/A		
21	4	E21.02	P.1.1.8	DEMETER shall process the Order of Battle (ORBAT) attributes.		N/A		
21	4	E21.03	P.1.2.1	DEMETER shall import the Battle Space Objects (BSO) attributes.		N/A		
21	4	E21.04	P.1.2.3	DEMETER shall produce the Order of Battle (ORBAT) information for all defined entities.		N/A		
21	4	E21.05	P.1.2.2	DEMETER shall export the Battle Space Objects (BSO) attributes.		N/A		
22	3	E22		Operation Plan (OPLAN) How well is the solution able to consume, exchange, collaborate on Operation Plans (OPLAN) documents (file type of MS Office or PDF) with NATO planning applications (e.g. TOPFAS) and able to produce, approve, disseminate and provide read receipt of Operation Plans (OPLAN) documents?	3.5.6	N/A	N/A	N/A
22	4	E22.01	P.1.4.1	DEMETER shall enable workflow to produce the Operation Plan (OPLAN).		N/A		
22	4	E22.02	P.1.4.3	DEMETER shall provide the Operation Plan (OPLAN) data for Situational Awareness (SA).		N/A		
22	4	E22.03	P.1.4.4	DEMETER shall produce the Operation Plan (OPLAN) in a collaborative workspace.		N/A		
22	4	E22.04	P.1.4.5	DEMETER shall archive the Operation Plan (OPLAN).		N/A		
22	4	E22.05	P.1.4.6	DEMETER shall manage the security classification of the Operation Plan (OPLAN).		N/A		
22	4	E22.06	P.1.4.7	DEMETER shall provide version control for the Operation Plan (OPLAN).		N/A		
22	4	E22.07	P.1.4.8	DEMETER shall provide the ability to approve the Operation Plan (OPLAN).		N/A		
22	4	E22.08	P.1.4.9	DEMETER shall provide the ability to sign off the Operation Plan (OPLAN).		N/A		
22	4	E22.09	P.1.4.10	DEMETER shall disseminate the approved Operation Plan (OPLAN).		N/A		
22	4	E22.10	P.1.4.11	DEMETER shall request a read receipt when disseminating the Operation Plan (OPLAN).		N/A		
26	3	E23		Intelligence products How well is the solution interoperable with NATO Intelligence and Joint Targeting applications (e.g. INTEL-FS and JTS) in order to support the Intelligence Preparation of the Operational Environment (IPOE)?	3.5.6	N/A	N/A	N/A
26	4	E23.01	P.2.1.1	DEMETER shall develop an initial Intelligence Preparation of the Operational Environment (IPOE).		N/A		
26	4	E23.02	P.2.1.2	DEMETER shall develop initial Commander's Critical Information Requirements (CCIRs).		N/A		
26	4	E23.03	P.2.1.3	DEMETER shall formulate commander's initial intent.		N/A		
26	4	E23.04	P.2.1.4	DEMETER shall provide the ability to brief the commander's initial intent.		N/A		
26	4	E23.05	P.2.2.1	DEMETER shall develop Intelligence Preparation of the Operational Environment (IPOE).		N/A		
26	4	E23.06	P.2.2.2	DEMETER shall develop planning guidance factors.		N/A		
26	4	E23.07	P.2.2.3	DEMETER shall develop Commander's Critical Information Requirements (CCIRs).		N/A		
26	4	E23.08	P.2.2.4	DEMETER shall contribute to the Intelligence Collection Plan (ICP).		N/A		
23	3	E24		Concept of Operations (CONOPS) How well is the solution able to consume, exchange, collaborate on Concept of Operations (CONOPS) documents (file type of MS Office or PDF) with NATO planning application (e.g. TOPFAS)?	3.5.6	N/A	N/A	N/A
23	4	E24.01	P.1.3.3	DEMETER shall provide the Concept of Operations (CONOPS) data for Situational Awareness (SA).		N/A		
23	4	E24.02	P.1.3.6	DEMETER shall manage the security classification of the Concept of Operations (CONOPS).		N/A		
23	4	E24.03	P.1.3.7	DEMETER shall provide version control for the Concept of Operations (CONOPS).		N/A		

