



**ACQUISITION**

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NCIA/ACQ/2016/1508  
16 August 2016

To: See Distribution List

Subject: **Distribution of Invitation for Bid (IFB) Amendment 2**  
**IFB-CO-14171-PMIC: To Provide an Integrated Programme Management and**  
**Integration Capability (PMIC)**

Reference(s): AC/4-DS(2015)0023  
Project Serial No.: 2014/OIS03096  
Commitment Number: N/A

1. Forwarded herewith for your action and/or file is/are copy/copies of subject **Amendment 2** to the Invitation for Bid (IFB).
2. The effective date of this **IFB Amendment 2** is: 16 August 2016.

FOR THE GENERAL MANAGER:

A handwritten signature in black ink, appearing to be 'Ijeoma Ezeonwuka', written over a horizontal line.

Ijeoma Ezeonwuka  
Contracting Officer

Attachment: As stated



NATO Communications  
and Information Agency  
Agence OTAN d'information  
et de communication  
Avenue du Bourget 140  
1110 Brussels, Belgium  
[www.ncia.nato.int](http://www.ncia.nato.int)



**External Distribution List  
IFB-CO-14171-PMIC\_Amendment 2**

**All Nominated Prospective Bidders** 1

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

|                 |   |
|-----------------|---|
| Albania         | 1 |
| Belgium         | 1 |
| Bulgaria        | 1 |
| Canada          | 1 |
| Croatia         | 1 |
| Czech Republic  | 1 |
| Denmark         | 1 |
| Estonia         | 1 |
| France          | 1 |
| Germany         | 1 |
| Greece          | 1 |
| Hungary         | 1 |
| Iceland         | 1 |
| Italy           | 1 |
| Latvia          | 1 |
| Lithuania       | 1 |
| Luxembourg      | 1 |
| The Netherlands | 1 |
| Norway          | 1 |
| Poland          | 1 |
| Portugal        | 1 |
| Romania         | 1 |
| Slovakia        | 1 |
| Slovenia        | 1 |
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| Turkey          | 1 |
| United Kingdom  | 1 |
| United States   | 1 |

**Embassies in Brussels (Attn: Commercial Attaché):**

|                |   |
|----------------|---|
| Albania        | 1 |
| Bulgaria       | 1 |
| Canada         | 1 |
| Croatia        | 1 |
| Czech Republic | 1 |
| Denmark        | 1 |
| Estonia        | 1 |
| France         | 1 |
| Germany        | 1 |

|                                                                                                                            |   |
|----------------------------------------------------------------------------------------------------------------------------|---|
| Greece                                                                                                                     | 1 |
| Hungary                                                                                                                    | 1 |
| Iceland                                                                                                                    | 1 |
| Italy                                                                                                                      | 1 |
| Latvia                                                                                                                     | 1 |
| Lithuania                                                                                                                  | 1 |
| Luxembourg                                                                                                                 | 1 |
| The Netherlands                                                                                                            | 1 |
| Norway                                                                                                                     | 1 |
| Poland                                                                                                                     | 1 |
| Portugal                                                                                                                   | 1 |
| Romania                                                                                                                    | 1 |
| Slovakia                                                                                                                   | 1 |
| Slovenia                                                                                                                   | 1 |
| Spain                                                                                                                      | 1 |
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NCIA/ACQ/16/1471  
16 August 2016

To : All Nominated Prospective Bidders  
Subject : **Amendment 2 to IFB-CO-14171-PMIC**

**Responses to Clarification Requests and Changes to IFB Documentation**

**IFB-CO-14171-PMIC: Invitation for Bid to Provide an Integrated Programme Management and Integration Capability (PMIC)**

Reference(s) : A. AC/4-D/2261 (1996 Edition)  
B. AC/4-D(2008)0002-REV2 and AC/4-D(2009)0002  
C. NSIP Project Serial 2014/0IS03096  
D. AC/4(PP)D/27265-ADD5-REV1-FINAL  
E. AC/4-DS(2015)0023  
F. NCI Agency NOI NCIA/ACQ/2015/1827 dated 21 December 2015  
G. Issuance of IFB-CO-14171-PMIC dated 10 June 2016  
H. AC/4-DS(2016)0018  
I. Issuance of IFB-CO-14171-PMIC, Amendment 1 dated 25 July 2016

Dear Sir/Madam,

1. The purpose of this Amendment 2 to IFB-CO-14171-PMIC is to:
  - a. Provide all Nominated Bidders with the NCI Agency responses to Clarification Requests (CR) received for the subject IFB. The Purchaser-provided responses to CR are issued as Annex A to this letter and will also be made available for download via the PMIC IFB Web Portal and;
  - b. Extend the Closing Time for Submission of Bids.
2. As a result of the responses to CR provided herein, the following IFB documents have been revised:
  - a. 1-IFB-CO-14171-PMIC-Book I-Bidding Instructions
  - b. 2-IFB CO-14171-PMIC-Book I-Annex A-Bidding Sheets
  - c. 4-IFB-CO-14171-PMIC-Book II-Prospective Contract (with Part II)



- d. 5-IFB CO-14171-PMIC-Book II-Part I-SSS
- e. 8-IFB-CO-14171-PMIC-Book II-Part IV-SOW-Annex A-Performance Goals.

By virtue of this Amendment 2 they replace and supersede any previous version issued in the context of IFB-CO-14171-PMIC.

- 3. All amended documents are available for download via the PMIC IFB Web Portal at: <https://ifb.ncia.nato.int/IFB-CO-14171-PMIC>
- 4. All other IFB documents (as noted below) remain unchanged in this Amendment:
  - a. 3\_IFB-CO-14171-PMIC-Book II-Contract Cover Sheet.
  - b. 6\_IFB-CO-14171-PMIC-Book II-Part III-Contract General Provisions.
  - c. 7-IFB-CO-14171-PMIC-Book II-Part IV-SOW.
- 5. The NCI Agency point of contact for all information concerning this IFB is Ms. Ijeoma Ezeonwuka, Contracting Officer, who may be reached at [Ijeoma.Ezeonwuka@ncia.nato.int](mailto:Ijeoma.Ezeonwuka@ncia.nato.int).
- 6. The reference for the IFB is **IFB-CO-14171-PMIC**, and all correspondence concerning this IFB shall reference this number.
- 7. **THE CLOSING TIME FOR SUBMISSION OF BIDS IN RESPONSE TO THIS INVITATION FOR BID IS EXTENDED IN ACCORDANCE WITH REFERENCE A TO 12:00 HOURS (BRUSSELS LOCAL TIME) ON 13 SEPTEMBER 2016.**

FOR THE GENERAL MANAGER:

A handwritten signature in black ink that reads 'P. Scaruppe'.

Peter Scaruppe  
Director of Acquisition

**Attachments:**

- A) Clarification Requests and Responses to IFB-CO-14171-PMIC, Amendment 2.
- B) Revised Bidding Documentation per Paragraph 2 of this letter.



Annex A

ADMINISTRATIVE or CONTRACTUAL CLARIFICATION REQUESTS

| Index No. | IFB Source Document                          | IFB Paragraph Reference                                   | Bidder's Question                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NCI Agency's Response                                                          | IFB Package Amended | CR Released in AMD # |
|-----------|----------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------|----------------------|
| CR#6      | Book II-Prospective Contract                 | Book II, Part II, Clause 7.2.6                            | Would it be acceptable for the Agency to apply a market conform payment term of 30 days after receipt of invoice? Or, alternatively, maintain the payment term of 45 days, instead of the proposed 60 days?                                                                                                                                                                                                                                                                                                                                      | The Purchaser has changed the invoice payment term from 60 days to 45 days.    | Yes                 | AMD 2                |
| CR#7      | Book II-Prospective Contract                 | Book II, Part II, Clauses 12.4 and 7.3.2                  | Clauses 12.4 and 7.3.2 seem to have overlapping scope and strive for similar - if not the same – purpose; at the same time providing the Purchaser insurance, and, as well, the Contractor an incentive to strive for delivery of quality products or services. Bidder supposes that having two clauses for the same purpose is superfluous. As well, in line with the proposed performance management approach to the Performance Goals, Bidder suggests that the Purchaser will scrap clause 12.4 from Book 2, “Prospective Contract”, please. | Clause 12.4 in Book II-Prospective Contract is hereby deleted in its entirety. | Yes                 | AMD 2                |
| CR#8      | Book II-Part III-Contract General Provisions | Book II-Part III-Contract General Provisions, Clause 13.9 | Bidder proposes, in line with market practice, to explicitly exclude indirect damages and to limit its entire liability for all claims related to the Agreement and that it will not exceed the amount of any actual direct damages incurred                                                                                                                                                                                                                                                                                                     | No. The Purchaser does not agree to this. The clause as is remains unchanged.  | No                  | AMD 2                |

|       |                                                                                       |                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                |    |       |
|-------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|       |                                                                                       |                                                                                                                             | by the NCI Agency, up to the amounts paid (if recurring charges, up to 12 months' charges apply) for the product or service that is the subject of the claim, regardless of the basis of the claim. Can Purchaser agree to that?"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                |    |       |
| CR#9  | Book II, Part II-Contract Special Provisions and Part III-Contract General Provisions | Book II, Part II-Contract Special Provisions, Clauses 22 and 23 and Part III-Contract General Provisions, Clauses 29 and 31 | <p>Referring to clauses 29 and 31 of the Contract General Provisions; if Bidder were required to install or to use software for the benefit of the NCI Agency during the delivery of the Services, Bidder will do so under the standard license terms applicable to that Software, or software specific agreements that were agreed to between Bidder and NCIA, if applicable.</p> <p>Any indemnification for infringement of intellectual property rights will also be pursuant to such terms. With reference to clause 22 and clause 23 of the Contract Special provisions, Bidder understands that the scope of the Services does not include any code developing and therefore no intellectual property rights will be transferred under the Agreement.</p> <p>Can NCI Agency accept this approach?</p> | No. The Purchaser does not accept this approach. The clause as is remains unchanged.                                                                                                                           | No | AMD 2 |
| CR#10 | Book 2, Part II-Contract Special Provisions and Part III-Contract General Provisions  | Book II, Part II-Contract Special Provisions, Clause 16 and Part III-Contract General                                       | Will Purchaser consider to adapt Clause 16 of the Contract Special Provisions such that the cumulative liquidated damages as defined in the clauses 16 (Contract Special Provisions) and 38 (Contract General Provisions), to be paid under this contract, shall never exceed 100 % of the total contract value of this contract?                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No. The Purchaser will not consider this approach as the clause is clear that if liquidated damages are accessed, it shall be no more than Fifteen Per Cent (15%) of the applicable payment for the milestone. | No | AMD 2 |



|       |                                                      | Provisions,<br>Clause 38                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                             |    |       |
|-------|------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
| CR#11 | Book II, Part III-<br>Contract General<br>Provisions | Book II,<br>Part III-<br>Contract<br>General<br>Provisions,<br>Clause 6    | <p>1. Will Purchaser consider that Bidder can only be responsible for compliance with laws applicable to Bidder generally and as a provider of IT products and services; we also comply with our own code of conduct; Bidder will also monitor IT laws that are applicable on Bidder as an IT service provider and insofar as related to the Services in scope?</p> <p>2. May Bidder, however, expect that the NCI Agency will inform Bidder on time of a change in laws and regulation applicable and relevant for the NCI Agency?</p>                                                                                                                                         | <p>1. No. The Purchaser does not consider this.</p> <p>2. Any change in laws and regulations that are applicable and relevant to the NCI Agency and that affects the contract shall be made know to the successful Bidder in the form of a contract amendment.</p>                                                                                                          | No | AMD 2 |
| CR#12 | Book II, Part III-<br>Contract General<br>Provisions | Book II,<br>Part III-<br>Contract<br>General<br>Provisions,<br>Clause 19.3 | <p>1. With reference to Clause 19, Bidder requests the NCI Agency will, when reasonably possible, give a prior written notice of two weeks before engaging in any such audit.</p> <p>2. Bidder agrees to produce its routinely prepared records that directly relate to the execution of this Contract. Bidder will not provide any information that (a) is confidential by law, applicable regulation or contract, (b) concerns Bidder's cost structure or margins. Bidder will have the right to deny access to its records when the outside auditor appointed by NCI Agency can reasonably be considered as a competitor of Bidder. Can NCI Agency accept this approach?</p> | <p>1. Any requests for prior notices is to be arranged between successful Bidder and Purchaser after contract award and prior to any such examination(s).</p> <p>2. No. The Purchaser does not accept this approach. Also, as it relates to the question of an outside auditor, as a general rule, the NCI Agency does not use commercial entities as outside auditors.</p> | No | AMD 2 |



|       |                                                      |                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                   |    |       |
|-------|------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----|-------|
| CR#13 | Book II, Part III-<br>Contract General<br>Provisions | Book II,<br>Part III-<br>Contract<br>General<br>Provisions,<br>Clause 19.7 | Bidder proposes to make use of benchmarking provisions instead, since this would protect the NCI Agency's price and since the described provisions are inherently bureaucratic and difficult for Bidder to perform, and if acceptable, reflect this in the "Contract Special Provisions"?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This clause remains as is and unchanged.          | No | AMD 2 |
| CR#14 | Book II, Part II-<br>Contract Special<br>Provisions  | Book II,<br>Part II-<br>Contract<br>Special<br>Provisions,<br>Clause 22.4  | <p>Open Source Software:</p> <p>The Contractor may use open source software in connection with the Services provided under this Contract. In that event, open source software is licensed and distributed to the Purchaser by the open source software distributors and/or respective copyright and other right holders ("Right Holders") under the Right Holders' terms and conditions.</p> <p>The Contractor is neither a party to the Right Holders' license nor a distributor of the open source software and is performing the Services on your behalf and based upon your specification. The Contractor does not provide any express or implied patent license or other license to open source software. The Contractor uses open source software "AS IS" and makes no representations or warranties, either express or implied, with respect to open source software or any software or material provided to the Purchaser under this Contract that links to or interacts with such open source software. The Contractor will not indemnify the Purchaser against any claim that open</p> | No. This Purchaser does not accept this approach. | No | AMD 2 |

|       |                             |                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                              |    |       |
|-------|-----------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----|-------|
|       |                             |                                                | <p>source software infringes a third party's intellectual property right nor will the Contractor be liable for any damages arising out of your use or distribution of open source software. Both of the Purchaser and the Contractor agree that modification or creation of derivative works of open source software is outside the scope of this Contract.). Contractor's COTS software may also include open source elements. The terms applicable to such element are included in the license terms for the product.</p> <p>Can Purchaser accept this approach?</p> |                                                                                              |    |       |
| CR#15 | Book I-Bidding Instructions | Book I-Bidding Instructions, Paragraph 3.5.3.6 | <p>Bidder would like to ask Purchaser to consider the sizeable investment that Bidder makes in order to prepare the bid and in respect to that, to delete the second sentence of the article 3.5.3.6 "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.", please?</p>                                                                                                                               | <p>No. This sentence will not be deleted. Paragraph 3.5.3.6 remains as in and unchanged.</p> | No | AMD 2 |

*\*CR#1 through CR#5 are in Amendment 1 which was issued on 25 July 2016.*

**TECHNICAL CLARIFICATION REQUESTS**

| Index No. | IFB Source Document                                   | IFB Paragraph Reference                              | Bidder's Question                                                                                                                                             | NCI Agency's Response                                                                                                                                                                                                                                                                                                                                                                               | IFB Package Amended | CR Released in AMD # |
|-----------|-------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
| CR#4      | Book II-Part IV-SOW, Section 2 "Applicable Documents" | Book II, Statement of Work, Section 2, Paragraph 2.2 | Would the Purchaser be so kind to prepare a pack with all referenced documents, please? Alternatively, please send the following referenced documents below:? | Except for the Bi-SC AIS Implementation Plan version 8.0 (which is provided for informational purposes only and is not required in order to submit compliant Bids), all pertinent information from these referenced documents have been retrieved and made a part of the IFB. Therefore, Potential Bidders do not require physical access to these documents in order to make their Bids compliant. | Yes                 | AMD 2                |
|           |                                                       |                                                      | •AC/4(PP)N(2014)0068 BC-D(2014)0083 Capability Package 9C0150 Implementation Plan, dated 27 June 2014                                                         |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •AC/4-DS(2015)0023                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •AC/4-D(2008)0002-REV2 and AC/4-D(2009)0002                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •NSIP Project Serial2014/OIS03096                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •AC/4-DS(2015)0023                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •NCI Agency NOI NCI/ACQ/2015/1827 dated 21 December 2015                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •AAP 20 – NATO Programme Management Framework (SOW Paragraph 2.2.1.4.1)                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |
|           |                                                       |                                                      | •AC/4(PP)N(2014)0100 NCI Programme Management and Integration Capability Exclusion Clause. (SOW Paragraph 2.2.1.5.6)                                          |                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                      |

|  |                                                                                                                                                                                                 |  |  |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  | <ul style="list-style-type: none"> <li>•EAPC(AC/322-SC/5)WP(2008)0031, Draft NATO CIS Policy and Directive to Support Capability Management, 14 July 2008. (SOW Paragraph 2.3.1.2)</li> </ul>   |  |  |  |
|  | <ul style="list-style-type: none"> <li>•AC/4(PP)N(2005)0135-ADD1, A Status Report on the Bi-SC AIS: A Supplementary Report on Schedule, Risk and Cost. (SOW Paragraph 2.3.1.4)</li> </ul>       |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Capability Package 9C0107 – Functional Services for Command &amp; Control of Operations (OPS FS), 18 September 2008. (SOW Paragraph 2.3.1.7)</li> </ul> |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Bi-SC Capability Package (CP) 9C0150, "Core Information Services For Command And Control" 8 January 2014. (SOW Paragraph 2.3.1.8)</li> </ul>            |  |  |  |
|  | <ul style="list-style-type: none"> <li>•The Alliance C3 Strategy, C-M(2014)0016, 7 Mar 2014 (SOW Paragraph 2.3.1.9)</li> </ul>                                                                  |  |  |  |
|  | <ul style="list-style-type: none"> <li>•C3 Policy Glossary, C-M(2015)0041-REV1 (Annex 1) (SOW Paragraph 2.3.1.10)</li> </ul>                                                                    |  |  |  |
|  | <ul style="list-style-type: none"> <li>•NATO ICT Service Management Policy, C-M(2015)0041-REV1 (Annex 2) (SOW Paragraph 2.3.1.11)</li> </ul>                                                    |  |  |  |
|  | <ul style="list-style-type: none"> <li>•C3 Capabilities and ICT Services Lifecycle Management Policy, C-M(2015)0041-REV1 (Annex 3) (SOW Paragraph 2.3.1.12)</li> </ul>                          |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Waveform Policy, C-M(2015)0041-REV1 (Annex 4) (SOW Paragraph 2.3.1.13)</li> </ul>                                                                       |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Alliance C3 Interoperability Policy, C-M(2015)0041-REV1 (Annex 5) (SOW Paragraph 2.3.1.14)</li> </ul>                                                   |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Federation of Communications Services Policy, C-M(2015)0041-REV1 (Annex 6) (SOW Paragraph 2.3.1.15)</li> </ul>                                          |  |  |  |
|  | <ul style="list-style-type: none"> <li>•NATO Software Policy, C-M(2015)0041-REV1 (Annex 7) (SOW Paragraph 2.3.1.16)</li> </ul>                                                                  |  |  |  |
|  | <ul style="list-style-type: none"> <li>•Policy on the Efficient Implementation of C3 Capabilities and ICT Services Delivery, C-M(2015)0041-REV1 (Annex 8) (SOW Paragraph 2.3.1.17)</li> </ul>   |  |  |  |
|  | <ul style="list-style-type: none"> <li>•NATO EA Policy, C-M(2015)0041-REV1 (Annex 9) (SOW Paragraph 2.3.1.18)</li> </ul>                                                                        |  |  |  |

|      |                                                  |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                   |     |       |
|------|--------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
|      |                                                  |                                                                       | <ul style="list-style-type: none"> <li>•NATO Cloud Computing Policy, C-M(2015)0041-REV1 (Annex 10) (SOW Paragraph 2.3.1.19)</li> <li>•Bi-SC AIS Implementation Plan version 8.0 (SOW Paragraph 2.3.2.1)</li> <li>•AC/4(PP)N(2005)0135, A Status Report on the Bi-SC AIS (SOW Paragraph 2.3.2.3)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                   |     |       |
| CR#5 | Book I-Bidding Instructions                      | Book I-Bidding Instructions, Paragraph 3.6.9.1                        | <p>“3.6.9.1. The Bidder shall provide a draft Programme Support Plan as described in the SOW explaining its proposed approach to maintain and support the programme management, engineering and integration tools, processes and testbed of the Bi-SC AIS and NGCS programme. The draft plan shall include the support services necessary, over the Ramp-Up and three execution stages, for maintenance and user support. It will include incidents, problems and change management; key performance indicators; and roles, including the identification of any necessary Service Level Agreements and Operational Level Agreements.”Bidder was unable to locate any further description in the SoW. Assuming there is no further detail beyond reference to the Plan being in line with ITIL 2011 in Table 5 Document Requirements List, we will respond in line with the information outlined in 1-IFB-CO-14171-PMIC Book I-Bidding Instructions section 3.6.9.1, and with reference to the ITIL standards. Does NCIA agree to this approach?</p> | <p>Yes, the Bidder is to respond in line with the information outlined in Book I-Bidding Instructions section 3.6.9.1 and with reference to the ITIL version 2011 as stated in Book I-Bidding Instructions, Paragraph 6.2.2.4, Table 5. The Table 5 is provided as an applicable quality standard against which the document will be reviewed for acceptance.</p> | No  | AMD 2 |
| CR#6 | Book II, Part IV SOW, Annex A- Performance Goals | Book II, Part IV SOW, Annex A- Performance Goals, Paragraph 1.3.1.1.5 | <p>In the Performance Goal 1.3.1.1.5 a monthly sub-programme review is requested. However, the SOW refers to a quarterly cadence. Which one is correct?</p> <p>Also, no MoSCoW rating is specified, should we consider this as a Must or is the priority of this Performance Goal rated lower?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p>Paragraph 1.3.1.1.5 of the Performance Goals document is amended as follows: "Review and amend the process for quarterly sub-programme progress reviews and conduct such reviews for each sub-</p>                                                                                                                                                             | Yes | AMD 2 |

|      |                      |                                         |                                                                                                                        |                                                                                                                                                      |     |       |
|------|----------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
|      |                      |                                         |                                                                                                                        | programme."<br>Its MoSCoW rating is M.                                                                                                               |     |       |
| CR#7 | Book II, Part IV-SOW | Book II, Part IV-SOW, Paragraph 4.8.2.3 | What CM Tool is currently in use and are there existing baselines in place that will be handed over to the contractor? | Both Bi-SC AIS and NGCS programmes use Rational DOORS for functional baselining and Microsoft Team Foundation Server for product baselining.         | No  | AMD 2 |
| CR#8 | Book II, Part IV-SOW | Book II, Part IV-SOW, Paragraph 6.2     | Is it possible to receive BAIP version 8.0 during the bidding phase?                                                   | Yes, this document will be provided during this bidding phase for informational purposes only and is not required in order to submit compliant Bids. | Yes | AMD 2 |

*\*CR#1 through CR#3 are in Amendment 1 which was issued on 25 July 2016.*

**PRICE CLARIFICATION REQUESTS**

| Index No. | IFB Source Document | IFB Paragraph Reference       | Bidder's Question                                                                                                                                                                                                                                                                                                                                                     | NCI Agency's Response                                                                                                                                                                                                                                                                                            | IFB Package Amended | CR Released in AMD # |
|-----------|---------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|
| CR#1      | Book II, Part I-SSS | Book II-Part I-SSS, Section 1 | <p>This spreadsheet seems to be identical to the "SECTION-1 SSS" sheet contained in spreadsheet "2_IFB CO-14171-PMIC-Book I-Annex A-Bidding Sheets.xlsx".</p> <p>Can the Purchaser explain the intended use of spreadsheet "5_IFB CO-14171-PMIC-Book II-Part I-SSS.xlsx"?</p> <p>Or, can Purchaser confirm it is NOT a required part of the Bidder's Bid Package?</p> | <p>Yes it is the same spreadsheet contained in Book I-Annex A-Bidding Sheets and it is required as part of the Bidder's Bid Package.</p> <p>Book I-Annex A-Bidding Sheets shall be used for evaluation purposes and before contract award while Book II-Part I-SSS becomes part of the contract after award.</p> | No                  | AMD 2                |

|             |                                                               |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |
|-------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|
| <p>CR#2</p> | <p>Book II, Part I-SSS and Book I, Annex A-Bidding Sheets</p> | <p>Book II-Part I-SSS, Section 1-SSS and Book I, Annex A-Bidding Sheets, Section 1-SSS</p> | <p>1. Can the Purchaser explain the difference between "Each" and "Lot" under UNIT (column H), should the entry in row 19 not be "Lot" and row 20 "Each"?</p> <p>2. Should the entries under quantity for deliverables with a required completion date "monthly" not be set to 12 instead of 6 for the (12 months) execution stages (e.g. 2.1.7 Project Checkpoint Reviews in row 87)?</p> <p>3. Cost Management (SOW reference 4.7) and Information Security Management (SOW reference 4.17) seem missing under the entries in Work Package 2: PMIC Programme/Project Support. Can the Purchaser explain why these areas are not included?</p> | <p>1. All references to "Lot" are now deleted and renamed as "Each".</p> <p>2. Deliverables with a required completion date as "monthly" and with a 12 months performance period is now set to 12 instead of 6.</p> <p>3. The Schedule of Supplies and Services (SSS) Work Package 2 (WP2) lists the deliverables which will be prepared by using core PMIC services listed in SOW 4.2 - 4.17. There is no one-to-one mapping between services and deliverables. Various combinations are required to produce items of the WP2. In this aspect, it should be seen that Cost Management and Information Security Management services will be necessary to create some deliverable even though they are individually not referenced in the SSS.</p> | <p>Yes</p> | <p>AMD 2</p> |
| <p>CR#3</p> | <p>Book I-Annex A-Bidding Sheets</p>                          | <p>Book I-Annex A-Bidding Sheets "Instructions" Tab, sub-item "Subcontract Labour"</p>     | <p>The description given is: "Indirect labour is all effort expended by the sub-contractor for the proposed solution. Prices must be traceable to the Subcontract &amp; Material BOE tab"; 1. To which part of the Bidding Sheets refers "the Subcontract &amp; Material BOE tab", exactly? 2. What is Purchaser's intent and purpose to have Bidder specify the labour costs between the prime and subcontractors?</p>                                                                                                                                                                                                                         | <p>1. This is amended to read as follows: "Indirect labour is all effort expended by the sub-contractor for the proposed solution. Prices must be traceable to the Subcontract &amp; Material BOE section under each CLIN's breakdown tab". 2. The intent is to find out if any work will be done by a subcontractor, and if so which portions of the work will be done by the subcontractor(s). The purpose is to be able to rightly address any potential future</p>                                                                                                                                                                                                                                                                            | <p>Yes</p> | <p>AMD 2</p> |

|      |                                                                          |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                        |     |       |
|------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
|      |                                                                          |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | changes in the work with the correct labour rate.                                                                                                                                                                                                                                                      |     |       |
| CR#4 | Book I-Bidding Instructions, Annex A-2 and Book I-Annex A-Bidding Sheets | Book I-Bidding Instructions, Annex A-2, Paragraph 4.2.1 and Book I-Annex A-Bidding Sheets, "Cover" Tab | With regards to "The bidder shall indicate on the Bidding Sheet Cover Page the currency in which its bid is expressed"; the COVER sheet appears not to have a field for entering the currency; where, on which cell on which worksheet, should Bidder indicate the currency?                                                                                                                                                                                                                                                                                                                                                             | The Book 1, Annex A-Bidding Sheets under the cover tab is now amended to include the Bid Currency field.                                                                                                                                                                                               | Yes | AMD 2 |
| CR#5 | Book I-Bidding Instructions, Annex A-2                                   | Book I-Bidding Instructions, Annex A-2, Paragraph 4.3.1.3                                              | <p>"4.3.1.3. The purpose of the BOE sheets is to provide the Purchaser with additional information relevant to the level of effort and costs associated with each specific task. This information will be used by the Purchaser within the framework of the evaluation effort for the purposes specified in Book I Section 4."</p> <p>In Book 1 section 4 (paragraphs 4.6.3.2 and 4.6.3.2.1) - it is specified that only the Sum of the Firm-Fixed Prices offered for CLINS 1 through 4 will be used for evaluation.</p> <p>Can Purchaser explain how and in which way the BOE Sheets will be used and contribute to the evaluation?</p> | The BOE sheets will be evaluated in order to enable the Purchaser to accurately assess the level of effort and labour mix proposed for each CLIN. The Purchaser will also evaluate the BOE sheets as part of the Price Balance and Realism process per Paragraph 4.6.5 of Book I-Bidding Instructions. | No  | AMD 2 |
| CR#6 | Book II, Part I-SSS and Book I, Annex A-Bidding Sheets                   | Book II, Part I-SSS and Book I, Annex A-Bidding Sheets, SECTION-1 SSS, CLINs 1.2.21 and 1.3.4          | Are CLINs 1.2.21 and 1.3.4 (Security Accreditation Plan) effectively the same plan?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | It is the same plan but for two separate Work Packages. The Security Accreditation Plan under CLIN 1.2.21 is for the PMIC Programme / Project Support (Ramp-Up Stage)-Work Package 2 while the Security Accreditation Plan under CLIN 1.3.5 is for                                                     | No  | AMD 2 |

|      |                                              |                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                       |     |       |
|------|----------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
|      |                                              |                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Testbed Support (Ramp-Up Stage: Task Order)-Work Package 3                                                                                                                                                                                                                                                                                                                                            |     |       |
| CR#7 | Book II, Part IV-SOW                         | Book II, Part IV-SOW                                         | In some cases the performance goals are not reflected, or not fully reflected in the CLINs – and vice versa; some of these Performance Goals are prioritized as Must Haves; should Bidder not price the cost of meeting these Performance Goals, or how shall these costs be considered in the Bid?                                                                                                                                                                                                                                                                  | Bidders shall price according to the CLINs in the Bidding Sheet (Book I-Annex A-Bidding Sheets) and not the Performance Goals. The Performance Goals (Book II-Part IV-SOW-Annex A-Performance Goals) will be used as a measure of how well the successful Bidder meet the requirements in the SOW and if any price reduction is to be applied in the event of marginal or unsatisfactory performance. | No  | AMD 2 |
| CR#8 | Book I-Bidding Instructions, Annex A-2       | Book I-Bidding Instructions, Annex A-2, Paragraph 1.2        | <p>It is stated that: "No alteration of the bidding sheets including but not limited to quantity indications, descriptions or titles are allowed with the sole exception of those explicitly indicated as allowed in this document. Additional price columns may be added if multiple currencies are bid, including extra provisions for all totals."</p> <p>Will the Purchaser allow the bidder to add rows to the pricing sheets, such as to the CLIN Breakdown-sheets and Schedule of Forward Labour Rates, without the risk of being declared non-compliant?</p> | Yes. This section of the Bidding Instructions is also amended to provide further clarification.                                                                                                                                                                                                                                                                                                       | Yes | AMD 2 |
| CR#9 | Book I-Annex A-Bidding Sheets, Section-1 SSS | Book I-Annex A-Bidding Sheets, Section-1 SSS, Work Package 2 | 1. To meet the performance goals there are multiple sub-CLINS in Work Package 2 that need to be produced or updated multiple times during a stage (e.g. on a quarterly basis or even ad-hoc). Nevertheless the QTY in the bidding sheets is set to 1 for all items in WP 2.                                                                                                                                                                                                                                                                                          | 1. Yes, since this not a yellow field, the Bidder is not allowed to update this quantity.                                                                                                                                                                                                                                                                                                             | No  | AMD 2 |

|       |                                                 |                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |       |
|-------|-------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|       |                                                 |                                                                         | <p>Since this is not a yellow field, we must assume we are not allowed to update this quantity.</p> <p>2. Can Purchaser please clarify if for these sub-CLINS either:</p> <ol style="list-style-type: none"> <li>1. Bidder should enter the total price for the number of instances needed or expected during a stage in the associated field;</li> <li>2. Bidder should enter the price for one instance and update the QTY; or</li> <li>3. Bidder should enter the price for one instance and NOT update the QTY.</li> </ol> <p>Please note that option 3 would imply that additional instances of a sub-CLIN (above QTY 1) will not be included in the total price as calculated in the Bidding Sheets and therefore will require additional budget.</p> | <p>2. The Bidder should enter the total price for the number of instances needed or expected during a stage in the associated field.</p>                                                                                                                                                                                                                                                                                                                                                  |    |       |
| CR#10 | Book II, Part IV-SOW, Annex A-Performance Goals | Book II, Part IV-SOW, Annex A-Performance Goals, Paragraphs 1.2 and 1.5 | <p>It is stated that in the Ramp Up Stage there are roughly 80 current projects under current framework;</p> <ul style="list-style-type: none"> <li>• 8 new projects will be created during this stage <ul style="list-style-type: none"> <li>• An undefined number of projects nearing to the end of their execution are foreseen to have lowest priority in this stage.</li> </ul> </li> </ul> <p>In the First Execution Stage there are</p>                                                                                                                                                                                                                                                                                                              | <p>As explained in paragraph 5.4-Performance Assessment under Book II-Part IV-SOW; the Project board will use these metrics to evaluate the Contractor's overall performance:</p> <ul style="list-style-type: none"> <li>- for the determination of the additional term earned by the Contractor or,</li> <li>- in case of Contractor's defective performance, for the determination of the price reduction that may be applicable based on the Contractor's failure to attain</li> </ul> | No | AMD 2 |

|       |                                                                                                            |                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |       |
|-------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------|
|       |                                                                                                            |                                                                                                                                 | <p>around 35 projects to be supported under the new contract (Bi-SC AIS and NGCS)</p> <ul style="list-style-type: none"> <li>• 8 new projects will be created during this stage;</li> <li>• 15 projects nearing completion will be given the lowest priority during this stage.</li> </ul> <p>Are the amounts of projects mentioned per stage correct; please clarify the apparent inconsistency between numbers of projects in the mentioned stages?</p> <p>If the number of projects will be changed, how much effort must Bidder assume for supporting these projects?</p> | <p>the goals specified in the Performance Goals.</p> <p>Therefore, the provided numbers are for planning and eventually for the performance assessment framework. Depending on the pace of the Bi-SC AIS and NGCS programmes; there may be less number of projects closed or more projects started. However these numbers indicated in Book II, Part IV-SOW, Annex A-Performance Goals, Paragraphs 1.2 and 1.5 will be used for the performance evaluation.</p>                                                                                                                                                                                    |    |       |
| CR#11 | Book II, Part IV-SOW, Book II-Part I-SSS, Section 1-SSS, and Book I, Annex A-Bidding Sheets, Section 1-SSS | Book II, Part IV-SOW, Paragraph 4.11.4.11, Book II-Part I-SSS, Section 1-SSS, and Book I, Annex A-Bidding Sheets, Section 1-SSS | <p>This Activity and its services are not referred in the SSS.</p> <p>How shall those activities be highlighted in the bid?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>There is no one-to-one mapping between these Activities and its services and the SSS. Various combinations are required to produce these Activities. SOW Paragraph 4.11.4.11 (which is the Maintenance section) includes activities supporting the following SSS deliverables:</p> <ul style="list-style-type: none"> <li>- Dependency Structure Matrix (SOW Paragraph 4.2.5.1.4)</li> <li>- Project Brief (SOW Paragraph 4.2.10.2.1.2.1)</li> <li>- Test scenario (SOW Paragraph 4.11.2.1.1.2)</li> <li>- Programme Test Requirements Baseline (SOW Paragraph 4.11.4.3.2)</li> <li>- Programme Test Plan (SOW Paragraph 4.11.4.4.1)</li> </ul> | No | AMD 2 |



|  |  |  |  |                                                                            |  |  |
|--|--|--|--|----------------------------------------------------------------------------|--|--|
|  |  |  |  | - System Security Requirements<br>Specification (SOW Paragraph 4.11.4.5.1) |  |  |
|--|--|--|--|----------------------------------------------------------------------------|--|--|

*There were no Clarification Requests related to Price were received in Amendment 1.*

**INVITATION FOR BID**

**IFB-CO-14171-PMIC**

**PROGRAMME MANAGEMENT AND INTEGRATION  
CAPABILITY  
(PMIC)**

**Project Serial No.: 2014/0IS03096**



**BOOK I**

**BIDDING INSTRUCTIONS**



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## SECTION 1 INTRODUCTION

### 1.1. Purpose

- 1.1.1. The purpose of this Invitation for Bid (IFB) is to award a Contract to provide Implementation Authority Programme and Integration Capability.
- 1.1.2. This project will harness the resources programmed under several projects in CP 9C0107 and CP 9C0150 to provide an integrated Programme Management and Integration Capability (PMIC), which will ensure a controlled evolution of the Bi-Strategic Automated Information Systems (Bi-SC AIS) and NATO General Communication Services (NGCS) as an increasingly effective contribution to future North Atlantic Treaty Organization (NATO) Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Capability.
- 1.1.3. This Contract will provide a framework through which a Contractor team will provide services to support the management, governance, and control of the implementation of the Bi-SC AIS and NGCS programmes and its constituent projects.
- 1.1.4. The purpose of this Contract is also to improve the benefit realisation, quality, timeliness, cost-effectiveness, and interoperability of Bi-SC AIS, and NGCS services through performance of management and technical services encompassing all key cross-cutting programme management, programme support, integration and testing functions.

### 1.2. Scope of Work

- 1.2.1. The PMIC project Contract will support 16 management and C4ISR technical services as shown below.

| Management Services |                           | C4ISR Technical Services |                                  |
|---------------------|---------------------------|--------------------------|----------------------------------|
| 1                   | Programme Management      | 9                        | Systems Engineering              |
| 2                   | Change Management         | 10                       | Integration Management           |
| 3                   | Communications Management | 11                       | Software Engineering and Design  |
| 4                   | Risk Management           | 12                       | Operational User Experience (UX) |
| 5                   | Schedule Management       | 13                       | Requirements Management          |
| 6                   | Cost Management           | 14                       | Programme Assurance              |
| 7                   | Configuration Management  | 15                       | Transition Management            |
| 8                   | Quality Management        | 16                       | Information Security Management  |

- 1.2.2. The NCI Agency has defined an overall programme and project management framework within which the PMIC will be implemented. This framework combines the PRINCE2 project management methodology with the knowledge areas and best practices defined in the Project Management Institute's Project Management Book of Knowledge and its Standard for Program Management. In addition, the NCI Agency intends to work with the PMIC Contractor to implement a process improvement approach that will progressively increase the maturity of Bi-SC AIS and NGCS programme management and integration processes to deliver capabilities faster, with higher quality, and with greater efficiency.

### **1.3. Overview of the Prospective Contract**

- 1.3.1. The Prospective Contract (Book II) requires the selected Contractor to deliver the PMIC capability and associated services. The Contractor shall perform all activities required as per Book II Part IV (Statement of Work – SOW) and shall deliver the associated deliverables as per Book II Part I (Schedule of Supplies and Services – SSS). The Contractor's work encompass the activities described in paragraph 1.2).
- 1.3.2. In accordance with the terms of the Contract, the Contractor shall be required to render performance for a Basic Contract and, subject to Purchaser's formal request, for Optional additional years of services as defined in the SOW and summarized below as follows:
- 1.3.2.1. The Basic Contract is to provide for a duration of 18 months to cover successful completion of performance associated with Ramp-Up Stage (6 Months) and 1st Execution Stage (12 Months) and for performance rendered on the basis of Task Orders as required in the Prospective Contract (Book II).
- 1.3.2.2. After the initial 18-month basic Contract term, two 12-months Options (for the Second and Third Execution Stages) is anticipated to be exercised if the Contractor's overall performance during the initial term of 18 months is considered satisfactory. These Options shall be evaluated. This means that they will be evaluated and scored as part of the source selection process following this IFB.
- 1.3.3. The Contract resulting from this IFB shall be awarded on a Firm Fixed Price basis. The Purchaser liabilities at the time of Contract signature shall be limited to the effort relevant to the Basic Contract as defined in the Statement of Work. Performance associated with Evaluated Options shall be subject to formal Purchaser request, in accordance with Clause 10 (Options) of the Contract Special Provisions, and shall not constitute an obligation on the part of the Purchaser at the time of Contract signature.

- 1.3.4. The Contract will be governed by Book II, Part II (Contract Special Provisions), and Part III (Contract General Provisions).

#### **1.4. Governing Rules, Eligibility, and Exclusion Provisions**

- 1.4.1. This solicitation is an International IFB and is issued in accordance with the procedures for International Competitive Bidding set forth in the NATO document AC/4 D/2261 (1996 Edition).

- 1.4.2. Pursuant to these procedures, bidding is restricted to companies from participating NATO member nations (see paragraph 2.1.1.5) for which a Declaration of Eligibility has been issued by their respective government authorities.

#### **1.4.3. Best Value Evaluation Method**

- 1.4.3.1. 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 (2008)0002-Rev 1 dated 27 April 2009 and AC/4-D (2008)0002-Rev 2 dated 15 July 2015.

- 1.4.3.2. The bid evaluation criteria and the detailed evaluation procedures are described in Section 4.

- 1.4.4. This IFB will not be subject to a public bid opening.

- 1.4.5. The Bidder shall refer to the Purchaser all queries for resolution of any conflicts found in information contained in this document in accordance with the procedures set forth in paragraph 2.6 "Request for IFB Clarifications".

#### **1.4.6. Exclusion Clause**

- 1.4.6.1. Prospective Bidders must note the Contracting limitations established in Clause 25 of the Contract Special Provisions of the Prospective Contract (Book II) regarding the participation in future Contracts for Bi-SC AIS and NGCS Programme related products and services.

- 1.4.6.1.1. The Bidder shall certify in Annex B-15, its comprehension and intention to comply with the exclusion clause in Clause 25 of Book II: Prospective Contract and acknowledge that during the maximum period of performance established by this Contract plus two (2) years, they shall be excluded from award of all BI-SC AIS and NGCS work performed at the NCI Agency. Failure to complete this Annex shall result in the Bidder being considered non-compliant.

- 1.4.6.2. Prospective Bidders and their prospective sub-Contractor(s) must also note that if they currently hold any contract(s) or sub-contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes (more specifically, contract(s) or sub-contract(s) under Table 1 of paragraph 1.2 of the SOW (Book II, Part IV)), then they are excluded from participating in this PMIC IFB.
- 1.4.6.2.1. The Bidder shall certify in Annex B-16, that neither they nor their prospective sub-Contractor(s) currently hold any contract(s) or sub-contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes. If they do, then they are subsequently excluded from participating in this PMIC IFB.
- 1.4.6.3. Bidders must also note that future IFBs for Bi-SC AIS and NGCS Projects as listed under Table 1 of the SOW will contain language limiting the Contractor's participation in these projects due to a real or apparent Conflict of Interest. An example of this language is hereby provided:

*“Prospective Bidders shall note that the Purchaser reserves the right to exclude the successful Bidder and its prospective Sub-Contractors from the award of this Contract if the successful Bidder or its prospective Sub-Contractors may be in a position to unfairly influence this Contract as a result of being selected for the work performed or to be performed under the BI-SC AIS and NGCS Programme Management and Integration Capability (PMIC) current Contract or prospective IFB. This applies also to the Contractor's/ Sub-Contractor's parent companies or subsidiaries unless the parent company or its subsidiaries will provide proof that they operate as a separate legal entity in a completely distinguishable and different business domain from that of the PMIC.”*

## 1.5. Security

- 1.5.1. This IFB has been classified as NATO UNCLASSIFIED.
- 1.5.2. 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.