23	4	E24.04	P.1.3.1	DEMETER shall enable workflow to produce the Concept of Operations (CONOPS) document.			N/A		
23	4	E24.05	P.1.3.4	DEMETER shall produce the Concept of Operations (CONOPS) in a collaborative workspace.			N/A		
23	4	E24.06	P.1.3.5	DEMETER shall archive the Concept of Operations (CONOPS).			N/A		
23	4	E24.07	P.1.3.8	DEMETER shall provide the ability to approve the Concept of Operations (CONOPS).			N/A		
23	4	E24.08	P.1.3.9	DEMETER shall provide the ability to sign off the Concept of Operations (CONOPS).			N/A		
23	4	E24.09	P.1.3.10	DEMETER shall disseminate the approved Concept of Operations (CONOPS).			N/A		
23	4	E24.10	P.1.3.11	DEMETER shall request a read receipt when disseminating the Concept of Operations (CONOPS).			N/A		
		E25		Course of Action (CoA)	3.5.6	N/A		N/A	
				How well is the solution able to consume, exchange, collaborate on Course of Action (CoA) documents (file type of MS Office or PDF) with NATO planning application (e.g. TOPFAS)?				N/A	
24	3								
24	4	E25.01	P.3.1.1	DEMETER shall assess combat power in the Area of Responsibility (AOR).			N/A		
24	4	E25.02	P.3.1.2	DEMETER shall develop Courses of Action (CoAs).			N/A		
24	4	E25.03	P.3.1.3	DEMETER shall validate Courses of Action (CoAs).			N/A		
24	4	E25.04	P.3.1.4	DEMETER shall provide the ability to brief Courses of Action (CoAs).			N/A		
24	4	E25.05	P.3.2.1	DEMETER shall compare own Courses of Action (CoAs) with adversary/enemy Courses of Action (CoAs).			N/A		
24	4	E25.06	P.3.2.2	DEMETER shall conduct Courses of Action (CoAs) analysis.			N/A		
24	4	E25.07	P.3.2.3	DEMETER shall assess Courses of Action (CoAs) analysis results.			N/A		
24	4	E25.08	P.3.3.1	DEMETER shall compare Courses of Action (CoAs).			N/A		
24	4	E25.09	P.3.3.2	DEMETER shall provide the ability to brief the Course of Action (CoA) decision.			N/A		
		E26		Logistics Functional Area Services (LOGFAS)	3.5.6	N/A		N/A	
				How well is the solution able to receive logistic reports from NATO Logistic applications (e.g. LOGFAS)?				N/A	
25	3								
25	4	E26.01	A.1.1.1	DEMETER shall assess the logistic situation.			N/A		
		E27		Assessment	3.5.6	N/A		N/A	
				How well is the solution able to support operators to receive assessment inputs, conduct analysis, display data, assess progress of land operation and conduct recommendations with NATO Planning applications (e.g. TOPFAS) and able to process input in accordance with Data Collection Plan, process assessment input and conduct data analysis of collected data?				N/A	
27	3								
27	4	E27.01	E.1.2.1	DEMETER shall assess the progress of land operations in accordance with the Operation Plan (OPLAN) and ORDERS.			N/A		
27	4	E27.02	A.1.1.2	DEMETER shall assess own force situation.			N/A		
27	4	E27.03	A.1.2.1	DEMETER shall receive inputs in accordance with the Data Collection Plan in the Operational Operation Plan (OPLAN)			N/A		
27	4	E27.04	A.2.1.4	DEMETER shall conduct recommendations.			N/A		
27	4	E27.05	E.2.2.1	DEMETER shall assess progress for specific unpredicted occurrences.			N/A		
27	4	E27.06	A.1.2.2	DEMETER shall process inputs in accordance with the Data Collection Plan in the Operational Operation Plan (OPLAN)			N/A		
27	4	E27.07	A.1.2.3	DEMETER shall prepare assessment inputs.			N/A		
27	4	E27.08	A.1.2.4	DEMETER shall treat assessment inputs.			N/A		
27	4	E27.09	A.2.1.1	DEMETER shall conduct analysis of collected data.			N/A		
27	4	E27.10	A.2.1.2	DEMETER shall display the available data.			N/A		
27	4	E27.11	A.2.1.3	DEMETER shall assess the achievement of results and activities described in the Operation Plan (OPLAN).			N/A		
		E28		NATO Information Portal	3.5.6	N/A		N/A	
				How well is the solution able to access, receive and import information products MS Office or PDF files originating from NATO portals?				N/A	
28	3								
28	4	E28.01	P.1.1.4	DEMETER shall process planning information received from the NATO's Information Portal (NIP).			N/A		
		E29		Situational Awareness (SA)	3.5.6	N/A		N/A	
				How well is the solution able to develop and maintain Situation Awareness with NATO applications (e.g. JOCWatch and NCOP)?				N/A	
29	3								
29	4	E29.01	P.1.1.6	DEMETER shall inform the user on changing datasets impact on plan.			N/A		
		E30		Collaborative editing	3.5.6	N/A		N/A	
				How well is the solution able to simultaneously handle documents with collaborative functionalities? How well is the solution able to simultaneously develop staff product in support of decision making cycle and report assessment to the commander?				N/A	
30	3								
30	4	E30.01	P.1.6.8	DEMETER shall develop staff products in support of the decision making cycle.			N/A		
30	4	E30.02	A.2.2.1	DEMETER shall report assessments to the commander.			N/A		
		E31		ORDERS	3.5.6	N/A		N/A	
				How well is the solution able to consume, exchange, collaborate on ORDERS documents (file type of MS Office or PDF)? How well is the solution able to produce, approve, disseminate and provide read receipt of ORDERS documents?				N/A	
31	3								
31	4	E31.01	P.1.5.11	DEMETER shall request a read receipt when disseminating the ORDERS.			N/A		
		E32		Interoperability	3.5.6	N/A		N/A	
				How well is the solution interoperable (Standard supported: MIP, FFT, NVG, ADatP-3, etc.) in accordance with Federated Mission Networking Spiral 4 (from 2025 to 2027), Spiral 5 (from 2028 to 2029) and with NATO application?				N/A	
32	3								
32	4	E32.01	A.2.2.7	DEMETER shall report both assessment products and data to higher commands, in accordance with the Data Collection Plan from the Operational Operation Plan (OPLAN)			N/A		
		E33		Synchronization Matrix	3.5.6	N/A		N/A	
				How well is the solution able to synchronise effects, coordinate assets and refine synchronisation in a Synchronisation Matrix?				N/A	
32	3								
32	4	E33.01	E.1.3.1	DEMETER shall synchronize effects.			N/A		

32	4	E33.02	E.1.3.2	DEMETER shall coordinate assets.			N/A		
32	4	E33.03	E.1.3.3	DEMETER shall refine synchronization.			N/A		
		E34		Rehearsal of Concept (ROC)	3.5.6		N/A	N/A	N/A
33	3			How well is the solution supports operators to perform Rehearsal of Concept (RoC)?					
33	4	E34.01	P.1.6.3	DEMETER shall enable performing Rehearsal of Concept (ROC) drills.			N/A		
33	4	E34.02	P.1.6.4	DEMETER shall report Rehearsal of Concept (ROC) drill results.			N/A		
		E35		War gaming	3.5.6		N/A	N/A	N/A
34	3			How well is the solution supports operators to conduct war-gaming?					
34	4	E35.01	P.1.6.2	DEMETER shall enable war-gaming.			N/A		
		E36		Simulation	3.5.6		N/A	N/A	N/A
				How well is the solution interoperable with NATO simulation applications, in order to support the operators to consume Courses of Action (CoA) analysis?					
35	3	E36.01	P.1.6.5	DEMETER shall perform simulations.			N/A		
35	4	E36.02	P.1.6.6	DEMETER shall compare simulation Courses of Action (CoAs).			N/A		