- 1.5.3. 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 shall be liable for forfeiture of the Bid Guarantee.
- 1.5.4. 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. Any Reference Documents are provided "as is, without any warranty" as to quality or accuracy.

## 1.6. Bidders Conference

- 1.6.1. Prospective Bidders are invited to a Bidders Conference that will be held at the NCI Agency Premises in The Hague, Netherlands on 13 July 2016 from 0830 until 1500 (The Hague, Netherlands Time).
- 1.6.2. The purpose of the Bidders Conference is to brief the Prospective Bidders on the IFB. The Bidder's Conference is planned to include a briefing on the bidding process; the bidding sheets; the Prospective Contract; and the technical and project management aspects of the project.
- 1.6.3. The participation to the Conference is limited to a maximum of two (2) persons simultaneously per Bidder and per agenda item. No exception to this number of attendees will be made by NCI Agency because of space restrictions.
- 1.6.4. **Proposed Conference Programme:**

|           |                                         |
|-----------|-----------------------------------------|
| 0830-0900 | Arrival and Registration                |
| 0900-0920 | Administrative Brief                    |
| 0920-0930 | Welcome and Introduction                |
| 0930-0945 | Introduction of the PMIC Project        |
| 0945-1015 | Presentation of the Acquisition Process |
| 1015-1045 | Coffee Break                            |
| 1045-1145 | PMIC Technical Introduction             |
| 1145-1245 | Lunch Break (No Host)                   |
| 1245-1345 | Questions and Answers                   |
| 1345-1400 | Closing Remarks                         |
| 1400-1500 | Wrap-up and Networking                  |

- 1.6.5. Those companies that wish to participate in the Bidders Conference shall indicate their intention to attend not later than 7 days prior to the date of the Conference to the Point of Contact stated in paragraph 2.5.1. Security clearances are not required to attend the Bidders Conference. The interested firms shall email the Purchaser POC the following relevant data for each of the two company members (maximum per agenda item) attending:
- 1.6.5.1. The name of company
  - 1.6.5.2. Name of attendee(s) and Email Address(es)
  - 1.6.5.3. Passport number/ID
  - 1.6.5.4. Place and date of birth
  - 1.6.5.5. Agenda item attending
- 1.6.6. All attendee nominations shall be addressed to the IFB POC specified in paragraph 2.5.1.
- 1.6.7. The potential Bidders may submit questions in writing not later than 7 days prior to the date of the Conference to the POC, at the email address mentioned under paragraph 2.5.1. The Purchaser will endeavour to respond to the previously submitted questions at the Bidders Conference. If any additional questions are asked by the potential Bidders at the Bidders Conference, the Purchaser may attempt to answer them at that time, but any answer that may appear to amend terms, conditions and/or specifications of the Contract shall be considered to be formally included in the IFB only when a written amendment to the IFB is issued in writing by the Purchaser.
- 1.6.8. Answers to all questions will be issued in writing to all Bidders as soon as practicable after the Conference, whether or not the Bidders attended the Conference. The formal written answers will be the official response of the Agency, even if the written answer differs from the verbal response provided at the Conference.
- 1.6.9. Notwithstanding the written answers provided by the NCI Agency after the Bidders' Conference, the terms, conditions and language of the IFB remains unaltered unless a formal IFB amendment is issued by the NCI Agency and is identified as such.

**END OF SECTION 1**

## SECTION 2 GENERAL BIDDING INFORMATION

### 2.1. Definitions

2.1.1. In addition to the definitions and acronyms set in Clause 1 of Part II of the Prospective Contract and the definitions and acronyms set in the Clause 2 of the NCI Agency Contract General Provisions (Part III), 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”**: a 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 NATO nations contributing to the project, namely, (in alphabetical order): ALBANIA, BELGIUM, BULGARIA, CANADA, CROATIA, CZECH REPUBLIC, DENMARK, ESTONIA, FRANCE, GERMANY, GREECE, HUNGARY, ICELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, THE NETHERLANDS, NORWAY, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, TURKEY, 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. **“IFB”**: Invitation for Bid

## 2.2. Eligibility and Origin of Equipment and Services

- 2.2.1. As stated in paragraph 1.4.2, only firms from a Participating Country are eligible to engage in this competitive bidding process.
- 2.2.2. In addition, all Contractors, sub-Contractors and manufacturers, at any tier, must be from Participating Countries.
- 2.2.3. None of the work, including project design, labour and services shall be performed other than by firms from and within Participating Countries.
- 2.2.4. 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.
- 2.2.5. Unless otherwise authorised by the terms of the Prospective Contract, 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 Contractor to firms, individuals or governments other than within the NATO member community.

## 2.3. Bid Delivery and Bid Closing

- 2.3.1. All bids shall be in the possession of the Purchaser at the address given below in paragraph 2.3.2 on/or before 12:00 hours (Brussels Local Time) on **13 September 2016**, at which time and date bidding shall be closed.
- 2.3.2. Bids shall be delivered to the following address:
  - 2.3.2.1. **By Post:**  
NATO/ NCI Agency  
Acquisition Directorate  
Attn: Ms. Ijeoma Ezeonwuka (x8104)  
Avenue du Bourget 140, Bâtiment Z  
B-1110 Brussels, Belgium
  - 2.3.2.2. **Hand Carried Service or Courier:**  
NATO/ NCI Agency  
Acquisition Directorate

Attn: Ms. Ijeoma Ezeonwuka (x8104)  
Avenue du Bourget 140, Bâtiment Z  
B-1110 Brussels, Belgium

- 2.3.3. Bids submitted by electronic means (i.e. email) are not permitted and will not be considered. Bidders shall note that electronic (CD ROM) copies of their bid are required to be submitted with their "hard copy" in accordance with the submission prescriptions as further detailed in Section 3 of this Book I.
- 2.3.4. Bidders are advised that security or other personnel remaining on the premises outside of normal business hours may 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 (0830 to 1700 Monday through Thursday and 0830 to 1600 on Friday).
- 2.3.5. **Late Bids**
- 2.3.5.1. Bids which are delivered to the Purchaser after the specified time and date set forth in paragraph 2.3.1 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.
- 2.3.5.2. **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. Considering the number and quality of express delivery services, courier services and special services provided by the national postal systems, a late bid shall only be considered for award under the following circumstances:
- 2.3.5.2.1. A Contract has not already been awarded pursuant to the IFB, and
- 2.3.5.2.2. The bid was sent to the address specified in the IFB by ordinary, registered or certified mail not later than ten (10) calendar days before the bid closing date and the delay was due solely to the national or international postal system for which the Bidder bears no responsibility (the official postmark for ordinary and Registered Mail or the date of the receipt for Certified Mail will be used to determine the date of mailing), or
- 2.3.5.2.3. The bid was hand carried, or delivered by a private courier service and the Bidder can produce a receipt which demonstrates that the delivery was made to the correct address and received by a member of the NCI Agency and the failure to be received by the Contracting Authority was due to mishandling within the Purchaser's organisation.

- 2.3.5.3. A late bid which was hand-carried, or delivered by a private courier, for which a proper receipt cannot be produced, cannot be considered for award under any circumstances nor can late bids which bear no post marks or for which documentary evidence of mailing date cannot be produced.

## 2.4. Requests for Extension of Bid Closing Date

- 2.4.1. Bidders are informed that requests for extension to the closing date for the IFB shall be submitted to the Point of Contact indicated in paragraph 2.5 below **only** through the delegation of the country of origin of the firm which has been invited to bid or by that country's Embassy **no later than fourteen (14) calendar days** prior to the established bid closing date. Bidders are advised to submit their request in sufficient time as to allow their respective NATO Delegation or Embassy to deliver the formal request to the Purchaser within the above time limit.

## 2.5. Purchaser's Point of Contact

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

Ms. Ijeoma Ezeonwuka, Contracting Officer

Acquisition Directorate

E-mail: [ijeoma.ezeonwuka@ncia.nato.int](mailto:ijeoma.ezeonwuka@ncia.nato.int)

Tel: +32.2.707.81.04

*\*preference is via email over phone*

- 2.5.2. All correspondence related to the IFB will be forwarded to the contact details in paragraph 2.5.1 above.

## 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 seek clarification of any matters of an administrative or contractual, price, or technical in nature pertaining to this IFB.
- 2.6.2. All questions and requests for clarification shall be submitted via email (no phone calls please) to the point of contact identified in paragraph 2.5.1 using the Clarification Request Form provided at Annex D of this Book 1.
- 2.6.3. Such questions and requests for clarification shall be submitted **not later than twenty eight (28) calendar days** prior to the stated "Bid Closing Date". The Purchaser is under no obligation to answer questions submitted after this time. Requests for clarification must address the totality of the concerns of the Bidder, as the Bidder will not be permitted to revisit areas of the IFB for additional clarification except as noted in paragraph 2.6.4 below.

- 2.6.4. Additional requests for clarification are limited only to the information provided as answers by the Purchaser to Bidder's 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 mode used for the transmission of the clarification.
- 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 above.
- 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 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 (but not the identity of the questioner) 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 the mean of the issuance of a formal IFB amendment in accordance with paragraph 2.8.
- 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 responses issued by the Purchaser shall be regarded as the authoritative interpretation of the IFB. Any amendment to the language of the IFB included in the answers will be issued as an IFB Amendment and shall be incorporated by the Bidder in its 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.
- 2.7.2. 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 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. Such amendment will be accompanied by an acknowledgement of receipt which the Bidder shall complete and enclose as part of its submitted bid. This process may be part of the clarification procedures set forth in paragraph 2.6 or may be an independent action on the part of the Purchaser.
- 2.8.2. All revisions or amendments issued by the Purchaser shall also be acknowledged by the Bidder in its bid by completing the "Acknowledgement of Receipt of IFB Amendments" at Annex B-2 of this Book I. Failure to acknowledge receipt of all amendments may be grounds to determine the bid to be non-compliant.
- 2.8.3. 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.

## **2.9. Cancellation of Invitation for Bid**

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 (including participation at a Bidders Conference) in response to this IFB.

## **2.10. Modification and Withdrawal of Bids**

- 2.10.1. 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. Such modifications shall be considered as an integral part of the submitted bid.
- 2.10.2. 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 in paragraph 2.3.5 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.
- 2.10.3. 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.
- 2.10.4. Except as provided in paragraph 2.11.4.2, a Bidder may withdraw its bid after bid opening only by forfeiture of the Bid Guarantee.

## **2.11. Bid Validity**

- 2.11.1. 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.
- 2.11.2. 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.
- 2.11.3. 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.

- 2.11.4. Upon notification by the Purchaser of such a request for a time extension, the Bidders shall have the right to:
- 2.11.4.1. 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
  - 2.11.4.2. 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.
- 2.11.5. 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.

## 2.12. Bid Guarantee

- 2.12.1. The Bidder shall furnish with its bid, a guarantee in an amount equal to **Three Hundred Thousand Euros (€300,000)** with a validity equal to that of the bid as expressed in paragraph 2.11.1. The Bid Guarantee shall be substantially similar to Annex C as an irrevocable, unqualified and unconditional Standby Letter of Credit (SLC) issued by a Belgian banking institution fully governed by Belgian legislation or issued by a non-Belgian financial institution and confirmed by a Belgian banking institution fully governed by Belgian legislation. In the latter case, signed original letters from both the issuing institution and the confirming institution must be provided. The confirming Belgian bank shall clearly state that it will guarantee the funds, the drawing against can be made by the NCI Agency at its premises in Belgium. Bid Guarantees shall be made payable to the Treasurer, NCI Agency.
- 2.12.2. "Standby Letter of Credit" or "SLC" as used herein, means a written commitment by a Belgian financial institution either on its own behalf or as a confirmation of the Standby Letter of Credit issued by a non-Belgian bank 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. The term "Belgian financial institution" includes non-Belgian financial institutions licensed to operate in Belgium.
- 2.12.3. A format substantially similar to the one set in Annex C of this Book I shall be used by the issuing financial institution to create a Standby Letter of Credit acceptable to the Purchaser.
- 2.12.4. Alternatively, a Bidder may elect to post the required Guarantee by certified cheque. If this method is selected, Bidders are informed that the Purchaser will cash the cheque on the bid closing date.
- 2.12.5. 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.

- 2.12.6. Failure to furnish the required Bid Guarantee in the proper amount, and in the proper form and for the appropriate duration by the bid closing date may be cause for the bid to be determined non-compliant.
- 2.12.7. In the event that a Bid Guarantee is submitted directly by a banking institution, the Bidder shall furnish a copy of said document in the Bid Administration Package.
- 2.12.8. The Purchaser will make withdrawals against the amount stipulated in the Bid Guarantee under the following conditions:
  - 2.12.8.1. The Bidder has submitted a bid and, after bid closing date (including extensions thereto) and prior to the selection the compliant bid determined to represent the best value, withdraws the bid, or states that it does not consider the bid valid or agree to be bound by the bid, or
  - 2.12.8.2. The Bidder has submitted a compliant bid determined by the Agency to represent the best value, but the Bidder declines to sign the Contract offered by the Agency, such Contract being consistent with the terms of the IFB.
  - 2.12.8.3. 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 within a reasonable time.
  - 2.12.8.4. 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 at the date of Contract signature.
- 2.12.9. Bid Guarantees will be returned to Bidders as follows:
  - 2.12.9.1. 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);
  - 2.12.9.2. to all other unsuccessful Bidders within thirty (30) days following the award of the Contract to the successful Bidder;
  - 2.12.9.3. 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.
  - 2.12.9.4. pursuant to paragraph 2.11.4.2.

**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 or portal communication (<https://ifb.ncia.nato.int/IFB-CO-14171-PMIC>) to manage all correspondence related to this IFB, including IFB amendments and clarifications.

**2.14. Supplemental Agreements and Export Controlled Information**

- 2.14.1. Bidders are required, in accordance with the certificate at Annex B-7 of this Book I, 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 terminating an executed Contract if it is discovered that the terms of such Supplemental Agreements contradict the terms 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 22 of the Contract Special Provisions and Clause 30 of the Contract General Provisions set forth Parts II and III of Book II herein. These Clauses set forth the definitions, 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, in accordance with Annexes B-9, B-10, and B-11 of this Book I the IP proposed to be used by the Bidder that will be delivered with either Background Intellectual Property Rights (IPR) or Third Party IPR. Bidders are required to identify such IP and the basis on which the claim of Background or Third Party IP is made.
- 2.15.3. The identification of Bidders' Background and/or Third Party IP shall be limited to those IPs associated with products and/or documentation which is

indispensable in order to deliver, install and operate, support, maintain the system and to provide training and which are not related to products and/or documentation needed for internal processes only.

- 2.15.4. Bidders are further required to identify any restrictions on Purchaser use of the IP that is not in accordance with the definitions and rights set forth in the provisions of the Book II's Prospective Contract concerning use or dissemination of such IP.
- 2.15.5. Bidders are reminded that restrictions on use or dissemination of IP conflicting with the Book II terms and conditions or with the objectives and purposes of the Purchaser as stated in the Prospective Contract shall result in a determination of non-compliant bid.

**END OF SECTION 2**

## 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.
- 3.1.3. Bidders are informed that the quality, 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 written. 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 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. If no specific format has been established for electronic versions, Bidders shall deliver this type of documentation in an electronic format which is best suited for review and maintenance by the Purchaser (e.g. Project Master Schedule in MS Project format, Project Highlight Reports in MS Word).
- 3.1.7. All documentation submitted as part of the bid shall be "NATO UNCLASSIFIED".
- 3.1.8. **Language Of Bid**
- 3.1.8.1. All notices and communications regarding this IFB shall be written and conducted in English.
- 3.1.8.2. All bids shall be submitted in English.

### 3.2. Bid Package Content

- 3.2.1. The complete bid shall consist of three distinct and separated volumes described in the following subparagraphs. Detailed requirements for the structure and content of each of these packages are contained in these bidding instructions.
- 3.2.2. **Volume 1- Bid Administration Package:** containing one (1) hard copy and one (1) soft copy of the documents specified in paragraph 3.4.
- 3.2.3. **Volume 2- Price Quotation:** containing one (1) hard copy and two (2) soft copies (CD ROMs or DVDs) of information specified in paragraph 3.5.1. The soft copy shall be in MS Excel format which can be manipulated i.e. not an image and be the full and complete Price Quotation including the Contract Line Item Number (CLIN) Price breakdown sheets.
- 3.2.4. **Volume 3- Technical Proposal Package:** Technical Proposal Package composed of the further six (6) parts as specified below. Each of the Parts listed below shall be self-contained in a clearly marked separate binder or file for ease of segregation and handling.
- 3.2.4.1. **Part 1: Bidder Qualifications,** as described in 3.6.4, in four (4) hard copies and two (2) electronic copies.
- 3.2.4.2. **Part 2: Draft Project Management Plan,** as described in 3.6.5, in four (4) hard copies and two (2) electronic copies.
- 3.2.4.3. **Part 3: Draft Ramp-Up Stage Plan,** as described in 3.6.6, in four (4) hard copies and two (2) electronic copies.
- 3.2.4.4. **Part 4: Draft First Execution Stage Plan,** as described in 3.6.7, in four (4) hard copies and two (2) electronic copies.
- 3.2.4.5. **Part 5: Draft Programme Risk Management Plan,** as described in 3.6.8, in four (4) hard copies and two (2) electronic copies.
- 3.2.4.6. **Part 6: Draft Programme Support Plan,** as described in 3.6.9, in four (4) hard copies and two (2) electronic copies.
- 3.2.5. Bidding instructions describing the expected contents of each of the six (6) parts constituting the Technical Proposal Package are in paragraph 3.6 of this document. Advice to Bidders on how the Purchaser plans to conduct the technical evaluation of Parts 1 through 5 is contained in paragraph 4.5 of this document

### 3.3. Package Marking

- 3.3.1. The separate parts of the bid shall be placed in outer containers for delivery. All outer containers into which bidding documents are placed shall be opaque or wrapped in opaque paper, sealed and identified with the following markings:

**SEALED BID IFB-CO-14171-PMIC  
BOX X of Y (1 of 3, 2 of 3, etc.)  
NOTIFY Ms. Ijeoma Ezeonwuka (x8104) UPON RECEIPT**

- 3.3.2. Each of the bid parts placed in the outer container(s) shall be separately wrapped (multiple copies of the same document may be wrapped together), and marked as follows:

- 3.3.2.1. Name and address of the Bidder.
- 3.3.2.2. The words “SEALED BID” followed by the reference “IFB-CO-14171-PMIC”; and
- 3.3.2.3. The appropriate package marking (i.e. Volume 1: Bid Administration Package (Copy#); Volume 2: Price Quotation (Copy#); and Volume 3: Technical Proposal Package (Copy#)).

### 3.4. Volume 1: Bid Administration Package

- 3.4.1. The Bid Administration Package must include the original of the Bid Guarantee required by paragraph 2.12 of the Bidding Instructions. If the Bid Guarantee is sent to the Purchaser directly from the Bidder's bank, a letter, in lieu of the actual Guarantee, shall be included specifying the details of the transmittal. Bidders are reminded that the Bid Guarantee shall reflect any extensions to the bid validity date due to extensions in the bid closing date.
- 3.4.2. The Package shall include the Certificates set forth in Annexes to these Bidding Instructions, signed in the original by an authorised representative of the Bidder. The Certificates are as follows:
- 3.4.2.1. Annex B (Certificate of Legal Name of Bidder)
- 3.4.2.2. Annex B-2 (Acknowledgement of Receipt of IFB Amendments)
- 3.4.2.3. Annex B-3 (Certificate of Independent Determination)
- 3.4.2.4. Annex B-4 (Certificate of Bid Validity)
- 3.4.2.5. Annex B-5 (Certificate of Exclusion of Taxes, Duties, and Charges)

- 3.4.2.6. Annex B-6 (Comprehension and Acceptance of Contract Special and Contract General Provisions)
  - 3.4.2.7. Annex B-7 (Disclosure of requirements for NCI Agency Execution of Supplemental Agreements) as applicable.
  - 3.4.2.8. Annex B-8 (List of Prospective Subcontractors)
  - 3.4.2.9. Annex B-9 (Bidder Background IPR)
  - 3.4.2.10. Annex B-11 (List of Third Party IPR).
  - 3.4.2.11. Annex B-10 (List of Subcontractor IPR)
  - 3.4.2.12. Annex B-12 (Certificate of Origin of Equipment, Services, and Intellectual Property)
  - 3.4.2.13. Annex B-13 (List of Proposed Key Personnel)
  - 3.4.2.14. Annex B-14 (Certificate of Price Ceiling)
  - 3.4.2.15. Annex B-15 (Comprehension and Intention to Comply with Exclusion Clause and Conflict of Interest)
  - 3.4.2.16. Annex B-16 (Certification as a Non-holder of Contract(s) or sub-Contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes)
  - 3.4.2.17. Annex C Bid Guarantee-Standby Letter of Credit
- 3.4.3. **No information disclosing or contributing to disclose the Bid Price shall be made part of the Bid Administration Package. Failure to abide to this prescription may result in the bid being declared non-compliant.**

### **3.5. Volume 2: Price Quotation**

#### **3.5.1. Package Contents**

- 3.5.1.1. This envelope must contain the following documentation and media in the quantities provided in paragraph 3.2.3:
- 3.5.1.2. Annex A-1 “Bidding Sheets”
- 3.5.1.3. 2\_IFB-CO-14171-PMIC Book I Annex A Bidding Sheets.xlsx issued as part of this IFB

### 3.5.2. General Rules

- 3.5.2.1. Bidders are informed that the Total Price Quotation for the Basic Scope of the intended Contract (i.e. Ramp-Up Stage of 6 Months plus the 1<sup>st</sup> Execution Stage of 12 Months for a total of 18 months) shall not exceed the amount of **Eight Million Four Hundred and Fifty Six Thousand Three Hundred and Eleven Euros (€8,456,311)**. Bids submitted in excess of this figure will be determined to be non-compliant and eliminated from further consideration.

### 3.5.3. Pricing Prescriptions

- 3.5.3.1. Annex A-2 (Instructions for Bidding Sheets Preparation) to the present Book I illustrates the price bid requirements associated with the completion of the Bidding Sheets. All prescriptions illustrated therein are to be regarded as mandatory. Failure to abide to these prescriptions may lead to the bid being declared non-compliant.
- 3.5.3.2. Bidders shall prepare their Price Quotation by completing the Bidding Sheets referenced in paragraph 3.5.1.3, in accordance with the instructions specified in Book I Annex A-2. Such documentation constitutes an integral part of this IFB and prescriptions contained therein shall be referred to for the purpose of the evaluation set forth in paragraph 4.6.
- 3.5.3.3. 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 to include those expressed in the SOW.
- 3.5.3.4. When completing the Bidding Sheets the Bidder shall insert information in all yellow cells of the Bidding Sheets and complete the Pricing Summary as instructed. A price for each specified element needs to be supplied on each CLIN. Prices should not be grouped. 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 and in the currency quoted. If the price of a line item is expressed in different currencies, these shall be identified, and there shall be as many totals on that line item as there are currencies. In preparing the Price Quotation, Bidders shall ensure that the prices of the Sub-items total the price of the major item of which they constitute a part.
- 3.5.3.5. Bidders shall **furnish Firm Fixed Prices** for: the Ramp-up stage of 6 months plus the 1st execution stage of 12 months as well as options for a 2nd and 3rd optional execution stages of 12 months each in accordance

with the format set forth in the instructions for preparation of the Bidding Sheets. These options may be exercised by the Purchaser, at the sole discretion of the Purchaser in accordance with Clause 10 of the Contract Special Provisions (Book II Part II). The Purchaser's decision to exercise any Options will take into consideration the Contractor's successful performance on the basic Contract, as well as the availability of the required funding.

- 3.5.3.6. 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.
- 3.5.3.7. Offered prices shall not be "conditional" in nature. Any comments supplied in the Bidding Sheets or in any part of the bid package which are conditional in nature, relative to the offered prices may result in a determination that the bid is non-compliant.
- 3.5.3.8. 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. In the case of inconsistencies between the electronic version of the Bidding Sheets and the paper "hard copy" of the Bidding Sheets, the "hard copy" will be considered by the Purchaser to have precedence over the electronic version.
- 3.5.3.9. 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:
- 3.5.3.9.1. the currency is of a "participating country" in the project, **and**
- 3.5.3.9.2. 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.
- 3.5.3.10. The Purchaser, by virtue of its 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.

- 3.5.3.11. 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.
- 3.5.3.12. Unless otherwise specified in the instructions for the preparation of Bidding Sheets in Annex A-2, 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.
- 3.5.3.13. All prices bid shall be clearly traceable in the detailed Bidding Sheets.
- 3.5.3.14. 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.
- 3.5.3.15. The Bidder’s attention is directed to the fact that Price Quotation shall contain no document and/or information other than the priced copies of the Bidding Sheets. Any other document will not be considered for evaluation.

### **3.6. Volume 3: Technical Proposal Package**

- 3.6.1. 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.
- 3.6.2. The following documents shall be part of the Technical Proposal Package:
  - 3.6.2.1. **Table of Contents:** which lists not only the section headings but also the major sub-sections, and topic headings required set forth in these Instructions or implicit in the organisation of the Engineering Proposal.
  - 3.6.2.2. **Executive summary:** Bidders shall provide an overview of the salient features of their technical proposal in the form of an executive summary. This summary shall not exceed 2 pages.
  - 3.6.2.3. **Bidder Qualifications**
  - 3.6.2.4. **Draft Project Management Plan**
  - 3.6.2.5. **Draft Ramp-Up Stage Plan**

- 3.6.2.6. **Draft First Stage Execution Plan**
- 3.6.2.7. **Draft Programme Risk Management Plan**
- 3.6.2.8. **Draft Programme Support Plan**
- 3.6.3. “Times New Roman” fonts in size 12 shall be used for normal text, and “Arial Narrow” fonts not smaller than size 10 for tables and graphics.
- 3.6.4. **Bidder Qualifications**
  - 3.6.4.1. **General.** Where the Bidder refers to experience in providing support to a customer, the Bidder shall identify the customer and provide the name, address, telephone number, and electronic mail address of a contact in that organization who can confirm the statements made in the bid. Examples mentioned without accompanying contact information will be ignored.
  - 3.6.4.2. The Bidder shall describe the corporate structure of the Prime Contractor and the administration of the prospective Project within the overall corporate structure. This section should indicate the chain of authority within the Prime Contractor’s organisation from the Project Manager to the Chief Executive Officer. The Bidder shall also describe the role, contributions, and corporate capabilities of its proposed sub-Contractors.
  - 3.6.4.3. The Bidder shall describe its experience and capabilities in managing and providing support to information systems programmes, and explain how these apply to the services required in this Contract. The Bidder shall identify its experience and qualifications in applying a recognized standard for programme management, preferably Managing Successful Programmes (MSP) or equivalent, and describe how and to what extent it supported programme governance, planning, and benefits managements. The Bidder shall provide a set of lessons learned from this experience and explain how these lessons might be applied to improve the implementation of the Bi-SC AIS and NGCS programme.
  - 3.6.4.4. The Bidder shall describe its experience and capabilities in managing information systems projects and application and infrastructure services, and explain how these apply to the services required in this Contract. The Bidder shall identify its experience in applying a recognized standard for project management and describe how it supported the planning, execution, and monitoring and control of projects. The Bidder shall identify the approximate number of its staff holding current professional project, preferably PRINCE 2, and programme management certifications, preferably MSP, and indicate what portion of these are proposed to support this Contract.

- 3.6.4.5. The Bidder shall describe its experience in carrying out overall C4ISR systems and services engineering and integration responsibilities for a major programme, and explain how these apply to the services required in this Contract. The Bidder shall describe its experience and qualifications in planning and implementing system of systems architectures for C4ISR capabilities. The Bidder shall describe its corporate engineering standards and processes, if these exist, and explain if and how these could be applied to support this Contract. The Bidder shall provide a set of lessons learned from this experience and explain how these lessons might be applied to improve the implementation of the Bi-SC AIS and NGCS programme.
- 3.6.4.6. The Bidder shall describe its experience and capabilities in developing and managing C4ISR systems and services, specifically experience in (NATO and/or national) military domain and engineering tasks, such as:
- 3.6.4.6.1. C4ISR systems architecture and services descriptions, and its maintenance and use during life cycle,
  - 3.6.4.6.2. C4ISR software architecture based on modern IT technologies,
  - 3.6.4.6.3. C4ISR interoperability and integration architecture based on NATO, national and commercial standards,
  - 3.6.4.6.4. C4ISR architecture assessment and evaluation reports,
  - 3.6.4.6.5. System level requirements management including non-functional requirements,
  - 3.6.4.6.6. Engineering documentations related with services, system and software development activities which are used as guidance/instructions by more than one implementation project,
  - 3.6.4.6.7. Operational user involvement activity reports which detail how stakeholder requirements were collected and how corresponding business models were developed, and how user acceptance criteria are captured,
  - 3.6.4.6.8. Transition to Software development factory management using modern tools and environments, e.g., DevOps or Continuous Integration,
  - 3.6.4.6.9. System release management using modern tools and environments, e.g., DevOps, or Continuous Integration
  - 3.6.4.6.10. Guidance documents to develop Proof of Concept (P.o.C.) software for analyzing technical issues and proposing a way ahead,

- 3.6.4.6.11. Process documentation and/or instructions for developing, assessing and maintaining modern user interfaces compliant with User Experience (UX) and user-centric design principles,
- 3.6.4.6.12. Documentation and reports related with usability and operational acceptance (usability testing, user acceptance test),
- 3.6.4.6.13. Documentation and reports for assessment of system and software quality (static code testing for quality and security vulnerabilities),
- 3.6.4.6.14. Use of TOGAF or U.S. Department of Defence Architecture Framework (DODAF) or the Zachman framework,
- 3.6.4.6.15. Implementing service oriented architecture (SOA) and its management and such SOA elements as a services catalogue,
- 3.6.4.6.16. Process documentation and/or instructions for administration and maintenance of Commercial-Off-The-Shelf (COTS) software and hardware for programme management, system and software engineering, and integration and testing.
- 3.6.4.7. The Bidder shall describe the relationship between the military domain & engineering activities with programme governance, planning, quality assurance, and configuration and change management processes.
- 3.6.4.8. The Bidder shall describe its experience and capabilities in test management and designing, implementing, and managing C4ISR systems validation testbed. It shall provide a high-level architectural view of at least one integration testbed and describe the role it played in organizing and performing local and distributed tests. It shall provide a sample test plan and an execution report which describe validation efforts required for standard-based software services and non-functional system requirements.
- 3.6.4.9. The Bidder shall describe its experience and capabilities in providing programme assurance support to information systems projects and programmes. The Bidder shall describe how it would apply these to the programme assurance services required in this Contract.
- 3.6.4.10. The Bidder shall describe its experience and capabilities in applying a recognized capability maturity model, such as the CMMI Institute's Capability Maturity Model Integration (CMMI) for Development. The Bidder shall identify the approximate number of its staff holding current CMM assessor certifications and indicate how many of these staff it proposes to include in its service delivery team. The Bidder shall identify at least one of its staff skilled to apply a method (such as, SEP's Architecture Tradeoff Analysis Method, ATAM) for evaluating C4ISR software architectures relative to quality attribute goals.

- 3.6.4.11. The Bidder shall describe its experience and capabilities in applying NATO C4ISR knowledge and experience to work with operational user community to understand user needs and to model operational artefacts (architectures, user stories, work flows, etc.).
  - 3.6.4.12. The Bidder shall describe its experience and capabilities in applying a structured User Experience (UX) process to C4ISR systems.
  - 3.6.4.13. The Bidder shall identify its corporate capabilities to supplement the services of its proposed on-site staff and explain how these would be applied to support this Contract.
  - 3.6.4.14. The Bidder shall identify and provide resumes or Curricula Vitae (CV) for staff it proposes for on-site support, including the following Key Personnel as well as staff assuming work package or task leader role:
    - 3.6.4.14.1. Project Manager (PM)
    - 3.6.4.14.2. Deputy PM
  - 3.6.4.15. Each CV shall identify the individual's relevant academic education, professional or technical training, job experience, corresponding programme services (Book II – Part IV SOW – Section 4) and labour category (Book II – Part IV SOW – Section 7) for this Contract. The Bidder shall provide a copy of any professional or technical certifications mentioned in this set of CVs.
- 3.6.5. **Draft Project Management Plan**
- 3.6.5.1. The Bidder shall provide a draft Project Management Plan (PMP) as outlined in the SOW, including all aspects of the project implementation, including the Contractor's project management structure and project control processes, personnel assignments, and external relationships necessary to provide the capability as required by this Contract. The initial Project Management Plan shall be a top-level document outlining the management approach and the monitoring and control mechanisms by which the Bidder proposes to manage the project across all Contract stages and provide the required services for programme management and technical support.
  - 3.6.5.2. The Bidder shall describe the corporate resources which are available to support the Project which are resident in the organisation of the Prime Contractor but not directly under the authority of the Project Manager. The Bidder shall describe the process by which the Project Manager may have access to these "in-house" corporate resources, the level of authority required in the Corporation hierarchy to secure the needed resources, and how their engagement will be managed.

- 3.6.5.3. The Project Management Plan shall identify any COTS or custom-developed information tools it proposes to use in delivering services and describe its expertise in applying them to similar situations. Where use of an existing Purchaser tool is proposed by the Bidder or directed by the SOW, the Bidder shall describe its expertise in using and managing the tool. The plan shall identify the service area(s) supported by each tool.
- 3.6.5.4. The Bidder shall provide an annex of the initial PMP which includes a proposed Project Work Breakdown Structure (PWBS) as outlined in the SOW, including a definition of the major work packages and the relationship between the work packages and the end product, being the services for programme management and programme technical services. The provided PWBS shall decompose the work packages to a level that exposes all project risk factors and allows accurate estimate of each work item's duration, resource requirements, inputs and outputs, and predecessors and successors.
- 3.6.5.5. As an annex to the draft Project Management Plan, the Bidder shall provide unpriced Basis of Estimate (BOE) sheets for all proposed CLINs. The BOE sheet shall be based on the Bidder's Bidding Sheets, but shall not include unit labour rate prices. The purpose of the BOE sheets is to enable the Purchaser to accurately assess—outside the price evaluation process—the level of effort and labour mix proposed for each CLIN. The BOE sheets shall identify the Project Work Breakdown Structure elements corresponding to the CLINs and enable the Purchaser to clearly identify and assess the work element and level of effort proposed.
- 3.6.5.6. The Bidder shall provide an annex of the PMP which includes an initial Project Master Schedule (PMS) as outlined in the SOW.
- 3.6.6. **Draft Ramp-Up Stage Plan**
- 3.6.6.1. The Bidder shall provide a draft Stage Plan, as described by the SOW, for the Ramp-up stage that describes how it proposes to establish the capabilities, deliver the services, and meet the performance goals as required by the SOW.
- 3.6.6.2. In the Ramp-Up Stage Plan, the Bidder shall:
- 3.6.6.2.1. Explain how it proposes to assess, maintain and establish the process asset library, including an explanation of how the library will be implemented using the Purchaser-furnished information tools and of how the library will be organized to aid navigation and discovery by a variety of users (programme management staff; project team members; other Purchaser staff).

- 3.6.6.2.2. Provide an example of a Programme Brief, as described in the SOW, based on the information included in this IFB and the Bidder's own understanding of the Bi-SC AIS and NGCS programme.
- 3.6.6.2.3. Provide an example of a Dependency Structure Matrix (DSM), based on a notional set of 20 information systems projects, and explain how the Bidder proposes to use this tool to manage project interdependencies. In addition to the projects, the DSM shall include examples of overarching aspects, such as operating systems and office automation suites, which will also present dependency management issues.
- 3.6.6.2.4. Provide an example of a Project Model as described in the SOW and explain how the Bidder proposes to apply this to the governance of Bi-SC AIS and NGCS projects.
- 3.6.6.2.5. Provide a draft of each template, form, or document required or one copy of a comparable item produced for another customer or project.
- 3.6.6.2.6. For at least 3 of the processes required to be established and documented, provide an example of how it would propose to define and document the process.
- 3.6.6.2.7. Describe its approach to integrated change management across all the required service areas and the forms, documents, or tools it would employ to establish and maintain this service.
- 3.6.6.2.8. Provide a model of its proposed issue management and change control processes.
- 3.6.6.2.9. Provide a sample of a Programme Issue Log.
- 3.6.6.2.10. Describe, in a draft Programme Communications Plan, its approach to communications management, including the management of programme portals, support for programme and project reporting, and meeting support.
- 3.6.6.2.11. Describe its proposed design of the NCIA NR Intranet programme portal, addressing all the capabilities required by the SOW.
- 3.6.6.2.12. Describe its approach to programme schedule management and schedule control between projects and the programme.
- 3.6.6.2.13. Provide, in Microsoft Project 2010 format or Focal Point view, a notional programme master schedule, including milestones for 20 notional projects with interdependencies traceable to the draft DSM and 5 external events.

- 3.6.6.2.14. Describe its approach to cost management and cost reporting.
- 3.6.6.2.15. Describe its approach to configuration management (CM), including CM information management, baseline maintenance, configuration control and integration approach of the in place Agency processes.
- 3.6.6.2.16. Describe its approach to quality management, including quality standards, quality reviews, and quality control of Purchaser and Contractor deliverables and integration approach of the in place Agency processes.
- 3.6.6.2.17. Provide an example of a notional programme quality log.
- 3.6.6.2.18. Describe its security management approach, including programme support and support across project stages.
- 3.6.6.2.19. Explain its C4ISR systems integration approach, including the need for engineering standards, support for the migration of the Bi-SC AIS and NGCS to a service oriented architecture, technical coordination with other programmes, technology road mapping, and change management.
- 3.6.6.2.20. Describe its proposed design for the programme engineering repository and identify the requirements for Purchaser-furnished hardware, software, and connectivity to support its implementation.
- 3.6.6.2.21. Explain its approach to C4ISR technical services (Systems Engineering, Integration Management, Software Engineering and Design, Operational User Experience, Requirements Management, Programme Assurance, Transition Management and Information Security Management) how it proposes to relate C4ISR technical services to programme management services.
- 3.6.6.2.22. Identify the tools it proposes to employ in C4ISR technical services and explain how these will support the requirements of the SOW.
- 3.6.6.2.23. Describe how the Bidder proposes to capture legacy Purchaser C4ISR data into the programme engineering repository.
- 3.6.6.2.24. Describe how the Bidder proposes to do following activities for C4ISR projects under the Bi-SC AIS and NGCS Programme:
  - 3.6.6.2.24.1 Capturing and maintenance of systems, software, interoperability and integration architectures, including reusable component architecture,
  - 3.6.6.2.24.2 Assessing, evaluating and documenting C4ISR systems and software architectures,

- 3.6.6.2.24.3 System release management using modern tools and environments,
- 3.6.6.2.24.4 Management of common set of requirements for quality attributes, standard services and reusable components,
- 3.6.6.2.24.5 Operational user involvement to collect stakeholder requirements and to develop business models,
- 3.6.6.2.24.6 Transition to management of software development factory using modern tools and environments, e.g., DevOps or Continuous Integration,
- 3.6.6.2.24.7 Development of Proof of Concept (P.o.C.) software for analysing issues and proposing a way ahead for resolution of the issue,
- 3.6.6.2.24.8 Establishment of User Experience (UX) and user-centric design process,
- 3.6.6.2.24.9 Developing UX related documentation (e.g., Human Machine Interface (HMI) style guides) and reusable software (e.g., a software library for user interface elements).
- 3.6.6.2.25. Describe how the Bidder proposes to integrate the programme engineering work with programme management activities by means of roadmaps and other tools.
- 3.6.6.2.26. Explain its approach to requirements management, including how programme and project requirements baselines will be developed and managed.
- 3.6.6.2.27. Explain its approach to test management support to the programme and its projects taking into consideration of the in place NCI Agency Directives.
- 3.6.6.2.28. Explain how it proposes to assess programme testing requirements, develop a Programme Test Plan, and use this as a baseline from which it will develop the design of the integration testbed.
- 3.6.6.2.29. Explain its approach to programme assurance services, including programme support and support to individual projects.
- 3.6.6.2.30. Explain its approach to transition management, including the use of common service provisioning models, standards, and processes

**3.6.7. Draft First Execution Stage Plan**

- 3.6.7.1. The Bidder shall provide a draft Stage Plan, as described by the SOW, for the first Execution stage that describes how it proposes to establish the capabilities, deliver the services, and meet the performance goals as required by the SOW.
- 3.6.7.2. In the draft First Execution Stage Plan, the Bidder shall:
  - 3.6.7.2.1. Explain its approach to achieve the maturity level goals identified in Annex A to the SOW.
  - 3.6.7.2.2. Describe its proposed approach to introducing benefits management into the programme and project governance framework.
  - 3.6.7.2.3. Provide a notional example of a strategic objectives chain as described in the SOW.
  - 3.6.7.2.4. Explain how it proposes to introduce Earned Value Analysis and Management into the programme.
  - 3.6.7.2.5. Describe how it proposes to conduct configuration status audits.
  - 3.6.7.2.6. Describe how it proposes to achieve Level 1 (“Performed”) for the Base Practice Areas defined in ISO/IEC 21827.
  - 3.6.7.2.7. Describe its approach to creating, using, and managing service mock-ups.
  - 3.6.7.2.8. Describe its approach to the detailed design, installation, test, activation, and initial operation and maintenance of the integration testbed.

**3.6.8. Draft Programme Risk Management Plan**

- 3.6.8.1. The Bidder shall provide a draft Programme Risk Management Strategy as described in the SOW, explaining its proposed approach to risk management for the Bi-SC AIS and NGCS programme. The draft plan shall include an example of a Programme Risk Log, populated with an initial set of risks derived from the Bidder’s independent assessment of programme risks.

**3.6.9. Draft Programme Support Plan**

- 3.6.9.1. The Bidder shall provide a draft Programme Support Plan as described in the SOW, explaining its proposed approach to maintain and support the programme management, engineering and integration tools, processes and testbed of the Bi-SC AIS and NGCS programme. The draft plan shall include the support services necessary, over the Ramp-Up and three

execution stages, for maintenance and user support. It will include incidents, problems and change management; key performance indicators; and roles, including the identification of any necessary Service Level Agreements and Operational Level Agreements.

### 3.7. Bidder's Check-List

- 3.7.1. The tables below provide an overview of all items to be delivered by the Bidder as part of this bid. Bidders are invited to use these tables to verify the completeness of their proposal.