Supportability

No	Traceability	Evaluation Criteria Description	Bidding Instructions	SOW Reference	Bid Reference	Bidder's comment
3		How suitable is the Bidder's organizational maturity, expertise and experience in COTS product maintenance and support?	3.5.7.4	N/A	N/A	N/A
	S01.01	The Bidder shall describe its expertise and experience in providing software support and maintenance services of a level equivalent to that required for the sustainment of DEMETER capability. This shall include experience in: <ul style="list-style-type: none"> Customer (end user) support services Software technical support and maintenance services 				
4	S01.02	The Bidder shall provide information on its experience and expertise in implementing or applying Information Technology Infrastructure Library (ITIL) framework for Service Management best practises.				
4	S01.03	The Bidder shall provide information on its experience and expertise in creating and executing In-Service and Product Support Plans for large, geographically-dispersed organizations.				
4	S01.04	The Bidder shall describe its expertise and experience in the delivery of classroom training courses of a level equivalent to those required for the training of DEMETER capability. This shall include experience in the preparation of syllabuses, schedules, course prerequisites, student skill prerequisites, course evaluations and instructor materials.				
4	S01.05	The Bidder shall describe its expertise and experience in the development and maintenance of eLearning training courses of a level equivalent to those required for the training of DEMETER capability.				
3		How good is the COTS product roadmap in regards to future functionality, release cycle, end-of-life product version support, etc.?	3.5.7.5	N/A	N/A	N/A
	S02.01	The Bidder shall provide the Product roadmap of its COTS product(s) in terms of future feature set (i.e. confirmed/ planned/ in assessment), functionalities and planned future release cycle(s) of major and minor versions.				
4	S02.02	The Bidder shall also provide information on historical roadmap of the product, in order to inform how frequently product evolved in the past.				
4	S02.03	The Product Roadmap shall contain clear definitions and support features available in each of the key product lifecycle phases (i.e. General/Full Support Phase, Extended Support, End of Support Life, End of Availability/Distribution, etc.).				
4	S02.04	The Product Roadmap shall include information about the latest product lifecycle dates for the current release of COTS product(s) offered by the Bidder, incl. any required 3rd party software.				
3		How good is the COTS product support package (e.g. helpdesk, on-site, FAQ, etc.)?	3.5.7.6	N/A	N/A	N/A
	S03.01	The Bidder shall provide the various options for the COTS customer service and technical support currently available such as helpdesk, remote/on-site support, FAQ, Self-Service and Knowledge Base portals, chatbots/virtual agents, community of interest, etc.				
4	S03.02	The Bidder shall describe its proposed multi-tier support service framework as well as standard Service Level Agreements (SLA).				
4	S03.03	Software support services shall include remote and on-site troubleshooting capabilities, installation assistance and basic usability assistance. The may also include new product installation services, installation of product updates, migrations for major releases of software, other types of proactive or reactive on-site services.				
4	S03.04	The Bidder shall indicate which of the offered support services can be delivered directly by the Bidder or a consulting firm or third-party software maintainers.				
3		How good is the COTS product training package (e.g. course description, duration, on site or online, class size, etc.)?	3.5.7.7	4.3.2.3, 4.3.2.4	N/A	N/A
	S04.01	The Bidder shall indicate its currently available training materials such as: Computer Based Training modules (e.g. Sharable Content Object Reference Model (SCORM)-compliant materials), Instructor-led Training materials, On-the-job Training materials, user manuals, administrator (operation and maintenance) manuals, etc.				
4	S04.02	The Bidder shall provide additional information such as course description, target audience, course duration, on site or online, supported class size, etc.				
4	S04.03	Training materials should cater for different user communities: end users, advanced users (administrators), trainers (train-the-trainers).				
4	S04.04	The Bidder may also provide technical information about its existing Learning Management System (LMS).				

Management

No	Traceability	Evaluation Criteria Description	Bidding Instructions Reference	SOW Reference	Bid Reference	Bidder's comment
3	M01	How suitable is the Bidder's organizational management experience in similar projects?	3.5.8.5	N/A	N/A	N/A
4	M01.01	The Bidder shall detail relevant and successful corporate experience in at least two recent contracts within the last ten years for which the Bidder integrated IT systems, functional services, with at least one for command and control, intelligence or military customer. For each required experience, the Bidder shall provide a description of the solution deployed/delivered, the expertise/experience highlighting similarities to the bid solution; the purchaser(s) of these systems; the user(s) of these systems; the Contract number(s); the start date and end date of the Contract; a point of contact for verification purposes.				
4	M01.02	The Bidder shall describe the corporate structure of the Contractor and the administration of the prospective Project within the overall corporate structure.				
3	M02	How well does the Project Management Plan (PMP) meet the requirements?	3.5.8.6	3.7.5 8.4	N/A	N/A
4	M02.01	The initial PMP includes a product breakdown structure (PBS) identifying all services and deliverables, with reference to the CLINs for traceability.				
4	M02.02	The initial PMP describes the project organisation and identifies key personnel in the project organization, their qualifications, and their responsibilities.				
4	M02.03	The initial PMP identifies all major contractor operating entities and any subcontractors involved in the work and describes the portion of the overall effort and deliverables allocated to them.				
4	M02.04	The initial PMP describes the Bidder's project implementation approach, project management approach, project control processes, used standards, and external relationships necessary to provide the deliverables.				
4	M02.05	The initial PMP shall identify the alternative means and tools proposed by the Purchaser beyond the Azure DevOps tools furnished by the NATO Software Factory in order to meet the configuration management requirements.				
4	M02.06	The initial PMP format and structure aligns with the SOW Section 8.4.				
3	M03	How well does the Project Master Schedule (PMS) meet the requirements?	3.5.8.7	8.4.1	N/A	N/A
4	M03.01	The initial PMS defines all major milestones and major activities, with reference to the element of the product breakdown structure, the durations of each activity, and the Contract end date.				
4	M03.02	The PMS shall include a Gantt chart where the start and finish dates of the WPs and phases are depicted, and it shall from this schedule be possible to identify the timeframe when a specific deliverable is planned to be delivered.				
4	M03.03	The PMS shall depict the sequence, start and finish dates, durations, and relationships among milestones and activities.				
3	M04	How well does the RAID Register meet the requirements?	3.5.8.8	8.5	N/A	N/A
4	M04.01	The initial Risk Register lists at a minimum 10 top risks and for each risk indicates the minimum information required in the SOW Section 8.5.1. The initial Risk Register contains a set of probable risks that demonstrates that the Bidder has a good understanding of the complexities and dependencies inherent in the project.				
4	M04.02	The initial Risk Register format and structure aligns with the SOW Section 8.5.1				