#### **Volume 1: Bid Administration Package**

|    | <b>Item</b>                                                                                                                                                                  | <b>Format</b>                                 |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1  | Annex B1: Certificate of Legal Name of Bidder                                                                                                                                | 1 hard copy original each<br>1 soft copy each |
| 2  | Annex B-2: Acknowledgment of Receipt of IFB Amendments                                                                                                                       |                                               |
| 3  | Annex B-3: Certificate of Independent Determination                                                                                                                          |                                               |
| 4  | Annex B-4: Certificate of Bid Validity                                                                                                                                       |                                               |
| 5  | Annex B-5: Certificate of Exclusion of Taxes, Duties, and Charges                                                                                                            |                                               |
| 6  | Annex B-6: Comprehension and Acceptance of Contract Special and General Provisions                                                                                           |                                               |
| 7  | Annex B-7: Disclosure of Requirements for the NCI Agency Execution of Supplemental Agreements                                                                                |                                               |
| 9  | Annex B-8: List of Prospective Sub-Contractors                                                                                                                               |                                               |
| 10 | Annex B-9: Bidder Background IPR                                                                                                                                             |                                               |
| 11 | Annex B-10: List of Sub-Contractor IPR                                                                                                                                       |                                               |
| 12 | Annex B-11: List of Third Party IPR                                                                                                                                          |                                               |
| 13 | Annex B-12: Certificate of Origin of Equipment, Services, and Intellectual Property                                                                                          |                                               |
| 14 | Annex B-13: List of Proposed Key Personnel                                                                                                                                   |                                               |
| 15 | Annex B-14: Certificate of Price Ceiling                                                                                                                                     |                                               |
| 16 | Annex B-15: Comprehension and Intention to Comply with Exclusion Clause and Conflict of Interest                                                                             |                                               |
| 17 | Annex B-16: Certification as a Non-holder of Contract(s) or sub-Contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes |                                               |
| 18 | Annex C: Bid Guarantee-Standby Letter of Credit                                                                                                                              |                                               |

#### **Volume 2: Price Quotation**

|   | <b>Item</b>                                                                                | <b>Format</b>      |
|---|--------------------------------------------------------------------------------------------|--------------------|
| 1 | Annex A-1: Bidding Sheets                                                                  | 2 hard copies each |
| 2 | Complete Set of Sheets contained in 2_IFB-CO-14171-PMIC Book I Annex A Bidding Sheets.xlsx | 2 soft copies each |

**Volume 3: Technical Proposal Package**

|   | <b>Item</b>                          | <b>Format</b>                            |
|---|--------------------------------------|------------------------------------------|
| 1 | Executive Summary (2 page limit)     |                                          |
| 2 | Table of Contents                    | 4 hard copies each<br>2 soft copies each |
| 3 | Bidder Qualifications                |                                          |
| 4 | Draft Project Management Plan        |                                          |
| 5 | Draft Ramp-Up Stage Plan             |                                          |
| 6 | Draft First Stage Execution Plan     |                                          |
| 7 | Draft Programme Risk Management Plan |                                          |
| 8 | Draft Programme Support Plan         |                                          |

**END OF SECTION 3**

## 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 formulae, 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 (BV) Score will be based only on that information furnished by the Bidder and contained in its bid. The Purchaser shall not be responsible for locating or securing any information that is not identified in the bid.
- 4.1.4.      The Bidder shall furnish with its bid all information requested by the Purchaser in Section 3: Bid Preparation Instructions of this Book I. 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 its 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 sufficient 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 its 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 its price quotation at any time.
- 4.1.6.      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.
- 4.1.7.      The evaluation will be conducted in accordance with the Best Value Procedures set forth in AC/4-D (2008)0002-Rev 1 dated 27 April 2009 and AC/4-D (2008)0002-Rev 2 dated 15 July 2015 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 according to the evaluation method specified in this Section 4.

4.2.2. The Price Score shall be determined according to the following formula:

$$PS = 100 * (1 - (\text{Price of the Bid} / (2 \times \text{Average Price of all Bids})))$$

Where: Bid Price and Average Bid Price will be the investment cost or the Present Value of the system life cycle cost as per the authorization.

4.2.3. 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.

4.2.4. The weighted Technical Score will be determined according to the following formula:

$$TS = a\% * TS1 + b\% * TS2 + c\% * TS3 \dots$$

4.2.4.1. Where: TS1, TS2, TS3, ... ≤ 100 are the Technical Scores of each of the authorised second-level or published third-level technical sub-criteria; and

4.2.4.2. a% b% c%, ... are the related weighting factors for each of the second-level or third-level technical sub-criteria adding to 100.

4.2.5. 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:

$$FS = PS * z\% + TS * (1 - z\%) \leq 100$$

Where: z% = 40%, i.e. the authorized weighting factor for the Price Criterion.

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

#### 4.2.7. Evaluation Criteria

4.2.7.1. The top level evaluation criteria are **60% Technical and 40% Price**.

- 4.2.7.2. 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 paragraph 4.5.
- 4.2.7.3. The Purchaser's priorities in the evaluation of the Technical Proposal are described in the paragraph 4.5.
- 4.2.7.4. The Technical Criteria and their weighting are as follows:
  - 4.2.7.4.1. Engineering: 25%
  - 4.2.7.4.2. Management: 20%
  - 4.2.7.4.3. Supportability: 15%
- 4.2.8. The scores obtained from the Evaluation Criteria shall be aggregated through the formula specified in paragraph 4.2.5 in order to obtain the overall score of each bid.
- 4.2.9. 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 done in a 4-step process, as described below:
  - 4.3.1.1. **Step 1: Administrative Compliance**
    - 4.3.1.1.1. Bids received will be reviewed for compliance with the mandatory Administrative requirements specified in paragraph 4.4. Bids not meeting all of the mandatory requirements may be determined to be non-compliant and not further considered for award.
  - 4.3.1.2. **Step 2: Technical Evaluation**
    - 4.3.1.2.1. All bids having successfully passed Step 1 will have their Technical Package evaluated for responsiveness against 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.

- 4.3.1.2.2. The pre-determined weighting factors will be applied to the scores for the top-level factors.
- 4.3.1.2.3. 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 in paragraph 4.5 may be determined by the Purchaser to be non-compliant and not further considered for award.
- 4.3.1.3. **Step 3: Price Evaluation**
- 4.3.1.3.1. The Price Quotations of all bids remaining after Step 2 will be opened, evaluated and scored in accordance with paragraph 4.6.
- 4.3.1.4. **Step 4: Determination of Best Value Bid**
- 4.3.1.4.1. Upon completion of the Price Evaluation, the Best Value bid will be determined in accordance with paragraph 4.7.

#### **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 3.4 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 its offer on a modification or alteration of the Terms and Conditions or the language of the SOW.
- 4.4.2. The Bidder certifies through signature of Annex B-14 Certificate of Price Ceiling that the total price offered in the bid for CLINs 1 and 2, or its conversion to EURO utilising for the purpose of price comparison the average of the official buying and selling rate(s) of the European Central Bank at close of business on the last working day preceding the signature of the subject certificate, does not exceed the price ceiling as described in paragraph 3.5.2.1

of this Book I. The Bidder shall not change the price offered in the bid by submitting this subject certificate. The Bidder shall only provide the certificate to confirm it does not exceed this price ceiling. For quotations submitted in other than EURO currency, it is the Bidder's responsibility to confirm that the certificate provided in the Bid remains valid in the following case:

- 4.4.2.1. When the reference rate used by the Purchaser for Price evaluation purposes as described in paragraph 4.6.3.1 has been subject to a fluctuation compared to the exchange rate indicated in the Certificate of Price Ceiling in Annex B-14 and,
- 4.4.2.2. It has an impact on the converted offered price compared to the Price Ceiling.
- 4.4.3. Subject to the stipulation of paragraph 4.4.1.1 through 4.4.1.4, bids failing to conform to the above requirements may be declared non-compliant and may not undergo through further evaluation. Bids that are determined to be administratively compliant will proceed to Step 2, Technical Evaluation.
- 4.4.4. Notwithstanding paragraph 4.4.3, if it is later discovered in the evaluation of the Technical Proposal 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 his offer on a modification or alteration of the Terms and Conditions or the language of the Statement of Work, the Bidder may be determined to have submitted a non-compliant bid at the point in time of discovery.

#### **4.5. Evaluation Step 2 - Technical Evaluation**

- 4.5.1. The Technical Proposal will be evaluated against the criteria set forth in paragraphs 4.5.2 through 4.5.4. In these paragraphs, those criteria will be expanded to identify sub criteria considered important by the Purchaser during bid evaluation. Sub criteria appear in descending order of importance within the criterion of which they form a part. For some sub-criteria, there may be additional supporting factors at the next lower level. These lower level factors are not published here but are predetermined and included in the Technical Evaluation Weighting Scheme sealed before bid opening.

#### **4.5.2. Technical Factor 1 – Engineering**

##### ***4.5.2.1. Criteria – Engineering (25% of the Technical Proposal)***

- 4.5.2.1.1. The evaluation in the Engineering area will be based on the assessment of the following factor:
  - 4.5.2.1.1.1. **Programme Technical and Integration Support Approach.** This factor assesses the engineering aspects of the Draft Project Management Plan and the Draft Ramp-Up and First Execution Stage

Plans. For the bid to receive a high score for this factor, the Bidder shall:

- 4.5.2.1.1.1.1. Propose a systems technical and integration approach that is publicly available system engineering practices and standards, such as ISO/IEC 15288.
- 4.5.2.1.1.1.2. Roadmap, concepts used and their experience, challenges faced and how they were overcome.
- 4.5.2.1.1.1.3. Provide a proposed design for the programme engineering repository that would support the expected uses of the repository by both internal and external programme stakeholders.
- 4.5.2.1.1.1.4. Provide, in its draft first Execution Stage plan, an effective approach to creating, using, and managing service mock-ups.
- 4.5.2.1.1.1.5. Describe an approach that reflects a mature level of architecture management capability.
- 4.5.2.1.1.1.6. Integrate architecture development and management with programme governance, systems integration, and requirements management in such a way that there is a low risk of architecture becoming an isolated, “ivory tower” specialty and a high probability of it becoming a significant programme enabler.
- 4.5.2.1.1.1.7. Cite examples of practical experience in using architecture management to support the implementation of service oriented architecture, including reuse of services, including the ‘as is’ start state, the ‘to be’ end-state, as it was modelled at the outset of the programme, the strategic plan for transitioning from the as-is to the ‘to-be’ and a description of how the transition actually took place – how changes were accommodated and how the vision was eventually achieved to the client’s satisfaction.
- 4.5.2.1.1.1.8. Reflect a mature level of requirements management capability and addresses the use of the DOORS requirements management tool.
- 4.5.2.1.1.1.9. Provide a practical approach to coordinating programme and project requirements management.
- 4.5.2.1.1.1.10. Cite examples of its experience in eliciting, analysing, and managing business process and technical requirements and demonstrates a clear view of the need to integrate requirements management with enterprise architecture and systems integration processes.
- 4.5.2.1.1.1.11. Provide a comprehensive explanation of its proposed test management approach that covers all aspects required by the SOW.

- 4.5.2.1.1.1.12. Propose an effective approach to planning and designing and maintaining the integration testbed based on identified programme testing requirements.
- 4.5.2.1.1.1.13. Provide, in its draft first Execution Stage plan, a sound plan for the detailed design, operation and maintenance of the integration testbed.
- 4.5.2.1.1.1.14. Propose an approach to managing and delivering programme assurance services that demonstrates substantial experience in these functions and the capability to provide support across all types of programme assurance activities from within its organizational resources.
- 4.5.2.1.1.1.15. Demonstrate substantial experience in the transition of new C4ISR services into operations.
- 4.5.2.1.1.1.16. Provide evidence of its corporate expertise in the theory and practical application of Information Technology Infrastructure Library (ITIL) or a similar service management framework.
- 4.5.2.1.1.1.17. Offer a sound approach to coordinating programme configuration management and release planning processes.

### **4.5.3. Technical Factor 2 - Management**

#### ***4.5.3.1. Criteria – Management (20% of the Technical Proposal)***

- 4.5.3.1.1. The evaluation in the Management area will be based on the assessment of the following factors which appear in descending order of importance:
  - 4.5.3.1.1.1. Programme Management Support Approach
  - 4.5.3.1.1.2. Draft Project Management Plan
  - 4.5.3.1.1.3. Bidder Qualifications
- 4.5.3.1.2. **Programme Management Support Approach.**
  - 4.5.3.1.2.1. This factor assesses the management aspects of the Draft Project Management Plan and the draft Ramp-Up and First Execution stage plans. For the bid to receive a high score for this factor, the Bidder shall:
    - 4.5.3.1.2.1.1. Address all the Stage Plan elements required by the SOW.
    - 4.5.3.1.2.1.2. Demonstrate, through its proposed approach, level of effort, and qualifications of its staff, a mature level of programme management capabilities and a thorough and realistic comprehension of the Contract's requirements.

- 4.5.3.1.2.1.3. Use process modelling standard such as Business Process Modelling Notation (BPMN) or Unified Modelling Language (UML) in its models of proposed processes.
- 4.5.3.1.2.1.4. Address all required elements of Programme Governance establishment for the Ramp-Up stage.
- 4.5.3.1.2.1.5. Provide an effective approach to establishment and maintenance of the process asset library.
- 4.5.3.1.2.1.6. Provide a sample Programme Brief that complies with the requirements of the SOW and reflects Contractor's understanding of the nature and scope of the Bi-SC AIS and NGCS programme.
- 4.5.3.1.2.1.7. Provide a sample Dependency Structure Matrix (DSM) that clearly demonstrates of the multiple aspects of project interdependencies and could provide significant added value to programme governance.
- 4.5.3.1.2.1.8. Provides an example of a Project Model that complies with the requirements of the SOW and is clearly applicable to the overall programme and project governance framework.
- 4.5.3.1.2.1.9. Provides, as part of its draft first Execution Stage plan, a complete approach to achieve the maturity level goals identified in Annex A to the SOW.
- 4.5.3.1.2.1.10. Proposes approach to introducing benefits management into the programme and project governance framework in its draft first Execution Stage plan.
- 4.5.3.1.2.1.11. Provides, in its draft first Execution Stage plan, a notional example of a strategic objectives chain that complies with the requirements of the SOW and can be incorporated as a useful tool in tracing project outputs to strategic goals and in communicating with stakeholders.
- 4.5.3.1.2.1.12. Propose a change management approach that is integrated and comprehensive, addressing all foreseeable types of change.
- 4.5.3.1.2.1.13. Provide samples of forms, documents, or tools it has developed or used on comparable efforts, and by these examples demonstrate a professional level of practice.
- 4.5.3.1.2.1.14. Propose a communications management approach that addresses all the requirements of the SOW and reflects a clear vision and strong practical familiarity with the role of effective information and knowledge management as an organizational enabler.

- 4.5.3.1.2.1.15. Provide a design for the NCI Agency NATO RESTRICTED Intranet programme portal that is complete, flexible, and easily navigable.
- 4.5.3.1.2.1.16. Provide a coherent approach to schedule management and schedule control.
- 4.5.3.1.2.1.17. Provide a notional programme master schedule that includes the required elements and reflects a high level of practice in the use of Microsoft Project 2010.
- 4.5.3.1.2.1.18. Provide a notional programme monitoring and control strategy.
- 4.5.3.1.2.1.19. Provide a proposed approach to cost management and reporting.
- 4.5.3.1.2.1.20. Propose a plan for introducing Earned Value Analysis and Management in its draft first Execution Stage plan.
- 4.5.3.1.2.1.21. Describe an approach to configuration management that enables effective programme and project control without manpower- or time-intensive processes.
- 4.5.3.1.2.1.22. Propose an approach to conducting configuration status audits in its draft first Execution Stage plan.
- 4.5.3.1.2.1.23. Demonstrate a high level of professional competence in quality management and propose a realistic approach to incorporating these practices into Bi-SC AIS and NGCS programme and project management.
- 4.5.3.1.2.1.24. Provide a notional programme quality log that could easily be implemented and maintained and delivers a clear valued added to programme management.
- 4.5.3.1.2.1.25. Provide an approach to security management that reflects familiarity with basic NATO security guidance and substantial expertise in information assurance and security engineering.
- 4.5.3.1.2.1.26. Propose an approach to achieving the ISO/IEC 21827 Level 1 of capability in its draft first Execution Stage plan.
- 4.5.3.1.2.1.27. Demonstrate expertise in planning, implementing, and sustaining a continuous capability improvement programme.
- 4.5.3.1.2.1.28. Propose an approach that is publicly available best practices, particularly CMMI, yet demonstrates understanding of the practical challenges involved in moving an organization from its current maturity to a higher level.

- 4.5.3.1.2.1.29. Propose metrics to assess the progress of capability improvement and provides a convincing explanation of how it proposes to link this service area into Contract performance management.

**4.5.3.1.3. Draft Project Management Plan**

- 4.5.3.1.3.1. This factor assesses the quality and suitability of the Bidder's Draft Project Management Plan. To receive a high score for this factor, the Bidder shall:
- 4.5.3.1.3.1.1. Address all the Project Management Plan elements required by the SOW.
  - 4.5.3.1.3.1.2. Reflects a mastery of the basic components of project planning and a high level of professional practice.
  - 4.5.3.1.3.1.3. Demonstrate an effective approach to obtaining, tasking, orienting, and controlling support from staff not working on-site on a full-time basis.
  - 4.5.3.1.3.1.4. Provide a coherent approach to performance management reflecting a solid comprehension of the approach and experience with similar frameworks on other Contracts.
  - 4.5.3.1.3.1.5. Identify the information tools it proposes to use in delivering services and demonstrates a mastery of their use and a clear vision for how they can help achieve the performance goals.
  - 4.5.3.1.3.1.6. Propose to take maximum advantage of Purchaser-furnished information tools and describe a low-risk approach to adapt or integrate any new tools it proposes to introduce and if required, a strategy for the migration of programme data.
  - 4.5.3.1.3.1.7. Provide a proposed PWBS that complies with the requirements of the SOW and provides clear traceability to the stage plans and BOE sheets.
  - 4.5.3.1.3.1.8. Provide a set of BOE sheets as required.
  - 4.5.3.1.3.1.9. Propose a realistic level of effort, mix of skills, and balance of on-site and off-site resources to achieve the performance goals of the Contract.
  - 4.5.3.1.3.1.10. Provide a PMS that complies with the requirements of the SOW.
  - 4.5.3.1.3.1.11. Demonstrate a practical approach to the sequencing and duration of the proposed efforts.

**4.5.3.1.4. Bidder Qualifications**

- 4.5.3.1.4.1. This factor assesses the expertise, capabilities, and relevant experience of the Bidder and its proposed subcontractors. To receive a high score for this factor, the Bidder shall:
- 4.5.3.1.4.1.1. Identify an organization with sufficient expertise, resources, and relevant experience to satisfy the requirements of this Contract.
  - 4.5.3.1.4.1.2. Propose a prime/subcontractor arrangement that addresses all required services without adding risks due to the number of partners or complexity of Contractual relationships.
  - 4.5.3.1.4.1.3. Demonstrate substantial expertise, experience, and capabilities in the management and support of C4ISR systems programmes.
  - 4.5.3.1.4.1.4. Provide a convincing explanation of the applicability of these assets to the needs of this Contract.
  - 4.5.3.1.4.1.5. Identify a high level of qualification and experience, within the team, in one or more recognized programme management standards and demonstrates a strong comprehension of how they would be applied.
  - 4.5.3.1.4.1.6. Provide a set of lessons learned that reflects a strong grasp of the issues involved in programme management and a sound comprehension of their relevance to the Bi-SC AIS and NGCS programmes.
  - 4.5.3.1.4.1.7. Demonstrate substantial expertise, experience, and capabilities in information systems project management.
  - 4.5.3.1.4.1.8. Demonstrate with examples how it has used COTS tools to support programme and project management in successful engagements.
  - 4.5.3.1.4.1.9. Identify a significant level of staff and organizational training and practical experience in the PRINCE2 project management methodology.
  - 4.5.3.1.4.1.10. Demonstrate substantial expertise, experience, and capabilities in systems engineering, particularly for C4ISR services and command and control systems.
  - 4.5.3.1.4.1.11. Identify mature capabilities and extensive practical experience in a full range of C4ISR technical services (systems engineering, integration management, software engineering and design, operational user experience, requirements management) processes and skills.
  - 4.5.3.1.4.1.12. Describes numerous corporate engineering standards and processes, strongly based on identified international standards, relevant to this Contract.

- 4.5.3.1.4.1.13. Provides a set of lessons learned that are highly relevant to the needs of the Bi-SC AIS and NGCS programmes.
- 4.5.3.1.4.1.14. Demonstrate substantial expertise, experience, and capabilities in the development of C4ISR engineering. In particular, provide a clear and convincing explanation of how systems engineering, software engineering and design, operational user experience, requirements and integration related engineering products are used as an enabler to programme governance and management.
- 4.5.3.1.4.1.15. Demonstrate substantial expertise, experience, and capabilities in the test management and the design, implementation, and management of information systems testbeds.
- 4.5.3.1.4.1.16. Describe a C4ISR systems testbed designed, implemented, and/or managed that is equivalent in scope and complexity to the expected Bi-SC AIS and NGCS integration testbed.
- 4.5.3.1.4.1.17. Give at least one example of a case study where the testbed reduced development time, sped integration or otherwise led to schedule or cost savings or performance improvements.
- 4.5.3.1.4.1.18. Demonstrate substantial expertise, experience, and capabilities in providing verification and validation support to C4ISR services and systems projects.
- 4.5.3.1.4.1.19. Identify a high level of organizational and staff qualifications and practical experience in the implementation and management of a recognized capability maturity model.
- 4.5.3.1.4.1.20. Identify sufficient numbers of certified CMM assessors that the Bidder can be expected to carry out an effective capability improvement approach without being vulnerable to staff turnover or competition for resources.
- 4.5.3.1.4.1.21. Identify substantial organizational resources and capabilities that would be readily available to support this Contract.
- 4.5.3.1.4.1.22. The Bidder shall identify and provide resumes or Curricula Vitae (CV) for staff it proposes for on-site support, including the following Key Personnel, who must have MSP or equivalent certification and experience, as well as staff assuming work package or task leader role:
  - 4.5.3.1.4.1.22.1. Project Manager (PM)
  - 4.5.3.1.4.1.22.2. Deputy PM

- 4.5.3.1.4.1.23. Demonstrate that the members of its proposed service delivery team possess strong education, training, experience and qualifications directly relevant to the needs of this Contract.
- 4.5.3.1.4.1.24. Demonstrate that its proposed Project Manager and Deputy PM have mastered the relevant formal and practical skills required to lead the service delivery team and exhibit a positive, flexible, and success-oriented approach to working with the Purchaser.

#### **4.5.4. Technical Factor 3 – Supportability**

##### ***4.5.4.1. Criteria – Supportability (15% of the Technical Proposal)***

4.5.4.1.1. The evaluation in the Supportability area will be based on the assessment of the following factors listed in descending order of importance:

- 4.5.4.1.1.1. Bid Risk Mitigation
- 4.5.4.1.1.2. Draft Programme Risk Management Strategy
- 4.5.4.1.1.3. Draft Programme Support Plan

##### **4.5.4.1.2. Bid Risk Mitigation**

4.5.4.1.2.1. This factor assesses the Bidder's overall ability to mitigate the risks facing this project as reflected in the Bidder Qualifications, Draft Project Management Plan, and Draft Stage Plans in accordance with paragraphs 3.6.4, 3.6.5, 3.6.6, and 3.6.7. For the bid to receive a high score for this factor, the Bidder shall:

- 4.5.4.1.2.1.1. Identify and assess sufficient mitigation measures, including contingencies, for the most significant foreseeable risks.
- 4.5.4.1.2.1.2. Propose an approach likely to require a low level of Contractor intervention or Purchaser monitoring to overcome difficulties.
- 4.5.4.1.2.1.3. Demonstrate that the Bidder has a high probability of successfully completing the solicitation requirements based on the Bidder's performance record on similar Contract efforts and its corporate expertise and resources.
- 4.5.4.1.2.1.4. Demonstrate that the Bidder presents a low risk of achieving the required performance goals within the required timeframes of the Ramp-Up and first Execution stages.

- 4.5.4.1.2.1.5. Indicate that the Bidder presents a low risk of meeting the performance goals of the Ramp-Up and first Execution stages and to maintain a satisfactory level of performance in subsequent stages.
- 4.5.4.1.2.1.6. Propose labour rates, resources, and levels of effort sufficient to achieve the Contract's performance goals without unexpected increases in costs to the Purchaser.
- 4.5.4.1.2.1.7. Reflect a high probability that the Bidder will be able to employ and retain staff with the proposed skills and experience.

#### **4.5.4.1.3. Draft Programme Risk Management Strategy**

- 4.5.4.1.3.1. For the bid to receive a high score for this factor, the draft Programme Risk Management Strategy shall address all required aspects of programme and project risk management support. The Bidder shall demonstrate a mature level of risk management expertise and propose processes based on recognized best practices such as the Project Management Book of Knowledge (PMBOK) or PRINCE2. The draft Programme Risk Log shall demonstrate a sound comprehension of the scope and character of the Bi-SC AIS and NGCS programme and its projects and reflect an expert assessment of the most likely risks that can be anticipated.

#### **4.5.4.1.4. Draft Programme Support Plan**

- 4.5.4.1.4.1. For the bid to receive a high score for this factor, the draft Programme Support Plan shall address all required aspects of the administration, maintenance and support of the tools and integration testbed. The Bidder shall demonstrate expertise with service provision and provide a mature plan, based on best practices, that takes into account the context in which the tools and testbed will be used, the number of users and necessary availability, and the SLAs and OLAs which will be required. The plan should allow for a 20% year on year growth in users and services. It should also describe what will happen in case software or hardware becomes obsolescent or is sold to a different vendor.

### **4.6. Evaluation Step 3 - Price Evaluation**

- 4.6.1. The Bidder's Price Quotation will be first assessed for compliance against the following criteria:
  - 4.6.1.1. The bid price complies with the requirement relevant to the Bid Ceiling Price set forth in paragraph 3.5.2.1.
  - 4.6.1.2. 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 and the Instructions for Preparation of the Bidding Sheets in Annex A-2.

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

4.6.1.4. The Price Quotation meets requirements for price realism and balance as described in paragraph 4.6.5 and does not exceed the defined price ceiling per paragraph 3.5.2.1.

4.6.2. 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.

**4.6.3. Basis of Price Comparison**

4.6.3.1. The Purchaser will convert all prices quoted into EURO for purposes of comparison and computation of price scores and compliance with stated price ceilings. 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.

4.6.3.2. The evaluated bid price to be inserted into the formula specified at paragraph 4.2.2 will be derived from the Grand Total of the Schedule of Supplies and Services calculated as follows:

4.6.3.2.1. The Sum of the Firm - Fixed Prices offered for CLINs 1 through 4, as detailed below:

| CLIN Number | CLIN Name                                                      |
|-------------|----------------------------------------------------------------|
| 1.0         | Project Management and Integration Services (Ramp-up Stage)    |
| 2.0         | Project Management and Integration Services (Stage 1)          |
| 3.0         | Project Management and Integration Services (Stage 2) (Option) |
| 4.0         | Project Management and Integration Services (Stage 3) (Option) |

**4.6.4. Bidding Sheets Accuracy – Order of Precedence**

4.6.4.1. Bidders are responsible for the accuracy of the bid price 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 4.6.3.2 (hence computable in the Best Value bid via the application of the formula at paragraph 4.2.2) the following descending order of precedence will be applied:

**4.6.4.1.1. Electronic Submission Bidding Sheets:**

- 4.6.4.1.1.1. Totals and Grand Total for CLINs 1 through 4 as shown in the Bidding Sheet Schedule of Services and Supplies (SSS) page.
- 4.6.4.1.1.2. Calculated Totals and Grand Total for CLINs 1 through 4 deriving from the total indicated on each Work Package Bidding Sheet.

**4.6.4.1.2. Hard Copy Submission Bidding Sheets:**

- 4.6.4.1.2.1. Totals and Grand Total for CLINs 1 through 4 as shown in the Bidding Sheet Schedule of Services and Supplies (SSS) page.
- 4.6.4.1.2.2. Calculated Totals and Grand Total for CLINs 1 through 4 deriving from the total indicated on each Work Package Bidding Sheet.

**4.6.5. Price Balance and Realism**

- 4.6.5.1. In the event that the successful Bidder has submitted a price quotation that is less than two thirds of the average of the remaining compliant bids, the Purchaser must ensure that the successful Bidder has not artificially reduced the offered price to assure Contract award. As such, the Purchaser will request the firm to provide clarification of the bid and will inform the national delegation of the firm. In this regard, the Bidder shall provide an explanation to both Purchaser and their national delegation on the basis of one of the following reasons:
  - 4.6.5.1.1. An error was made in the preparation of the price quotation. The Bidder must document the nature of the error and show background documentation regarding the preparation of the price quotation that convincingly demonstrates that an error was made by the Bidder. In such a case the Bidder may request to remain in the competition and accept the Contract at the bid price, or to withdraw from the competition.
  - 4.6.5.1.2. The Bidder has a competitive advantage due to prior experience or internal business/technological processes that demonstrably reduce cost to the Bidder resulting in an offered price that is realistic. The Bidder's explanation must support the technical proposal offered and convincingly and objectively describe the competitive advantage of and savings achieved by the advantage over the standard marked costs, practices and technology.
  - 4.6.5.1.3. The Bidder understands that the submitted price quotations are unrealistically low in comparison with the level of effort required. In this case, the Bidder is required to estimate the potential loss and show that the financial resources of the Bidder are adequate to withstand such a reduction in revenue.
  - 4.6.5.1.4. If a Bidder fails to submit a comprehensive and convincing explanation for one of the based above, the Purchaser shall declare the bid non-compliant and the

Bidder will so be notified in accordance with the procedures set forth in paragraph 13(iii)(b) of AC/4-D/2261(1996 Edition).

- 4.6.5.1.5. If the Purchaser accepts the Bidder's explanation of a mistake and allows the Bidder to accept the Contract at the bid price or if the explanation regarding competitive advantage is convincing, then the Bidder shall agree that the supporting pricing data submitted with this bid will be the basis to determine fair and reasonable pricing for all subsequent negotiations for modifications or additions to the Contract and that no revisions of proposed prices will be made.
- 4.6.6. In the case of incrementally funded projects, the cost and pricing methodology used by the winning Bidder on the base Contract will be used as the basis for all follow-on Contracts or amendments to the base Contract where these are proposed for IC agreement without competition.

#### **4.7. Evaluation Step 4 – Calculation of Best Value Scores**

- 4.7.1. Upon conclusion and approval of the Price Evaluation results, the pre-determined third level 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 4.2.5 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. The Purchaser will then resolve the statistical tie by awarding the Contract to the bid with the highest weighed technical score.
- 4.7.4. The Purchaser shall provide to each Bidder that requests a debriefing, a written summary of the technical evaluation of their bid, with a view to providing clarity.

#### **END OF SECTION 4**

## **ANNEX A. Bidding Sheets**

See separate Book I Excel Workbook file (“2\_IFB-CO-14171-PMIC Book I Annex A Bidding Sheets.xlsx”)

**Annex A-1. Bidding Sheets**

**IFB-CO-14171-PMIC**

On behalf of the firm stated below I hereby offer the Purchaser (the NCI Agency) with the services and deliverables (collectively referred as “ITEMS”) set forth in the attached schedules, at the specified prices, and subject to the terms and conditions stated in the referenced IFB.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

## Annex A-2. Instructions for the Preparation of Bidding Sheets

### 1.0 Introduction

- 1.1. Bid pricing requirements as addressed in this Annex are mandatory. Failure to abide to the prescriptions of bid submission referred in this section may lead to the bid being declared non-compliant and not being taken into consideration for award.
- 1.2. No alteration of the bidding sheets including but not limited to quantity indications, descriptions or titles are allowed with the sole exception of those explicitly indicated as allowed in this document.

1.2.1. The structure of the Section-1 SSS shall not be altered with the exception of additional price columns being added if multiple currencies are bid, including extra provisions for all totals.

1.2.2. The CLIN Price Breakdown Sheets explicitly indicate where the sheets may be altered.

1.2.3. Section-2 Forward Labour Rates and Section-3 COTS SW and COTS SW Data Sheet may be altered as indicated as well.

### 2.0 Bidding Sheets Structure

- 2.1. The Bidding Sheets, provided in native MS Excel® format are organized in accordance with the following structure:
  - 2.1.1. Bidding Sheets Cover Page
  - 2.1.2. Instructions
  - 2.1.3. Section 1 – CLIN Summary and CLIN Price Breakdown Sheets
  - 2.1.4. Section 2 – Schedule of Forward Labour Rates
  - 2.1.5. Section 3 – COTS Software and Licenses
- 2.2. A description of each section is provided at paragraph 4.0 of the present Annex along with the relevant assumptions and instruction for correctly compiling a price quotation.

### 3.0 General Pricing Requirements

- 3.1. Unless explicitly indicated in paragraph 4.0 of the present Annex or mandated by the Purchaser through a clarification issued in accordance with the prescriptions of Book I Section 2 paragraph 2.6, the structure of the bidding sheets shall not be altered or otherwise modified in any of its parts. This prescription is to be regarded as applicable also, but not limited to, indicated quantities, item

descriptions, references, Purchaser's inserted Not To Exceed (NTE) amounts (if applicable) or any other indication or instruction provided in the Bidding Sheets.

- 3.2. Bidders are advised that 'auto-calculation' have been inserted in the electronic copies of the Bidding Sheets. However, Bidders are responsible for ensuring that their figures are correctly calculated and should not rely on the accuracy of the auto-calculation features configured in the spreadsheets.
- 3.3. 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.
- 3.4. Bidders shall indicate Firm Fixed Prices for all CLINs in the bidding sheets.
- 3.5. Offered prices shall not be made conditional in nature nor contain any expressed or implied limitations which conflicts or otherwise amends any of the prescriptions of the IFB.
- 3.6. All CLINs (1 through 4) in the Bidding Sheets shall be quoted.
- 3.7. Bidders shall fill only yellow marked cells in the Bidding Sheets.
- 3.8. 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.
- 3.9. 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.
- 3.10. All metrics (e.g. cost associated with labour) will be assumed to be standard or normalised to a 7.6 hour/day, for a five day working week.
- 3.11. 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 CLIN Price Breakdown sheets and applied at the unit price level.
- 3.12. Should the bid be in other than EURO currency, the award of the Contract will be made in the currency of the bid.
- 3.13. The price quotation shall not include any other documentation except for the compiled bidding sheets in their required hard copy and electronic format.
- 3.14. All due dates as referred in the Bidding Sheets are to be considered as the basis of which the price quotation shall be compiled. To this extent, Bidders shall note that the relative durations of the tasks as indicated in the IFB are to be construed as relative to a hypothetical Effective Date of Contract (EDC) to occur not later than the end of the first quarter of 2017. Bidders shall take this indication in due account when factoring inflation and general increase of costs during the period of performance of the different CLINs for the purpose of their price quotation.

As not the entirety of the award process is within the influence of the Purchaser, it is not possible at this stage to clearly indicate a precise time of Contract award and consequently a precise time for CLIN performance. For the purpose of the quotation Bidders shall assume the risk deriving from any reasonable delay in award with respect to inflation. Consequently, in quoting for the various Contract stages the Bidders may refer to this indicated time and consider the application of rates that are deemed appropriate in light of the programmed Contract schedule and the lengths of the various stages. The occurrence of any reasonable delay in award shall not however constitute ground for the Bidders to claim a revision of the prices offered before Contract award. Similarly the anticipation of the Contract award date will not constitute ground for any Purchaser's request for decrease in price.

- 3.15. The Purchaser, by virtue of its 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.
- 3.16. 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.

#### **4.0 Bidding Sheets Compilation Instructions**

##### **4.1. Compilation Requirements**

- 4.1.1. This paragraph addresses specific requirements and assumptions relevant to completion of the different sections of the bidding sheets.

##### **4.2. Bidding Sheets – Cover Page**

- 4.2.1. The bidder shall indicate on the Bidding Sheet Cover Page the currency in which its bid is expressed. In those cases in which multiple currencies are used, the bidder shall augment the standard indications provided by inserting references to the additional currency used as well as by providing an indication of which CLINs are quoted in which currency. This indication shall not discharge the bidder from its obligation to provide for each CLIN of the Bidding Sheets appropriate indication of the currency used.

##### **4.3. Bidding Sheets – Section 1**

###### **4.3.1. Introduction**

- 4.3.1.1. Section I, CLIN Summary, corresponds to the Schedule of Supplies and Services of the Prospective Contract. Each Contract Work Package (WP) is represented in Section I, CLIN Summary, by a detailed schedule listing all Contract Line Items (CLINs) included in the scope of each Work Package.

- 4.3.1.2. Section I further includes for each identified CLIN a “CLIN Price Breakdown” sheet which contains the relevant Basis of Estimate (BOE).
- 4.3.1.3. The purpose of the BOE sheets is to provide the Purchaser with additional information relevant to the level of effort and costs associated with each specific task. This information will be used by the Purchaser within the framework of the evaluation effort for the purposes specified in Book I Section 4.
- 4.3.2. **Section 1 – CLIN Summary Pricing Requirements**
- 4.3.2.1. Subject to the stipulations in paragraph 4.1 of this present Annex, the following requirements are applicable to the pricing of all CLINs.
- 4.3.2.1.1. Unless otherwise identified, all travel and per-diem costs associated with the performance of the Work Package tasks shall be included in Work Package CLINs prices.
- 4.3.2.1.2. All costs associated with the performance of the CLINs including but not limited to those associated to COTS, Third Party, or Background Intellectual Property Software (including license acquisition costs and recurrent fees) necessary to successfully perform the scope of the CLIN in accordance with the technical proposal shall be included in the bid prices quoted.
- 4.3.2.1.3. CLIN 1 pricing (Project Management) shall account to cover for all Work Packages execution up through the end of the Contract period for each respective Stage (i.e. Ramp Up Stage, 1<sup>st</sup> Execution Stage, 2<sup>nd</sup> Execution Stage, and 3<sup>rd</sup> Execution Stage).
- 4.4. **Bidding Sheets – Completing the CLIN Summary Sheet**
- 4.4.1. Bidders shall fill in the CLIN Summary sheet based on the information provided in the detailed bidding sheets (CLIN Price Breakdown). The detailed bidding sheets are broken down into the categories listed in 4.5.
- 4.4.2. Bidders are expected to aggregate the prices in the CLIN Price Breakdown sheets that make up the line items in the CLIN Summary sheet.
- 4.4.3. Bidders shall make sure that the total price indicated in the CLIN Price Breakdown sheets matches the price stated in the CLIN Summary sheet for the same corresponding CLIN or sub-CLIN.
- 4.4.4. In the CLIN Summary Sheet Bidders shall enter the price of each CLIN for each line item.

#### 4.5. Bidding Sheets – Completing the CLIN Price Breakdown Sheets

4.5.1. Bidders are instructed to prepare their Price Quotation in sufficient detail to permit thorough and complete evaluation. For each of the CLINs, the Bidder shall use the separate Detailed CLIN Breakdown Sheets as provided, adding additional sheets if multiple currencies are used. Bidders shall change the currency in the header of the Sheets if necessary.

#### 4.5.2. Material

4.5.2.1. Purchased Parts: Provide a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing.

4.5.2.2. Raw Material: Consists of material in a form or state that requires further processing. Provide priced quantities of items required for the proposal. Show total cost.

4.5.2.3. Standard Commercial Items: Consists of items that the Bidder normally fabricates, in whole or in part, and that are generally stocked in inventory. Provide an appropriate explanation of the basis for pricing on attached schedule.

4.5.2.4. The bidder shall provide a level of detail down the unique sellable item level.

4.5.2.5. The bidder shall provide unit prices that shall be **exclusive** of any applicable overhead, general and administrative costs, profit, costs associated to travel, per-diem and/or incidentals as well as Personnel Installation costs at the sites of performance. Factors for overhead shall be applied in the **Material Overhead** section of the detailed bidding sheet to the total cost of material.

#### 4.5.3. Direct Labour

4.5.3.1. Bidders should the hourly rate by year and the total hours for the categories and disciplines of direct labour proposed.

4.5.3.2. Unit prices shall be **exclusive** of any applicable overhead, general and administrative costs, profit, costs associated to travel, per-diem and/or incidentals as well as Personnel Installation costs at the sites of performance. Factors for overhead shall be applied in the **Direct Labour Overhead** section of the detailed Bidding Sheet to the total cost of direct labour.

#### 4.5.4. **Subcontract Labour**

- 4.5.4.1. Bidders should the hourly rate by year and the total hours for the categories and disciplines of subcontract labour proposed.
- 4.5.4.2. Unit prices shall be **exclusive** of any applicable overhead, general and administrative costs, profit, costs associated to travel, per-diem and/or incidentals as well as Personnel Installation costs at the sites of performance. Factors for overhead shall be applied in the **Subcontract Labour Overhead** section of the detailed Bidding Sheet to the total cost of subcontract labour.

#### 4.5.5. **Travel**

- 4.5.5.1. Bidders should show the number of trips being made, the number of people travelling, the number of days per trip, the cost of travelling (i.e. flight costs, etc.), and the daily per diem rate.
- 4.5.5.2. Comments, descriptions, references, and explanation of calculation method may be inserted under the 'Notes' column including the location & reference to SOW.

#### 4.5.6. **Other Direct Costs**

- 4.5.6.1. Special Tooling/Equipment: Identify and support specific equipment and unit prices. Use a separate schedule if necessary.
- 4.5.6.2. Individual Consultant Services: Identify and support the proposed contemplated consulting. State the amount of services estimated to be required and the consultant's quoted daily or hourly rate.
- 4.5.6.3. Other Costs: List all other direct charge costs not otherwise included in the categories described above (e.g., services of specialized trades, computer services, preservation, packaging and packing, leasing of equipment, ex-pat costs etc.) and provide bases for pricing.

### 4.6. **Bidding Sheets – Section 2**

#### 4.6.1. **Introduction**

- 4.6.1.1. Section 2 addresses the requirement for the bidders to quote for labour rates associated with the performance of the Contract. The Purchaser reserves the right to include this pricing information into the Contract as reference for future amendments.

#### 4.6.2. Pricing Requirements

4.6.2.1. Subject to the stipulations in paragraph 4.1 of this present Annex, the following requirements are applicable for the purpose of the quotation:

4.6.2.1.1. All prices quoted shall be fully loaded (i.e. inclusive of all G&A, administrative costs and profit).

4.6.2.1.2. Prices provided shall be applicable to each year indicated in the bidding sheets.

4.6.2.1.3. Prices quoted shall include travel to join the required place of duty.

#### 4.7. Bidding Sheets – Section 3

##### 4.7.1. Introduction

4.7.1.1. Section 3 addresses the requirement for bidders to quote prices for COTS software and licenses required for the performance. The Purchaser reserves the right to include this pricing information into the Contract as reference for future amendments.

### 5.0 SPECIAL INSTRUCTIONS

5.1. Bidders shall note the Not to Exceed (NTE) Man-Days for subCLINs 1.3, 1.4, 2.3, 2.4, 3.3 3.4, 4.3, and 4.4. The Purchaser has reserved a fixed man-days which is envisioned to be used during the period of the Contract for Task Orders.

5.2. Bidders are **NOT** to alter these numbers specified in the referenced CLINs but **ARE** to take it into consideration for the purpose of not exceeding the overall price limitation associated with the bid to be submitted

**ANNEX B. Prescribed Administrative Forms and Certificates**

### **Annex 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: \_\_\_\_\_

Point of Contact Regarding this bid:

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Telephone: \_\_\_\_\_

Alternative Point of Contact:

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Telephone: \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

## Annex B-2. Acknowledgement of Receipt of IFB Amendments

I confirm that the following amendments to Invitation for Bid n° IFB-CO-14171-PMIC have been received and the bid, as submitted, reflects the content of such amendments.

| Amendment No. | Date of Issued | Date of receipt | Initials |
|---------------|----------------|-----------------|----------|
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |
|               |                |                 |          |

\_\_\_\_\_   
 Date

\_\_\_\_\_   
 Signature of Authorised Representative

\_\_\_\_\_   
 Printed Name

\_\_\_\_\_   
 Title

\_\_\_\_\_   
 Company

### Annex B-3. Certificate of Independent Determination

It is hereby stated that:

- a. We have read and understand all documentation issued as part of IFB-CO-14171-PMIC. 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.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

### Annex 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 (12) months from the bid closing date of this Invitation for Bid.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

### **Annex 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.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

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

The Bidder hereby certifies that it has reviewed the Contract Special Provisions and the NCI Agency Contract General Provisions set forth in the Prospective Contract, Book II of this Invitation for Bid. The Bidder hereby provides its confirmation that it 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 it will accept and abide by the stated Special and General Provisions if awarded the Contract as a result of this Invitation for Bid.