135	Technical		RFC/IFC/IEEE 201401 International Standard for Customer and software experience - Life cycle processes - Requirements engineering 2014	This document can be obtained from IFC: http://www.iso.org/standard/72000.html
136	Technical		RFC 0000/2015 Quality management systems - Fundamentals and vocabulary	This document can be obtained from IFC: http://www.iso.org/standard/45401.html
137	Technical		(NATO) PL SC DIR 07E 0071 NATO PL SC Education and Individual Training Directive (E/ITD) 07E 007 Sep 2015	This document will be transmitted
138	Technical		NICIA AD 06 00 41 NICIA - Agency Directive 06 00 41 Certification Management Feb 2020	This document will be transmitted
139	Technical		NICIA AD 06 00 42 NICIA - Agency Directive 06 00 42 Development Management Planning Oct 2020	This document will be transmitted
140	Technical		NICIA AD 06 00 43 NICIA - Agency Directive 06 00 43 Identification of Capabilities Annex 1 Jun 2016	This document will be transmitted
141	Technical		NICIA AD 06 00 44 NICIA - Agency Directive 06 00 44 Information Management Oct 2020	This document will be transmitted
142	Technical		NICIA AD 06 00 45 NICIA - Agency Directive 06 00 45 Enterprise IT Change Management Mar 2020	This document will be transmitted
143	Technical		INDEF 10511 Net is reference lists - but referenced from CFC 017 etc	This document will be transmitted
144	Technical		Def ATP 42611 Net is reference lists - but referenced from CFC 206	NATO Unclassified ATCI list provided (NLI 20220406 ATCI)
145	Technical		Def DFCI 00/20210220 Data Evaluation Framework Deliver	This document will be transmitted
146	Technical		Def ICD External TORCAF/OCFAE ADI EDU ODDAT Software version 2023 7	This document will be transmitted
147	Technical		Def ICD ICDI	This document will be transmitted
148	Technical		Def ICD Internal DMAL CO 4157319 I2DF -INTEL FC Critical 2 NAF A 01 7 Information Model Data Dictionary - All Entities Nov 9 2022 4:58 PM	Use STANAG 4774 and 4779 7 (included in document delivered) instead
149	Technical		Def ICD NIDICI Tool Chain Open ADI interface - original version to be provided	This document will be transmitted
150	Technical		Def ICD COA IDMI CO 44176 COA IDMI Service Oriented Architecture (COA) and Identity Management Platform (IDM) Wave 1 Interface Control Document (ICD) Doc	Please refer to the document COA/IDM Platform Integration Requirements dated April 2022
151	Technical		Def ITMI Net is reference lists - but referenced from CFC 240	D ITMI shall be improved, the specifications of any system that shall operate in NATO enterprise environments are stated in CFC
152	Technical		Def RCDI AD 00 04 NATO Recognized Ground Directive	This document will be transmitted
153	Technical		Def Chemical Chemical Classes Data access and control exchange protocols	Please refer to standard Microsoft Chemical documentation
154	Technical		ICM IDMI COA IDMI Service Oriented Architecture (COA) and Identity Management Platform (IDM) Wave 1 Interface Control Document (ICD) V4.0 Jun 2023	Please refer to the document COA/IDM Platform Integration Requirements dated April 2022
155	Technical		ICANAC 44271 Mutual Assessment of Capabilities Quality Assurance of the Allied Quality Assurance Publications	This document will be transmitted
156	Technical		ICANAC 44271 Edition 3 - Configuration Management in System Life Cycle Management	This document will be transmitted
157	Technical		ICD LC3IS Interface Control Document (ICD) for LC3IS Inc 2 Contract no C014462 LC3IS E00E7 62704705 ESR Buy M - Annex E LC3IS Inc 2 YML Schema Definition	Provided per email (VSD LC3IS ICD for LC3IS Inc 2 Annex E YML Schema Definition
158	Price		Why is the price limit divided into CLINs 1, 2 and 4, if CLINs 1, 2 are basic and CLINs 3, 4 are optional? Whether the price limit should refer to CLIN 1, 2 and 3, 4?	"CLIN 1, 2 are about the investment and CLIN 4 is about Maintenance
159	Price		Is the labor tab there is only one column to enter labor rate (column Q)? Is it allowed to add columns to enter Unit Cost or MD for subsequent users?	No, it is not allowed to enter additional columns for subsequent users. If the Bidder however wishes to use different labor rates for subsequent users, they can add
160	Technical	Annex A Bidding Sheets Tab	Could you please specify in which CLIN you include the WP3 initiation phase? The bidding sheet doesn't mention the 84.7 was done in CLINs 1, 2, 3, 4, 7, 7, 7, 7, 7, 7, 7, 7	There is no specific sub CLIN in CLIN 7 for the cost of the WP3 initiation phase. When awarded, these costs should be spread across the awarded sub CLINs
161	Technical	Annex A Bidding Sheets Tab	Could you please confirm that you have to include the Detail Management costs in the M&S CLINs?	Please spread all costs across the sub CLINs and related detail tabs (Labour, Material, Travel, ODC)
162	Price	Bidding Sheets Tab "CLIN Summary"	According to the bidding sheets, the M&S CLINs must be priced in man/days (labour tab). Could you consider a pricing in lump sum price per year based on a percentage of the license fee(material Tab)? This would be in line with the usual business model for the M&S of a COTS	The Detail tabs (Labour/Material/Travel/ODC) should be completed with a breakdown of whatever information is used to build up the CLIN Summary prices, e.g. if the M&S CLINs are only composed of Material (license fee) then that should be entered in the appropriate tab. For any CLINs composed of one or more detail elements that information should be entered in the appropriate tab.
163	Price	Annex A-Bidding Sheets	We understand that the contract will last for 12 years & two months. However the bidding sheets file only presents columns for ten years to indicate man days	Bidding Sheets updated to accommodate 15 years (bidding sheets provided with AMD4)
164	Price	Annex A-Bidding Sheets	Given the fact that there is an economic price adjustment formula, the bidding sheets only takes into account current (2023) labour cost and others (tab Rates).	The inclusion of Economic Price Adjustment (EPA) for the future contract and use of Present Value (PV) calculation during the evaluation serve different purposes.
165	Technical	Annex A-Bidding Sheets	The SOW and the bidding sheets file indicate different dates for the PSA & FSA WP2 milestones for the project. Could you please indicate which one is correct?	The SOW is correct and bidding sheets have been amended accordingly (AMD4)
166	Admin		To be able to provide our best offer, we kindly request an extension of the BCD of at least 1 month.	Bid Closing date was amended to May 15 2023 in Amendment 1 and is amended further to May 31 2023 in Amendment 4
167	Admin		Could you please confirm if we can sign the documents electronically with an Official Certificate or if it must be a handwritten signature	The documents may be electronically signed
168	Admin	BOOK II, Part II Contract Special Provisions, 17.9 BOOK II, Part III Contract General Provisions, 30.2.2	If we deliver COTS software (within the scope of WP1 and WP2) the provisions of Sec. 17.9 of BOOK II, Part II Contract Special Provisions and sec. 30.2.2 of BOOK II, Part III Contract General Provisions saying about unlimited number of users (or licenses) do not apply (i.e. COTS are purchased in a specific number of licenses)? However, in case when we modify the COTS software by adding new functionalities within the scope of WP3, then such COTS software, which is the base for derivative product (final product), is to be understood as Contractor Background IPR and according to above provisions can be used and exploit by an unlimited number of users within NATO and NATO members?	The COTS will be governed by the software license, including any required source code for WP3. In case some code for WP3 is developed outside of the COTS, or as a separate add-on component to the COTS, then CSP 17.9 and CGP 30.2.2 apply.
169	Admin	Contract General	The new Identifiable and non-disclosure provisions set out in Article 14 of Part II Contract General Provisions are successfully drafted as an annex. A variation is requested.	No variation will be implemented in the clause.
170	Admin	Contract General	This clause provides that the Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.	These provisions remain in force as they are. The Contractor should ensure that the Contractor's negligence or willful misconduct is clearly defined.
171	Admin	Contract General	This clause provides that the Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.	The Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.
172	Admin	Contract General	This clause provides for a full right of audit, including an audit of pricing. A variation is requested so that any such audit relates only to baseline development and	The clause will not be amended.
173	Admin	Contract General	Please see the Discrepancy between Article 7 Part II Contract General Provisions and clause 7.7 Contract General Provisions rather than compliance with	Article 7.7 of CGP remains Article 7.7 "Language and Document" of the Contract General Provisions
174	Admin	Contract General	The Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.	The Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.
175	Admin	Contract General	This clause provides that the Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.	CGP Article 7.7 is not amended. If any CGP and annexes find in the Contractor's information, including information for commercial, technical and
176	Admin	Contract General	A variation is requested of clause 42.6 so that it is amended to substitute the legal recourse of the Contractor in the event of dispute. While it is the intention of the parties in	The clause will not be amended.
177	Admin	Contract General	It is usual in arbitration clauses to define the language of arbitration, but this is not specified in clause 42 Contract General Provisions. A variation is requested to	Variation requested will be implemented in the Contract General Provisions of the final contract to specify English as the language for arbitration.
178	Admin	Contract General	The CGP does not include all required information detailed in clause 21.6 as standard. To include this would result in development of a baseline release of	Variation will be accepted. CGP will be amended to replace as supplement CGP 21.6
179	Admin	Contract General	The Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.	The Contractor shall be liable for any loss of data caused by the Contractor's negligence or willful misconduct.
180	Admin	Contract General	When the QA is not possible based on the scope of the contract, the Contractor reserves the right to perform inspections through his own staff in accordance with	We confirm that the contract shall comply with the ISO standard for which certification is required in Book I, Annex D.
181	Admin	Book II Part II – Contract Special provisions – § 17, page N°17, 17.5	"This licence shall also allow the Purchaser and its member nations to use and authorise others to use the software for further adaptation, integration, modifications and future procurements." Could you confirm that this article applies to the Foreground IPR only? Could you define "others"?	Yes, this will apply to Foreground IPR only. 'Others' may be any other party, as the Foreground IPR is NATO property. For the COTS, the Nations and others shall be allowed to use the software (executable) for further adaptation, integration, modifications and future procurements, subject to the procurement of a corresponding license. In case some code for WP3 is developed outside of the COTS, or as a separate add-on component to the COTS, that code will be considered Foreground IPR.
182	Admin	Contract Special provisions – § 17 page N°17 17.7	"The Contractor warrants, undertakes, and represents that any derivative product created under this Contract from the stated Background IPR shall be considered as Foreground IPR and therefore shall be governed by the terms and conditions specified in Clause 30.3 (Foreground IPR) of the Contract General Provisions."	Indeed, a derivative product is restricted to the adaptations realized in WP3
183	Technical	Statement of Work (SOW), [SOW-526]	What is the impact of having AQAP certificates of approval (2110, 2210 or 2310) on the requirement related to approval of QA procedures aspects?	The QAP has to comply with AQAP 2105. The Purchaser will review it and agree on the proposed Quality activities. The Contractor having a ISO9001 certification does not mean that the developed QAP for this project is 'accepted' by default.
184	Admin	CGP §30.2.2 & Special Provisions, §17.8 & Annex A-Bidding Sheets & SOW, §3.6, [SOW-038]	The Special provisions and the SOW ask for no additional fee due to further re-transfer of the software or additional end user while the bidding sheet asks for a price to cover a right to use for 500 users. Considering a lot of COTS have a license model based on numbers of users, instances, capacities, would you mind to align the different related clauses in the Special provisions and SOW to take into account these existing licensing models and the limit fixed of 500 users?	CSP 17.9 is being amended to read: "Any use of Contractor Background IPR as listed in Annex B and Third Party Background IPR as stated listed in Annexes B and C, that are not part of the COTS and unless specifically applicable to COTS items, is not limited to the number of users or the number of licenses required by the Contract for use of the system. With the exception of COTS items, the Purchaser reserves the right to use or authorise NATO members to use the Background IPR as stated in Annexes B and C for any number of users and number of licenses as required, at no additional cost to the Purchaser."
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207	Price	BOOK II, Part II – 7.7	Could the Purchaser present the calculation of the Economic Price Adjustment based on sample data from previous years? When submitting an offer, we would like to make sure that we understand correctly what kind of input data we should enter into the calculations.	An example is being provided with Amendment 5
208	Technical	SOW 121 Book I 2.5.7.5.1	Please confirm if you request the Contractor to develop all requirements stated in the SRS into its COTS product before RSA WP2 that are currently not	The Purchaser requests the Contractor to develop all requirements stated as criteria and sub-criteria in the TVCRM before RSA WP2
209	Technical	Book I Bidding Instr 5	is it required to have a traceability with the SRS in the product description?	Not that is not required
210	Technical	Book I Bidding Instr 5	How will sub-criteria priority (which formula) be taken into account in the computation of ESR?	The 12 criteria as listed in col B of TVCRM are in priority order as per col A 1.4 sub-criteria priority are also listed in col A
211	Admin	Book II Part I – Consortium	Will it be possible to sign electronically all documents that NICIA may require from the bidders and eventually the contract by the preferred bidder?	Yes. A company "digital" certification authority is available
212	Admin	05 IFR CO 115701	In case the Bidder submits an offer as a consortium, could you please confirm that all consortium members will be mentioned under section 5 "Contractor" of the	Only the lead contractor from a consortium will be listed under section 5 "Contractor" of the NCI AGENCY CONTRACT, if awarded
213	Admin	05 IFR CO 115701	in case the Bidder acts as a consortium, could you please specify whether the consortium members will be paid separately?	All payments requested under the contract will be made to the lead contractor under the consortium
214	Technical	Book I Bidding Instructions	Does the NICIA expect the bidders to state they are compliant to all the SOW requirements (through a compliance matrix)?	The purchaser expects contractor's compliance with the SOW
215	Technical	Special Provisions 515.8	Could you clarify what kind and how much NR information the contractor will have to handle in its premises?	The Contractor expects the two NR laptops to be sufficient to handle all the NR information (which is mostly related to accreditation work)
216	Technical	Book I Bidding Instr 51.6.2	Could you confirm that the Contractor won't need to store in its premises MS material?	The Contractor confirms there is no need to store MS material at the contractor's premises
217	Technical	Book I Bidding Instr	Are we allowed to accelerate some sequences in the video provided for evaluation?	Yes, but if the video has been accelerated, the Bidder must clearly indicate this and specify the original duration
218	Technical	Book I Bidding Instr	The paragraph 52.5.5.2 asks to "complete the TVCRM by including Bidder's mapping (reference) of each evaluation criteria and sub-criteria to a specific section of	Only the 14 sub-criteria 2.5.5.2 should read as "complete the TVCRM by including Bidder's mapping (reference) of each evaluation sub-criteria to a specific section of
219	Technical	Book I-Annex A-Bidding Sheets	In the Bidding sheets CLIN Summary tab, WP3 payment milestones have fixed dates (CA+X) regardless of the effective date of option exercised which may be at any moment before 6 months after CA (Bidding instructions 1.3.4.6) : please clarify	The exercising of the WP3 option may be done by the Purchaser at any time between CAW and CAW+6 months. The bidding sheets reflect payment milestones for the not-to-exceed contractual due dates. However, the Contractor may deliver in advance of those due dates, in which case the corresponding payment will be made accordingly.