---

Date

---

Signature of Authorised Representative

---

Printed Name

---

Title

---

Company

## Annex 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 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 Memorandum of Understanding (MOU) signature after our firm would be selected as the successful bidder may be cause for the NCI Agency 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.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

**Annex B-8. List of Prospective Subcontractors**

| Name and Address of Sub-Bidder | DUNS Number <sup>1</sup> | Primary Location of Work | Items/Services to be Provided | Estimated Value of Sub-Contract |
|--------------------------------|--------------------------|--------------------------|-------------------------------|---------------------------------|
|                                |                          |                          |                               |                                 |
|                                |                          |                          |                               |                                 |
|                                |                          |                          |                               |                                 |
|                                |                          |                          |                               |                                 |
|                                |                          |                          |                               |                                 |
|                                |                          |                          |                               |                                 |

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

<sup>1</sup> 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.

### Annex B-9. Bidder Background IPR

I, the undersigned, as an authorised 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 / IP Ownership | Indicate if COTS <sup>1</sup> |
|------|----------------------------|-------------------------------|
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |

- 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 22 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 NCI Agency Contract General Provisions.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

<sup>1</sup> Indicate whether the IPR is applicable to a COTS product as defined in the Contract General Provisions.

**Annex B-10. List of Subcontractor IPR**

I, the undersigned, as an authorised representative of Bidder \_\_\_\_\_, warrant, represent, and undertake that:

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

| Item | Description / IP Ownership | Indicate if COTS <sup>1</sup> |
|------|----------------------------|-------------------------------|
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |

- b. The stated Bidder has and will continue to have, for the duration of the Prospective Contract, all necessary rights in and to the IPR specified above necessary to perform the Contractor’s obligations under the Contract.
- c. The Subcontractor IPR stated above complies with the terms specified in Clause 22 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 NCI Agency Contract General Provisions.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

<sup>1</sup> Indicate whether the IPR is applicable to a COTS product as defined in the General Contract Provisions.

**Annex B-11. List of Third Party IPR**

I, the undersigned, as an authorised representative of Bidder \_\_\_\_\_, warrant, represent, and undertake that:

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

| Item | Description / IP Ownership | Indicate If COTS <sup>1</sup> |
|------|----------------------------|-------------------------------|
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |

- b. The stated Bidder has and will continue to have, for the duration of the Prospective Contract, all necessary rights in and to the IPR specified above necessary to perform the Contractor’s obligations under the Contract.
- c. The Third Party IPR stated above complies with the terms specified in Clause 22 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 NCI Agency Contract General Provisions..

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

<sup>1</sup> Indicate whether the IPR is applicable to a COTS product as defined in the General Contract Provisions.

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

The Bidder hereby certifies that, if awarded the Contract pursuant to this solicitation, it 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.

|      |                                        |
|------|----------------------------------------|
| Date | Signature of Authorised Representative |
|      | Printed Name                           |
|      | Title                                  |
|      | Company                                |
|      | Bid Reference                          |

**Annex B-13. List of Proposed Key Personnel**

| <b>Position</b>        | <b>SOW Reference(s)</b> | <b>Labour Category</b>               | <b>Name</b>                          | <b>Designation Period</b>            |
|------------------------|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Project Manager        | 3.3.2.1                 | <i>To be completed by the Bidder</i> | <i>To be completed by the Bidder</i> | EDC through Contract expiration date |
| Deputy Project Manager | 3.3.2.2                 | <i>To be completed by the Bidder</i> | <i>To be completed by the Bidder</i> | EDC through Contract expiration date |

\*EDC : Effective Date of Contract

**Annex B-14. Certificate of Price Ceiling**

I hereby certify that the total price offered in the price quotation of this bid for CLINs 1 and 2 of the Bidding Sheets (i.e. Ramp-Up Stage of 6 Months plus the 1<sup>st</sup> Execution Stage of 12 Months for a total of 18 months) shall not exceed the amount of **Eight Million Four Hundred and Fifty Six Thousand Three Hundred and Eleven Euros (€8,456,311)** as described in paragraph 3.5.2.1 of this Book I.

***Note:** Price information of your bid shall not be disclosed in the Bid Administration Package, or the Technical Proposal Package.*

|      |                                        |
|------|----------------------------------------|
| Date | Signature of Authorised Representative |
|      | Printed Name                           |
|      | Title                                  |
|      | Company                                |
|      | Bid Reference                          |

### **Annex B-15. Comprehension and Intention to Comply with Exclusion Clause and Conflict of Interest**

The Bidder hereby certifies comprehension and intention to comply with the Exclusion Clause in Clause 25 of Book II: Prospective Contract and acknowledge that during the maximum period of performance established by this Contract plus two (2) years, they shall be excluded from award of all BI-SC AIS and NGCS work performed at the NCI Agency. Additionally, the Bidder confirms it has reviewed Clause 26 of Book II: Prospective Contract and certifies that it does not have a conflict of interest in performing this Contract. Failure to complete this Annex shall result in the Bidder being considered non-compliant.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

**Annex B-16. Certification as a Non-holder of Contract(s) or sub-Contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes**

The Bidder hereby certifies that neither they nor their prospective sub-Contractor(s) currently hold any contract(s) or sub-contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes (more specifically, contract(s) or sub-contract(s) under Table 1 of paragraph 1.2 of the SOW (Book II, Part IV)). Failure to complete this Annex shall result in the Bidder being considered non-compliant.

- Yes, I certify that neither I nor my prospective sub-Contractor(s) currently hold any contract(s) or sub-contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes. *\*Nominated Prospective Bidders and their prospective sub-Contractor(s) are eligible to participate in this PMIC Invitation for Bid (IFB).*
- No, I certify that I and my prospective sub-Contractor(s) currently hold contract(s) or sub-contract(s) for consultancy, hardware or software implementation under the BI-SC AIS and the NGCS programmes. *\*Nominated Prospective Bidders and their prospective sub-Contractor(s) are excluded from participating in this PMIC IFB.*

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorised Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Bid Reference

## ANNEX C. Bid Guarantee - Standby Letter of Credit

Standby Letter of Credit Number : \_\_\_\_\_

Issue Date : \_\_\_\_\_

Beneficiary : NCI Agency, Financial Management Office  
Boulevard Leopold III, B-1110, Brussels  
Belgium

Expiry Date : \_\_\_\_\_

1. 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 CO-14171-PMIC dated \_\_\_\_\_.
2. 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:
  - a) (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 the Bid, or stated that it does not consider the Bid valid or agree to be bound by the Bid, or
  - b) (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
  - c) 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
  - d) 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.
3. 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.
4. 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.

5. 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.
6. 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

“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).”

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.

7. 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.
8. Multiple drawings are allowed.
9. Drafts drawn hereunder must be marked, “Drawn under {issuing bank} Letter of Credit No. {number}” and indicate the date hereof.
10. 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.

11. 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.
12. This Letter of Credit is subject to The International Standby Practices-ISP98 (1998 Publication) International Chamber of Commerce Publication No.590.

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**ANNEX D. Clarification Request Form**

**INVITATION FOR BID  
IFB-CO-14171-PMIC**

**Programme Management and Integration Capability (PMIC)**

**Company Name:**

**Submission Date:**

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IFB-CO-14171-PMIC

Company Name:

Submission Date:

| ADMINISTRATIVE or CONTRACTUAL |          |                   |                       |
|-------------------------------|----------|-------------------|-----------------------|
| Serial#                       | IFB Ref. | Bidder's Question | NCI Agency's Response |
| A.1                           |          |                   |                       |
| A.2                           |          |                   |                       |
| A.3                           |          |                   |                       |

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**IFB-CO-14171-PMIC**

**Company Name:**

**Submission Date:**

| <b>PRICE</b>   |                 |                          |                              |
|----------------|-----------------|--------------------------|------------------------------|
| <b>Serial#</b> | <b>IFB Ref.</b> | <b>Bidder's Question</b> | <b>NCI Agency's Response</b> |
| P.1            |                 |                          |                              |
| P.2            |                 |                          |                              |
| P.3            |                 |                          |                              |

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**IFB-CO-14171-PMIC**

**Company Name:**

**Submission Date:**

| <b>TECHNICAL</b> |                 |                          |                              |
|------------------|-----------------|--------------------------|------------------------------|
| <b>Serial#</b>   | <b>IFB Ref.</b> | <b>Bidder's Question</b> | <b>NCI Agency's Response</b> |
| T.1              |                 |                          |                              |
| T.2              |                 |                          |                              |
| T.3              |                 |                          |                              |

**ANNEX E. CV/Resume Template**

**Company name**

Proposed Team:

Clearance Level:

Proposed Role:

Key Personnel:

| Employment History                                    |               |             |             |
|-------------------------------------------------------|---------------|-------------|-------------|
| Company (most recent first)                           |               |             |             |
| Summary of role                                       |               |             |             |
| Summary of relevance                                  |               |             |             |
| Company                                               |               |             |             |
| Summary of role                                       |               |             |             |
| Summary of relevance                                  |               |             |             |
| Company                                               |               |             |             |
| Summary of role                                       |               |             |             |
| Summary of relevance                                  |               |             |             |
| Summary of other experience                           |               |             |             |
|                                                       |               |             |             |
| Education, Qualifications and Professional Membership |               |             |             |
| Year                                                  | Qualification | Institution | Grade/Level |
|                                                       |               |             |             |

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|                                                                                                                                                                |           |          |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|---------|
|                                                                                                                                                                |           |          |         |
|                                                                                                                                                                |           |          |         |
|                                                                                                                                                                |           |          |         |
| <b>Relevant Experience</b>                                                                                                                                     |           |          |         |
| <i>Describe experience and specify level of experience as Expert, Extensive, Familiar, or Limited<sup>1</sup></i>                                              |           |          |         |
|                                                                                                                                                                |           |          |         |
| <b>Role-Specific Skills and Experience</b> <i>(describe experience and specify level of experience as Expert, Extensive, Familiar, or Limited<sup>1</sup>)</i> |           |          |         |
|                                                                                                                                                                |           |          |         |
| <b>Tools and Methodologies</b> <i>(describe experience and specify level of experience as Expert, Extensive, Familiar, or Limited<sup>1</sup>)</i>             |           |          |         |
|                                                                                                                                                                |           |          |         |
| <b>International Working Environments</b>                                                                                                                      |           |          |         |
|                                                                                                                                                                |           |          |         |
| <b>Language Proficiency</b> <i>(as defined in STANAG 6001)</i>                                                                                                 |           |          |         |
|                                                                                                                                                                | Listening | Speaking | Reading |
| English (working language)                                                                                                                                     |           |          |         |
| French                                                                                                                                                         |           |          |         |

<sup>1</sup> **Expert** – is recognised by peers as a subject matter expert through experience, published work, and/or qualifications  
**Extensive** – has direct experience accumulated over a number of years, and relevant qualifications where applicable  
**Familiar** – has some direct experience, more extensive experience in a related area, and/or has undertaken relevant training  
**Limited** – has awareness through indirect experience or related work

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**END OF IFB**

**IFB-CO-14171-PMIC BIDDING SHEETS**

Contract Bidding Documentation  
ANNEX 1 to General Provisions - Bidding Sheets  
IFB-CO-14171-PMIC

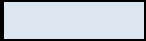





The tabs contained in this workbook are the Basis of Estimate (BOE) for the proposal.

Abbreviations:

- CWE Collaborative Working Environment
- NSP Not Separately Priced

**Legend**

|                                                                                   |                                     |
|-----------------------------------------------------------------------------------|-------------------------------------|
|  | Headings / Background               |
|  | Bidder Input Cell                   |
|  | To be Completed By NCIA Contracting |
|  | Background / Information Only       |

**Summary Bidders Input Description**

|             |                                                                |
|-------------|----------------------------------------------------------------|
| UNIT PRICE  | Provide the unit price for the item in your selected currency  |
| TOTAL PRICE | Provide the total price of all items in your selected currency |

**Bid Currency**



Click to select Bid Currency

## CLIN Bidding Sheets Instructions

| INTRODUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>All bidders are required to submit pricing details to demonstrate the Purchaser's Pricing Principles are being applied as part of their bids (in the absence of a pre-approved National Format). All data completed in these sheets shall be complete, verifiable and factual and include the required details. Any exclusions may render your bid as non compliant thus removing yourself from the bidding process.</p> <p>Input cells are colour coded <b>YELLOW</b>. Modify other cells as required and in accordance with the instructions below.</p> <p>Please use the <b>CLIN PRICING</b> sheets to provide the required pricing details <b>FOR EACH CLIN</b>. However replicate sheets as required. Please see Bidding Instructions for further details.</p> |

### FORM INPUTS

| PRICING SUMMARY ASSUMPTIONS |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| <b>Currency:</b>            | Select currency of input values from drop down list.                            |
| <b>Calendar Year:</b>       | Select Year 1 of the spread profile from the drop down list.                    |
| <b>Quantity</b>             | Enter quantities of proposed item(s) in the time profiling inputs to the right. |
| <b>Unit Cost</b>            | Enter the unit cost of the proposed item(s) for each year.                      |
| <b>Total Estimated Cost</b> | This is a calculated value (Quantity x Unit Price) and should not be altered.   |

| CATEGORY                       | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. DIRECT MATERIAL</b>      | <p>A. Purchased Equipment - Items purchased as part of the proposed solution. Please provide vendor quotes and/or invoices along with quantity and prices.</p> <p>B. Subcontracted Item - Items procured through sub contracts as part of the proposed solution. Please provide subcontractor quotes and/or invoices along with quantity and prices. Prices must be traceable to the Subcontract &amp; Material BOE tab</p> <p>C. Other Equipment/Materials - Items procured as part of the proposed solution. Please provide vendor quotes and/or invoices along with quantity and prices.</p> | <ol style="list-style-type: none"> <li>1. Insert the Equipment Item Name(s).</li> <li>2. Provide a time phased (monthly) breakdown of quantities.</li> <li>3. Provide unit prices against each equipment item for each year.</li> <li>4. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column</li> </ol>                                                                                                                            |
| <b>2. DIRECT LABOUR</b>        | Direct labour is all effort directly expended by the bidder for the proposed solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ol style="list-style-type: none"> <li>1. Insert the direct labour title(s).</li> <li>2. Provide a time phased (monthly) breakdown of labour hours.</li> <li>3. Provide hourly rates against each labour title for each year.</li> <li>4. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column.</li> </ol>                                                                                                                          |
| <b>3. SUBCONTRACT LABOUR</b>   | Indirect labour is all effort expended by the sub-contractor for the proposed solution. Prices must be traceable to the Subcontract & Material BOE section under each CLIN's breakdown tab                                                                                                                                                                                                                                                                                                                                                                                                      | <ol style="list-style-type: none"> <li>1. Insert the subcontract labour title(s).</li> <li>2. Provide a time phased (monthly) breakdown of labour hours.</li> <li>3. Provide hourly rates against each labour title for each year.</li> <li>4. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column</li> </ol>                                                                                                                      |
| <b>4. TRAVEL</b>               | Includes all travel associated with the procurement and delivery of the proposed solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <ol style="list-style-type: none"> <li>1. Insert the Trip Name(s).</li> <li>2. Provide number of trips being made.</li> <li>3. Provide number of people travelling.</li> <li>4. Provide number of days per trip.</li> <li>5. Provide cost of round trip flight.</li> <li>6. Provide daily per diem rate.</li> <li>7. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column including the location &amp; reference to SOW.</li> </ol> |
| <b>5. OTHER DIRECT COSTS</b>   | Additional direct costs directly expended by the bidder for the proposed solution that do not fit in any of the above categories.                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ol style="list-style-type: none"> <li>1. Insert the Other Direct Cost title(s).</li> <li>2. Provide a time phased (monthly) breakdown of unit quantities.</li> <li>3. Provide unit costs against each title.</li> <li>4. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column.</li> </ol>                                                                                                                                          |
| <b>6. TOTAL FEE / PROFIT %</b> | Provide all FEE/PROFIT percentage applied to costs in accordance with your approved national accounting standards.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Provide calculation used in application of FEE/PROFIT into the price.                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>7. OTHER FACTORS</b>        | Provide any OTHER FACTOR percentage applied to costs in accordance with your approved national accounting standards. Insert comments/descriptions/references/explanation of calculation method under the 'Notes' column.                                                                                                                                                                                                                                                                                                                                                                        | Provide calculation used in application of FACTORS into the price.                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>GRAND TOTAL</b>             | The total shall feed into the SSS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Total Price including direct cost, indirect cost, rates and factors as applied above. Please do not forget to amend the title to reflect the appropriate CLIN number.                                                                                                                                                                                                                                                                                                             |

| BOOK II-PART I-SCHEDULE OF SUPPLIES AND SERVICES (SSS)                      |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            |                  |          |
|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|---------------------------------|-----------------|----------------------|------|-----|------------|------------------|----------|
| IFB-CO-14171-PMIC                                                           |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            |                  |          |
| BASIC CONTRACT (RAMP-UP STAGE (6 months) + 1st EXECUTION STAGE (12 months)) |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            |                  |          |
| RAMP-UP STAGE (6 months)                                                    |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            |                  |          |
| CLIN                                                                        | DESCRIPTION                                                                                                                             | SOW REFERENCE  | WP REFERENCE | REQUIRED COMPLETION DATE        | DELIVERY METHOD | DELIVERY DESTINATION | UNIT | QTY | UNIT PRICE | PRICE (Currency) | Comments |
| <b>1.1</b>                                                                  | <b>Work Package 1: Project Management (Ramp-Up Stage)</b>                                                                               |                |              |                                 |                 |                      |      |     |            |                  |          |
| <b>1.1</b>                                                                  | <b>Project Management (Ramp-Up Stage)</b>                                                                                               |                |              |                                 |                 |                      |      |     |            |                  |          |
| 1.1.1                                                                       | Project Management Plan                                                                                                                 | 3.6            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.2                                                                       | Stage Plan                                                                                                                              | 3.7            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.3                                                                       | Project Workspace                                                                                                                       | 3.10           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.4                                                                       | Project Work Breakdown Structure                                                                                                        | 3.11           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.5                                                                       | Project Master Schedule                                                                                                                 | 3.12           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.6                                                                       | Risk Log                                                                                                                                | 3.13           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.7                                                                       | Project Kick-off Meeting                                                                                                                | 3.15.2         | 3.19.4.2.1   | EDC + 2w                        | N/A             | NCIA, The Hague      | Each | 1   | €          | -                | €        |
| 1.1.8                                                                       | Project Checkpoint Reviews                                                                                                              | 3.15.3         | 3.19.4.2.1   | Monthly                         | N/A             | NCIA, The Hague      | Each | 6   | €          | -                | €        |
| 1.1.9                                                                       | Other Meetings                                                                                                                          | 3.15.4         | 3.19.4.2.1   | As required                     | N/A             | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.10                                                                      | Meeting Minutes                                                                                                                         | 3.15           | 3.19.4.2.1   | Meeting + 3D                    | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.1.11                                                                      | Project Highlight Reports                                                                                                               | 3.16           | 3.19.4.2.1   | Monthly                         | Electronic      | NCIA, Workspace      | Each | 6   | €          | -                | €        |
| 1.1.12                                                                      | Draft Task Orders                                                                                                                       | 3.22           | 3.19.4.2.1   | As required                     | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| <b>TOTAL PRICE CLIN 1.1</b>                                                 |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            | €                | -        |
| <b>1.2</b>                                                                  | <b>Work Package 2: PMIC Programme/Project Support (Ramp-Up Stage)</b>                                                                   |                |              |                                 |                 |                      |      |     |            |                  |          |
| <b>1.2</b>                                                                  | <b>PMIC Programme/Project Support (Ramp-Up Stage)</b>                                                                                   |                |              |                                 |                 |                      |      |     |            |                  |          |
| 1.2.1                                                                       | Programme Brief                                                                                                                         | 4.2.3.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.2                                                                       | Bi-SC AIS Implementation Plan (BAIP)                                                                                                    | 4.2.4.3.1      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.3                                                                       | Project Dossiers                                                                                                                        | 4.2.4.3.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.4                                                                       | Programme Product Breakdown Structure                                                                                                   | 4.2.4.3.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.5                                                                       | Dependency Structure Matrix                                                                                                             | 4.2.5.1.4      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.6                                                                       | Project Models                                                                                                                          | 4.2.10.1       | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.7                                                                       | Project Brief                                                                                                                           | 4.2.10.2.1.2.1 | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.8                                                                       | Programme Issue Log                                                                                                                     | 4.3.2.1.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.9                                                                       | Project Issue Log                                                                                                                       | 4.3.3.2.2.1    | 3.19.4.2.2   | NLT 2w after requested          | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.10                                                                      | Programme Communications Plan                                                                                                           | 4.4.2.2.1      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.11                                                                      | Programme Highlight Report                                                                                                              | 4.4.2.6.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.12                                                                      | Investment Committee Report                                                                                                             | 4.4.2.6.4      | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.13                                                                      | Programme Risk Management Strategy                                                                                                      | 4.5.2.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.14                                                                      | Programme Risk Log                                                                                                                      | 4.5.2.1.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.15                                                                      | Project Risk Log                                                                                                                        | 4.5.3.2.2.1    | 3.19.4.2.2   | NLT 2w after requested          | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.16                                                                      | Programme Master Schedule                                                                                                               | 4.6.2.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.17                                                                      | Project Schedule                                                                                                                        | 4.6.3.2.1.1    | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.18                                                                      | Programme Configuration Management Plan                                                                                                 | 4.8.2.2.1.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.19                                                                      | Programme Configuration Management Repository                                                                                           | 4.8.2.3.3.1.2  | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.20                                                                      | Programme Quality Log                                                                                                                   | 4.9.4.1.4      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.21                                                                      | Security Accreditation Plan                                                                                                             | 4.11.4.5.2     | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.22                                                                      | Programme Open Technical Repository Design Review                                                                                       | 4.12.2.1.6.3   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.23                                                                      | Programme Service Catalogue                                                                                                             | 4.10.2.1.5.1   | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.24                                                                      | Programme Architecture Repository                                                                                                       | 4.12.2.1.6     | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.25                                                                      | Programme Requirements Baseline                                                                                                         | 4.14.2.1.3     | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.26                                                                      | Test Scenario                                                                                                                           | 4.11.2.1.1.2   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.27                                                                      | Service Provisioning Models                                                                                                             | 4.16.3.2.1.1   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.28                                                                      | Process Documentation                                                                                                                   | 4.13.3         | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.29                                                                      | Process Asset Library                                                                                                                   | 4.4.2.5.2.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.2.30                                                                      | Lessons Learned Log                                                                                                                     | 4.2.11.10.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| <b>TOTAL PRICE CLIN 1.2</b>                                                 |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            | €                | -        |
| <b>1.3</b>                                                                  | <b>Work Package 3: Testbed Support (Ramp-Up Stage: Task Order (Level of Effort or Completion)-Not to Exceed 550 man-days)</b>           |                |              |                                 |                 |                      |      |     |            |                  |          |
| <b>1.3</b>                                                                  | <b>Testbed Support (Ramp-Up Stage)</b>                                                                                                  |                |              |                                 |                 |                      |      |     |            |                  |          |
| 1.3.1                                                                       | Programme Test Requirements Baseline                                                                                                    | 4.11.4.3.2     | 3.19.4.2.3   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.2                                                                       | Programme Test Plan                                                                                                                     | 4.11.4.4.1     | 3.19.4.2.3   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.3                                                                       | System Security Requirements Specification                                                                                              | 4.11.4.5.1     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.4                                                                       | Security Accreditation Plan                                                                                                             | 4.11.4.5.2     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.5                                                                       | Security Test and Evaluation Plan                                                                                                       | 4.11.4.5.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.6                                                                       | Testbed High-Level Design                                                                                                               | 4.11.4.6.1     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.7                                                                       | Testbed Detailed Design                                                                                                                 | 4.11.4.6.2     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.8                                                                       | Testbed Test Plan                                                                                                                       | 4.11.4.6.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.3.9                                                                       | Testbed Schedule                                                                                                                        | 4.11.4.9.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| <b>TOTAL PRICE CLIN 1.3</b>                                                 |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            | €                | -        |
| <b>1.4</b>                                                                  | <b>Work Package 4: Project Assurance Support (Ramp-Up Stage: Task Order (Level of Effort or Completion)-Not to Exceed 135 man-days)</b> |                |              |                                 |                 |                      |      |     |            |                  |          |
| <b>1.4</b>                                                                  | <b>Project Assurance Support (Ramp-Up Stage)</b>                                                                                        |                |              |                                 |                 |                      |      |     |            |                  |          |
| 1.4.1                                                                       | Verification and Validation Plan                                                                                                        | 4.15.4.2.2     | 3.19.4.2.4   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| 1.4.2                                                                       | Verification and Validation Report                                                                                                      | 4.15.4.3       | 3.19.4.2.4   | Monthly, NLT 2w after requested | Online          | NCIA, Workspace      | Each | 1   | €          | -                | €        |
| <b>TOTAL PRICE CLIN 1.4</b>                                                 |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            | €                | -        |
| <b>TOTAL PRICE FOR RAMP-UP STAGE</b>                                        |                                                                                                                                         |                |              |                                 |                 |                      |      |     |            | €                | -        |