220	Technical	Contract General Provisions, Clause 31.4 and 21.7	The bidder would like to request a waiver in respect of COTS products at clause 31.4.4 General Contract Provisions and any other Purchaser remedy under the Contract (including clause 21.7.1 General Contract Provisions) whereby the Contractor is required to supply all materials and instructions to the Purchaser to enable them to remedy any defect and pay all costs reasonably incurred. These clauses appear to be tailored toward the supply of hardware, but do not make sense when applied to software as they do not provide for the best solution for the Purchaser. The Purchaser does not have access to the COTS building environment, and modifications/defect remedy by Purchaser or other third party would be inappropriate and difficult to deploy. Furthermore such modifications/defect remedy by the Purchaser or third party would not be possible due to IP restrictions. The Purchaser is already well covered by the Service Level Agreement which will ensure remedy of defects. The advantage in purchasing a COTS product is that it is a mature product and therefore defects are less likely to occur. Additionally, if a Purchaser or third party made changes to COTS software such as defect fixing, these changes would not be supported as part of the COTS product or maintenance and could result in future upgrades or updates not working effectively or at all, which again would be unsupported as a result of the prior fix not provided by the Supplier. It is very unusual to require a COTS product to be capable of defect remedy by the Purchaser. Instead, the obligation should be on the Supplier to provide such remedy as would be true of large international suppliers such as Microsoft. In light of the above, defect fixing in COTS software is requested to be limited to the Supplier, with no permission or reserved rights for any third party (including the Purchaser). For clarity, this waiver request does not impact the rights of the Purchaser as it relates to any bespoke development (foreground IP).	Contract Special Provisions is being amended by adding Clause 19.5: "Clause 31.4.4.2 of the Contract General Provisions is being deleted in its entirety."
221	Technical	Question to Answer 124 and 125.	Apart from support on inquiries and assessments from National Authorities within Prime Quality Assurance Conditions and Supplementary Quality Assurance Conditions. How does the purchaser suggest we as a potential supplier best support to comply with the AQAP 4107 and AQAP 2070	The aim of these AQAPs is primarily to regulate how Mutual Government Quality Assurance of defence products should be performed to establish confidence that the contractual requirements relating to quality are met. Specifically, in AQAP-2070 there are examples in Annex A – GQA supporting processes, which provides a
222	Technical	AMDT3 : answers to questions 20, 59, 117, 196, 197, 198, 199, 205	If the SRS are for guidance only, could you specify when the final SRS requirements will be provided? If the SRS are for guidance only, could you clarify why the prospective contract quote the SOW and its annexes that contain the SRS? Consequently, how can we commit on a fix and firm price offer? If there are variations between the SRS for guidance and the final ones, could you confirm that those will be subject to a Change Order? If the SRS are only for guidance, could you clarify § 3.4.1.5. that indicates "The structure of the Bidding Sheets shall not be changed, other than as indicated elsewhere, nor should any quantity or item description in the Bidding Sheets. The currency(ies) of each Contract Line Item and sub-item shall be shown. The prices provided shall be intended as the comprehensive total price offered for the fulfilment of all requirements as expressed in the IFB documentation including but not limited to those expressed in the SOW and Software Requirements Specification (SRS)." Could you explain to what to comply? Evaluation Criteria? When you state that "All features are to be delivered by PSA of WP2." (answer to question 20), could you precise which feature you are talking about?	The COTS is expected to be compliant with the evaluation (sub-)criteria. The SRS is provided to give guidance on the full scope to the bidder and give more detailed information on NATO's interpretation of the evaluation (sub-)criteria. The final SRS will be based on the provided SRS (for guidance) as well as the selected COTS capabilities. "All features" means all features that are needed to comply with selection criteria. It should be noted that the COTS will be deployed on the NATO network. As such, it will have to comply with NATO security regulations, in accordance with the related security SRS requirements. For interoperability, the SRS requirements also need to be satisfied, refer to WP3.
223	Technical	Book I - Annex D-TVCRM.xlsx, Book I - Annex E	The description of sub-criterion E12.01 is not the same in both documents. Can you please provide a single description for E12.01?	E12.01 should read as: "Future Land C2 shall provide continuity of command and control of Land operations 24/7 in all static and deployed environments, even with limited network bandwidth environments and on NATO's Deployable CIS (DCIS)."
225	Technical	Book I - Annex D-TVCRM.xlsx,	The description of sub-criterion E04.11 is not the same in both documents. Can you please provide a single description for E04.11	E04.11 should read as: "DEMETER shall be interoperable with the NATO C2 CIS and the Community of Interest (CoI) Services within the NATO C2 architecture, IAW NATO Security Policy (Security within the North Atlantic Treaty Organization), C-M(2002)49; & C3B -Consultation Command & Control Board, AC322-D(2019)0034 (INV)"
226	Technical	Book I - Annex E - Eval Criteria to Req Matrix.xlsx	Requirements SRS-182, SRS-244, SRS-245 and SRS-246 are associated to E11.03 "DEMETER shall be easy to learn.", but are technical requirements with no impact on learnability. Can you provide guidance as to which subcriteria this requirements should be linked?	Note that the SRS is provided for guidance, as it reflects the Purchaser's interpretation of the foreseen comprehensive requirements scope. It will be updated during the Pre-award discussions to reflect the selected COTS capabilities and further refined at the time of WP3 implementation, if that option is exercised. SRS-182: linked to E11.03 because of the English language mentioned in SRS-182. SRS-244: should be linked to E14.02, E14.03, E14.04 SRS-245: should be linked to E20.01 and E20.02 SRS-246: should be linked to E20.01
227	Technical	06_IFB-CO-115791-DEMETER_Book II-Part II Special Provisions	The Contract's SP is stating §17.3: « Any use by the Purchaser of Contractor Background IPR for the purpose of carrying out work pursuant to the Contract shall, subject to any obligation on the part of the Contractor to make payments to any third party in respect of IPR which is licensed from such third party, be free of any charge to Purchaser. The Contractor hereby grants to the Purchaser a non-exclusive, royalty-free and irrevocable licence throughout NATO, NATO operations (including out of area operations) and/or among NATO member nations to use and authorise others to use any Contractor Background IPR for the purpose of exploiting or otherwise using the Foreground IPR for any purpose." 1. Can the Agency define "others"? 2. Can the Agency clarify the meaning of "for any purpose"	Please see answers to questions 168, 181 and 184. "For any purpose" refer to the use of Foreground IPR.
228	Technical	SRS-275, SRS-276 SOW-325	SRS refers to different "modes of operation" e.g. training, demo and operational, whereas SOW mentions "multiple instances of an approved baseline release (up to four: operational instance, exercise instance, training instance and test instance)". Can you clarify the relationship between instances and modes of operation?	"Modes of operation" and "instances" are the same. Supplier shall ensure system is capable of providing all these modes of operation/instances.
229	Technical	SOW 4.1.1. Figures 4.1 & 4.2	Can the Purchaser clarify the position of the DMT and UAT on these timelines?	Figure 4.1: DMT and UAT are part of the WP1 configuration phase, also refer to Figure 4.4 which gives more details. Figure 4.2: DMT is part of the WP2 configuration phase, also refer to Figure 4.5 which gives more details.
230	Technical	Bidding Sheets, Tab "CLIN Summary"	Can the Purchaser clarify in which CLIN the DMT, UAT and SiAT activities can be placed?	For WP1: in CLIN 1.4.1 and 1.4.2. For WP2: in CLIN 2.3.1 and 2.3.2
231	Technical	Bidding Sheets, Tab "CLIN Summary"	Can the Purchaser clarify in which CLIN the Factory Acceptance Phase (page 16, Table 3.1 of the SOW), activities should be placed?	For WP1: in CLIN 1.4.2. For WP2: in CLIN 2.3.2
232	Technical	SOW Table 4.2,	Where will take place the site survey and the activation related to the deployable CIS configuration? Could you clarify "Europe" in table 4.2? Is it Brunssum?	The installation location is either the location of the deployable kit in one of the joint HQs (JFC Brunssum, JFC Naples) or LANDCOM or a remote access terminal to the deployable kit
233	Technical	SOW, Table 4.1, p45 & Annex A-Bidding Sheets	"1 iteration for the train the trainer courses": it is also mentioned that the train the trainer courses are for two locations (Izmir and The Hague – reference: Bidding sheets). Could you confirm if there are 1 or 2 train the trainer courses?	There is 1 train the trainer course. Dependent on the location of the students, this will be in The Hague or Oeiras.
234	Technical	SOW Page 45 : Table 4.1	In the SOW some paragraphs with "the Contractor shall" statement are not numbered as [SOW-X]: please confirm whether they are to be considered as SOW requirements: 4.3.2.2.4, 4.3.2.2.5, 4.8.4.4 (end of the paragraph).	4.3.2.2.4 and 4.3.2.2.5 are to be considered as SOW requirements and should have been marked as [SOW-X]. 4.8.4.4 does not exist.
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241	Technical	Statement of Work (SOW), [SOW-028] ; [048] ; §3.5	Could you please clarify which costs are to be taken into account by the bidders? [048] indicates a lot of purchaser furnished services (licenses included?) while [SOW-028] seems to indicate the contrary. "The Contractor shall include the associated costs for the Microsoft Azure Cloud Services and tooling in its price estimation." Could you please provide the different costs related to the mandatory azure Services that are to be funded by the contractor? Has the IaaS services (compute) to be funded by the contractor? Could you please describe the services available in the other platforms (IVVQ testbed, Support & Reference)?	Refer to the Amended para 3.5 of the SOW Amendment 5 No additional services are available in the other platforms mentioned.
242	Technical	Statement of Work (SOW)	Could you provide the list of supported OS?	- Windows Server 2016/2019/2022
243	Technical	SOW Annex B : & Book I-	"[214] ICD documents are included for reference in order for the Contractor to be able to assess the complexity and scope: ICD documents may be updated during	Throughout the duration of the project, ICDs may be updated. Therefore, it is expected that some developments may be needed for all of the interfaces. The ICD
244	Technical	Annex A-Bidding Sheets	Could you please confirm that the training delivery is expected to be completed for all sites between EDC+6M and EDC+8M?	Confirmed
245	Technical	Book I - Annex D-	"F19.01 - D.1.3.1" DEMETER shall refine both Land C2 Training Needs Analysis, and Land C2 Training Requirements Analysis."	The Contractor has to assume that the TNA document will have to be produced from scratch.
246	Technical	SOW Page 45 : Table 4.1	Level of expertise / profile per training type : Could you confirm if several levels of expertise or profile are expected for each course type? If different levels are expected, could you provide more details?	This is a result of the target audience analysis as an outcome of the Training Needs Analysis. Refer to the already provided [NATO-Bi-SC-Dir-075-007] reference, Annex O where 5 proficiency levels have been described (Basic, Intermediate, Advance, Expert, Master).

251	Technical	Statement of Work (SOW). WP3	Could you please reconsider the mandatory use of the NSF for adaptations (source code & build) made under WP3? Indeed, WP3 adaptations may affect to some different existing parts of the actual definition of the COTS and it will be hard to handle both existing COTS definition and its roadmap (obsolescence management, new features) and DEMETER's one in different environments.	NSF is to be used for foreground IPR additions to the COTS, such as interoperability adaptations on the SOA-IDM platform. For any adaptations to the COTS itself, the Contractor is expected to have its own platform. For these adaptations, the NSF is not to be used.
252	Technical	Statement of Work (SOW)	As stated in Statement of Work [126], the COTS version for WP2 is likely to be a new version bringing additional or improved features/capabilities iaw the COTS roadmap. If WP3 is exercised, depending on the date of exercise, the selected interoperability adaptations will be developed from the current COTS version (WP1) and in parallel of the new COTS version development to be used in WP2. The SOW current timeline (Figure 1.2 and Figure 4.5) doesn't include any activity for validation of WP3 interoperability adaptations with the WP2 COTS version before deployment and activation. Please clarify	It's the responsibility of the Contractor to plan for all necessary activities, as stated in the guidelines for WP3 in the bidding sheets.
253	Technical	SOW-Annex A-SRS, Page 9 Requirement ID: SRS-267	This requirement demands HTML5/CSS3 technology for the client UI, however requirements SRS-150, SRS-151, SRS-163, SRS-164 and SRS-184 open the door to thick client technology. Can you clarify?	Note that the SOW - Annex A SRS is provided for guidance, as it reflects the Purchaser's interpretation of the foreseen comprehensive requirements scope. It will be updated during the Pre-award discussions to reflect the selected COTS capabilities and further refined at the time of WP3 implementation, if that option is exercised. However, since the Purchaser is buying a COTS solution, there may be other ways to satisfy the requirements. The scoring of criteria and sub-criteria will be based on the characteristics of the COTS as provided by the bidder in their bid. A web client is indeed the preferred solution.
254	Technical	Statement of Work (SOW), Annex A and Annex B	The IFB documents contain multiple references to DEMETER interfaces with external systems, including Information Products identification: <ul style="list-style-type: none"> • SOW Annex B, Table 10.1 • SOW Annex B, Table 10.2 • SOW Annex B, Figure 10.1 • SOW Annex A requirements Unfortunately those references are not fully aligned. Can you clarify the order or precedence of the various references above?	Order of precedence in case of discrepancies with regard to DEMETER interfaces with external systems: 1. The tables in Annex B 2. The figure in Annex B 3. Annex A.
255	Technical	SOW §9 References, Table	According to this table, DEMETER should interface NIRIS to get the Recognized Air Picture. The table gives as interface description "L16" and "TCP/IP – UDP" as	NIRIS supports JREAP-C, in accordance with STANAG 5518Ed4, over TCP/IP (Server and Client) and UDP (unicast, broadcast and multicast), since 2008.
256	Technical	SOW Annex B Interfaces, page 94, Table 10.1 & SOW-Annex A-SRS	ITSM system is only listed in Table 10.1 of the SOW. No requirement deals with this system in the SRS. Do you confirm that DEMETER should interface ITSM system? Could you provide the ICD document [R-ICD-ITSM] describing this interface?	Bidder should assume that DEMETER is capable of some form of structured error messaging to support the production of ITSM incidents. In the SRS further error logging details have been provided.
257	Technical	SOW Page 45 : Table 4.1	Training sites : Could we have the sizing of the total number of trainees per site	Refer to Table 4.1 in the SOW for the number of seats per iteration. For the User courses, it can be assumed that 1-2 iterations per JFC need to be conducted; the remaining iterations will be in Izmir.
258	Technical	Annex D-TVCRM.xlsx, Annex E - Eval Criteria to Reqt Matrix.xlsx	The descriptions of sub-criteria E04.14 and E04.15 have been swapped between both documents. Please confirm that the right description is that of 04-IFB-CO-115791-DEMETER-Book I - Annex E - Eval Criteria to Reqt Matrix.xlsx and issue an updated version of 03-IFB-CO-115791-DEMETER-Book I - Annex D-TVCRM.xlsx?	The TVCRM is leading. Amended Annex E is being released with Amendment 5.
259	Technical	Book I-Bidding Instructions.pdf & Bidding Sheets & Statement of Work (SOW)	As mentioned in article 1.2.1 of the bidding instructions, the scope of the Invitation for Bid (IFB) is for services to provide the users with the best available Commercial-Off-The-Shelf (COTS) software product. The product description of the tenderer's offer will show the level of compliance by detailing how the COTS meets the criteria's features. When a criteria is fully met by the tenderer's COTS, no corresponding WP3 price will appear in the bidding sheet. The level of compliance will be evaluated in the bidding process by the NCIA (preferred bidder selection and test drive). Will the compliance of the COTS be challenged again during project execution? Indeed, it is stated in the SOW that all the SRS requirements will be assessed during the project phase (IADT principle). Could you specify how a disagreement about the acceptance criteria ([SOW-111]) will be dealt with?	The bidding process and the test drive aim at identifying the best available COTS solution. However, the compliance of the COTS will be fully assessed during project execution and disagreements about the acceptance criteria will be dealt with in accordance with the applicable Contract General or Special Provisions. Please note that the SOW - Annex A SRS is provided for guidance, as it reflects the Purchaser's interpretation of the foreseen comprehensive requirements scope. It will be updated during the Pre-award discussions to reflect the selected COTS capabilities and further refined at the time of WP3 implementation, if that option is exercised.
260	Technical	SRS-253	It is stated that "DEMETER can be deployed and operated at environments where database cluster is used for storage." Our system stores operational and management data in DB clusters. Is it also expected to store files, media etc. in the DB cluster?	It is not required that files, media, etc. are stored in the DB cluster, however there is a possibility to use EDMS (Data Handling System) and NIP (SharePoint based) storage.
261	Admin	Bidding Instructions 2.11.3/4	What other accepted methods of Standby Letters of Credit can the Bidder use, aside from counter-guarantee, that are preferred by the agency?	The acceptable methods for Bid Guarantees are detailed in section 2.11.3 of Book I - Bid Guarantee, while the list of acceptable banks to issue bid guarantee is provided in Annex F of the same document. 2.11.5. Alternatively, a Bidder may elect to electronically make a cash deposit of the required Guarantee directly to the bank account of the NCI Agency (no cheques). The NCI Agency's bank account details will be provided separately upon request.

Example of the Economic Price Adjustment (EPA) calculation

$$P = P_o * (0.2 + 0.7 L/L_o + 0.1 M/M_o)$$

P = Revised price for the Milestone applicable after EPA

P_o = Total Base Contract Price of the original Milestone at Bid Closing Date (BCD)

L = Labour index value registered in month "n" after EDC, n defined per Milestone as per table in Contract Special Provisions

L_o = Basic index for Labour value at BCD

M = Material (Producer Price) index in month "n" after EDC, n defined per Milestone as per table in Contract Special Provisions

M_o = Basic index for Producer Price value at BCD

Country: Belgium

BCD = 01/07/2019 2019/Q3

Milestone = MS08

P_o = € 1.000.000

n = 13

Price adjustment date (BCD + n) = 01/08/2020 2020/Q3

Lo =	99.6
Mo =	112.2
L =	103.3
M =	109.3

P = € 1.023.419