| 1st EXECUTION STAGE (12 months)                                  |                                                                                                                                               |                |            |                                 |            |                 |      |    |   |   |   |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------|---------------------------------|------------|-----------------|------|----|---|---|---|
| <b>2.1</b>                                                       | <b>Work Package 1: Project Management (1st Execution Stage)</b>                                                                               |                |            |                                 |            |                 |      |    |   |   |   |
| <b>2.1</b>                                                       | <b>Project Management (1st Execution Stage)</b>                                                                                               |                |            |                                 |            |                 |      |    |   |   |   |
| 2.1.1                                                            | Project Management Plan                                                                                                                       | 3.6            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.2                                                            | Stage Plan                                                                                                                                    | 3.7            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.3                                                            | Project Workspace                                                                                                                             | 3.10           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.4                                                            | Project Work Breakdown Structure                                                                                                              | 3.11           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.5                                                            | Project Master Schedule                                                                                                                       | 3.12           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.6                                                            | Risk Log                                                                                                                                      | 3.13           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.7                                                            | Project Checkpoint Reviews                                                                                                                    | 3.15.3         | 3.19.4.2.1 | Monthly                         | N/A        | NCIA, The Hague | Each | 12 | € | - | € |
| 2.1.8                                                            | Other Meetings                                                                                                                                | 3.15.4         | 3.19.4.2.1 | As required                     | N/A        | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.9                                                            | Meeting Minutes                                                                                                                               | 3.15           | 3.19.4.2.1 | Meeting + 3D                    | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.1.10                                                           | Project Highlight Reports                                                                                                                     | 3.16           | 3.19.4.2.1 | Monthly                         | Electronic | NCIA, Workspace | Each | 12 | € | - | € |
| 2.1.11                                                           | Draft Task Orders                                                                                                                             | 3.22           | 3.19.4.2.1 | As required                     | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 2.1</b>                                      |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |
| <b>2.2</b>                                                       | <b>Work Package 2: PMIC Programme/Project Support (1st Execution Stage)</b>                                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>2.2</b>                                                       | <b>PMIC Programme/Project Support (1st Execution Stage)</b>                                                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| 2.2.1                                                            | Programme Brief                                                                                                                               | 4.2.3.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.2                                                            | Bi-SC AIS Implementation Plan (BAIP)                                                                                                          | 4.2.4.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.3                                                            | Project Dossiers                                                                                                                              | 4.2.4.3.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.4                                                            | Programme Product Breakdown Structure                                                                                                         | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.5                                                            | Programme Blueprint                                                                                                                           | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.6                                                            | Dependency Structure Matrix                                                                                                                   | 4.2.5.1.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.7                                                            | Programme Tranches                                                                                                                            | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.8                                                            | Project Brief                                                                                                                                 | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.9                                                            | Programme Issue Log                                                                                                                           | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.10                                                           | Project Issue Log                                                                                                                             | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.11                                                           | Programme Communications Plan                                                                                                                 | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.12                                                           | Programme Highlight Report                                                                                                                    | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.13                                                           | Investment Committee Report                                                                                                                   | 4.4.2.6.4      | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.14                                                           | Programme Risk Management Strategy                                                                                                            | 4.5.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.15                                                           | Programme Risk Log                                                                                                                            | 4.5.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.16                                                           | Project Risk Log                                                                                                                              | 4.5.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.17                                                           | Programme Master Schedule                                                                                                                     | 4.6.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.18                                                           | Project Schedule                                                                                                                              | 4.6.3.2.1.1    | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.19                                                           | Programme Configuration Management Plan                                                                                                       | 4.8.2.2.1.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.20                                                           | Programme Configuration Management Repository                                                                                                 | 4.8.2.3.3.1.2  | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.21                                                           | Programme Quality Log                                                                                                                         | 4.9.4.1.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.22                                                           | Security Accreditation Plan                                                                                                                   | 4.11.4.5.2     | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.23                                                           | Programme Open Technical Repository Design Review                                                                                             | 4.12.2.1.6.3   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.24                                                           | Programme Service Catalogue                                                                                                                   | 4.10.2.1.5.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.25                                                           | Programme Architecture Repository                                                                                                             | 4.12.2.1.6     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.26                                                           | Programme Requirements Baseline                                                                                                               | 4.14.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.27                                                           | Test Scenario                                                                                                                                 | 4.11.2.1.1.2   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.28                                                           | Service Provisioning Models                                                                                                                   | 4.16.3.2.1.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.29                                                           | Process Documentation                                                                                                                         | 4.13.3         | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.30                                                           | Process Asset Library                                                                                                                         | 4.4.2.5.2.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.2.31                                                           | Lessons Learned Log                                                                                                                           | 4.2.11.10.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 2.2</b>                                      |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |
| <b>2.3</b>                                                       | <b>Work Package 3: Testbed Support (1st Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 1100 man-days)</b>          |                |            |                                 |            |                 |      |    |   |   |   |
| <b>2.3</b>                                                       | <b>Testbed Support (1st Execution Stage)</b>                                                                                                  |                |            |                                 |            |                 |      |    |   |   |   |
| 2.3.1                                                            | Programme Test Requirements Baseline                                                                                                          | 4.11.4.3.2     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.2                                                            | Programme Test Plan                                                                                                                           | 4.11.4.4.1     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.3                                                            | System Security Requirements Specification                                                                                                    | 4.11.4.5.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.4                                                            | Security Accreditation Plan                                                                                                                   | 4.11.4.5.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.5                                                            | Security Test and Evaluation Plan                                                                                                             | 4.11.4.5.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.6                                                            | Testbed High-Level Design                                                                                                                     | 4.11.4.6.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.7                                                            | Testbed Detailed Design                                                                                                                       | 4.11.4.6.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.8                                                            | Testbed Test Plan                                                                                                                             | 4.11.4.6.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.3.9                                                            | Testbed Schedule                                                                                                                              | 4.11.4.9.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 2.3</b>                                      |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |
| <b>2.4</b>                                                       | <b>Work Package 4: Project Assurance Support (1st Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 540 man-days)</b> |                |            |                                 |            |                 |      |    |   |   |   |
| <b>2.4</b>                                                       | <b>Project Assurance Support (1st Execution Stage)</b>                                                                                        |                |            |                                 |            |                 |      |    |   |   |   |
| 2.4.1                                                            | Verification and Validation Plan                                                                                                              | 4.15.4.2.2     | 3.19.4.2.4 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 2.4.2                                                            | Verification and Validation Report                                                                                                            | 4.15.4.3       | 3.19.4.2.4 | Monthly, NLT 2w after requested | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 2.4</b>                                      |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |
| <b>TOTAL PRICE FOR 1st EXECUTION STAGE</b>                       |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |
| <b>GRAND TOTAL PRICE FOR RAMP-UP STAGE + 1st EXECUTION STAGE</b> |                                                                                                                                               |                |            |                                 |            |                 |      |    |   | € | - |

| CONTRACT OPTION (2nd EXECUTION STAGE (12 months) + 3rd EXECUTION STAGE (12 months))                                                                       |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|------------|---------------------------------|------------|-----------------|------|----|---|---|---|
| 2nd EXECUTION STAGE (12 months)                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>3.1 Work Package 1: Project Management (Option: 2nd Execution Stage)</b>                                                                               |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>3.1 Project Management (Option: 2nd Execution Stage)</b>                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| 3.1.1                                                                                                                                                     | Project Management Plan                           | 3.6            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.2                                                                                                                                                     | Stage Plan                                        | 3.7            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.3                                                                                                                                                     | Project Workspace                                 | 3.10           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.4                                                                                                                                                     | Project Work Breakdown Structure                  | 3.11           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.5                                                                                                                                                     | Project Master Schedule                           | 3.12           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.6                                                                                                                                                     | Risk Log                                          | 3.13           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.7                                                                                                                                                     | Project Checkpoint Reviews                        | 3.15.3         | 3.19.4.2.1 | Monthly                         | N/A        | NCIA, The Hague | Each | 12 | € | - | € |
| 3.1.8                                                                                                                                                     | Other Meetings                                    | 3.15.4         | 3.19.4.2.1 | As required                     | N/A        | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.9                                                                                                                                                     | Meeting Minutes                                   | 3.15           | 3.19.4.2.1 | Meeting + 3D                    | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.1.10                                                                                                                                                    | Project Highlight Reports                         | 3.16           | 3.19.4.2.1 | Monthly                         | Electronic | NCIA, Workspace | Each | 12 | € | - | € |
| 3.1.11                                                                                                                                                    | Draft Task Orders                                 | 3.22           | 3.19.4.2.1 | As required                     | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 3.1</b>                                                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   | € | - |
| <b>3.2 Work Package 2: PMIC Programme/Project Support (Option: 2nd Execution Stage)</b>                                                                   |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>3.2 PMIC Programme/Project Support (Option: 2nd Execution Stage)</b>                                                                                   |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| 3.2.1                                                                                                                                                     | Programme Brief                                   | 4.2.3.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.2                                                                                                                                                     | Bi-SC AIS Implementation Plan (BAIP)              | 4.2.4.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.3                                                                                                                                                     | Project Dossiers                                  | 4.2.4.3.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.4                                                                                                                                                     | Programme Product Breakdown Structure             | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.5                                                                                                                                                     | Programme Blueprint                               | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.6                                                                                                                                                     | Dependency Structure Matrix                       | 4.2.5.1.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.7                                                                                                                                                     | Programme Tranches                                | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.8                                                                                                                                                     | Project Brief                                     | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.9                                                                                                                                                     | Programme Issue Log                               | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.10                                                                                                                                                    | Project Issue Log                                 | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.11                                                                                                                                                    | Programme Communications Plan                     | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.12                                                                                                                                                    | Programme Highlight Report                        | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.13                                                                                                                                                    | Investment Committee Report                       | 4.4.2.6.4      | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.14                                                                                                                                                    | Programme Risk Management Strategy                | 4.5.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.15                                                                                                                                                    | Programme Risk Log                                | 4.5.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.16                                                                                                                                                    | Project Risk Log                                  | 4.5.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.17                                                                                                                                                    | Programme Master Schedule                         | 4.6.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.18                                                                                                                                                    | Project Schedule                                  | 4.6.3.2.1.1    | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.19                                                                                                                                                    | Programme Configuration Management Plan           | 4.8.2.2.1.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.20                                                                                                                                                    | Programme Configuration Management Repository     | 4.8.2.3.3.1.2  | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.21                                                                                                                                                    | Programme Quality Log                             | 4.9.4.1.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.22                                                                                                                                                    | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.23                                                                                                                                                    | Programme Open Technical Repository Design Review | 4.12.2.1.6.3   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.24                                                                                                                                                    | Programme Service Catalogue                       | 4.10.2.1.5.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.25                                                                                                                                                    | Programme Architecture Repository                 | 4.12.2.1.6     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.26                                                                                                                                                    | Programme Requirements Baseline                   | 4.14.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.27                                                                                                                                                    | Test Scenario                                     | 4.11.2.1.1.2   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.28                                                                                                                                                    | Service Provisioning Models                       | 4.16.3.2.1.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.29                                                                                                                                                    | Process Documentation                             | 4.13.3         | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.30                                                                                                                                                    | Process Asset Library                             | 4.4.2.5.2.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.2.31                                                                                                                                                    | Lessons Learned Log                               | 4.2.11.10.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 3.2</b>                                                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   | € | - |
| <b>3.3 Work Package 3: Testbed Support (Option: 2nd Execution Stage: Task Order (Level of Effort or Completion)- Not to Exceed 1100 man-days)</b>         |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>3.3 Testbed Support (Option: 2nd Execution Stage)</b>                                                                                                  |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| 3.3.1                                                                                                                                                     | Programme Test Requirements Baseline              | 4.11.4.3.2     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.2                                                                                                                                                     | Programme Test Plan                               | 4.11.4.4.1     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.3                                                                                                                                                     | System Security Requirements Specification        | 4.11.4.5.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.4                                                                                                                                                     | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.5                                                                                                                                                     | Security Test and Evaluation Plan                 | 4.11.4.5.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.6                                                                                                                                                     | Testbed High-Level Design                         | 4.11.4.6.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.7                                                                                                                                                     | Testbed Detailed Design                           | 4.11.4.6.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.8                                                                                                                                                     | Testbed Test Plan                                 | 4.11.4.6.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.3.9                                                                                                                                                     | Testbed Schedule                                  | 4.11.4.9.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 3.3</b>                                                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   | € | - |
| <b>3.4 Work Package 4: Project Assurance Support (Option: 2nd Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 540 man-days)</b> |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| <b>3.4 Project Assurance Support (Option: 2nd Execution Stage)</b>                                                                                        |                                                   |                |            |                                 |            |                 |      |    |   |   |   |
| 3.4.1                                                                                                                                                     | Verification and Validation Plan                  | 4.15.4.2.2     | 3.19.4.2.4 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | - | € |
| 3.4.2                                                                                                                                                     | Verification and Validation Report                | 4.15.4.3       | 3.19.4.2.4 | Monthly, NLT 2w after requested | Online     | NCIA, Workspace | Each | 1  | € | - | € |
| <b>TOTAL PRICE CLIN 3.4</b>                                                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   | € | - |
| <b>TOTAL PRICE FOR 2nd EXECUTION STAGE (OPTION)</b>                                                                                                       |                                                   |                |            |                                 |            |                 |      |    |   | € | - |

| 3rd EXECUTION STAGE (12 months)                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|------------|---------------------------------|------------|-----------------|------|----|---|-----------------------------------------------------------------------------|---|
| <b>4.1 Work Package 1: Project Management (Option: 3rd Execution Stage)</b>                                                                               |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| <b>4.1 Project Management (Option: 3rd Execution Stage)</b>                                                                                               |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| 4.1.1                                                                                                                                                     | Project Management Plan                           | 3.6            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.2                                                                                                                                                     | Stage Plan                                        | 3.7            | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.3                                                                                                                                                     | Project Workspace                                 | 3.10           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.4                                                                                                                                                     | Project Work Breakdown Structure                  | 3.11           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.5                                                                                                                                                     | Project Master Schedule                           | 3.12           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.6                                                                                                                                                     | Risk Log                                          | 3.13           | 3.19.4.2.1 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.7                                                                                                                                                     | Project Checkpoint Reviews                        | 3.15.3         | 3.19.4.2.1 | Monthly                         | N/A        | NCIA, The Hague | Each | 12 | € | -                                                                           | € |
| 4.1.8                                                                                                                                                     | Other Meetings                                    | 3.15.4         | 3.19.4.2.1 | As required                     | N/A        | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.9                                                                                                                                                     | Meeting Minutes                                   | 3.15           | 3.19.4.2.1 | Meeting + 3D                    | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.1.10                                                                                                                                                    | Project Highlight Reports                         | 3.16           | 3.19.4.2.1 | Monthly                         | Electronic | NCIA, Workspace | Each | 12 | € | -                                                                           | € |
| 4.1.11                                                                                                                                                    | Draft Task Orders                                 | 3.22           | 3.19.4.2.1 | As required                     | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | TOTAL PRICE CLIN 4.1                                                        | € |
| <b>4.2 Work Package 2: PMIC Programme/Project Support (Option: 3rd Execution Stage)</b>                                                                   |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| <b>4.2 PMIC Programme/Project Support (Option: 3rd Execution Stage)</b>                                                                                   |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| 4.2.1                                                                                                                                                     | Programme Brief                                   | 4.2.3.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.2                                                                                                                                                     | BI-SC AIS Implementation Plan (BAIP)              | 4.2.4.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.3                                                                                                                                                     | Project Dossiers                                  | 4.2.4.3.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.4                                                                                                                                                     | Programme Product Breakdown Structure             | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.5                                                                                                                                                     | Programme Blueprint                               | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.6                                                                                                                                                     | Dependency Structure Matrix                       | 4.2.5.3.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.7                                                                                                                                                     | Programme Tranches                                | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.8                                                                                                                                                     | Project Brief                                     | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.9                                                                                                                                                     | Programme Issue Log                               | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.10                                                                                                                                                    | Project Issue Log                                 | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.11                                                                                                                                                    | Programme Communications Plan                     | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.12                                                                                                                                                    | Programme Highlight Report                        | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.13                                                                                                                                                    | Investment Committee Report                       | 4.4.2.6.4      | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.14                                                                                                                                                    | Programme Risk Management Strategy                | 4.5.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.15                                                                                                                                                    | Programme Risk Log                                | 4.5.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.16                                                                                                                                                    | Project Risk Log                                  | 4.5.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested          | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.17                                                                                                                                                    | Programme Master Schedule                         | 4.6.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.18                                                                                                                                                    | Project Schedule                                  | 4.6.3.2.1.1    | 3.19.4.2.2 | NLT 2w after requested          | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.19                                                                                                                                                    | Programme Configuration Management Plan           | 4.8.2.2.1.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.20                                                                                                                                                    | Programme Configuration Management Repository     | 4.8.2.3.3.1.2  | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.21                                                                                                                                                    | Programme Quality Log                             | 4.9.4.1.4      | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.22                                                                                                                                                    | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.23                                                                                                                                                    | Programme Open Technical Repository Design Review | 4.12.2.1.6.3   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.24                                                                                                                                                    | Programme Service Catalogue                       | 4.10.2.1.5.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.25                                                                                                                                                    | Programme Architecture Repository                 | 4.12.2.1.6     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.26                                                                                                                                                    | Programme Requirements Baseline                   | 4.14.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.27                                                                                                                                                    | Test Scenario                                     | 4.11.2.1.1.2   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.28                                                                                                                                                    | Service Provisioning Models                       | 4.16.3.2.1.1   | 3.19.4.2.2 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.29                                                                                                                                                    | Process Documentation                             | 4.13.3         | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.30                                                                                                                                                    | Process Asset Library                             | 4.4.2.5.2.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.2.31                                                                                                                                                    | Lessons Learned Log                               | 4.2.11.10.2    | 3.19.4.2.2 | Fill based on proposed PMS      | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | TOTAL PRICE CLIN 4.2                                                        | € |
| <b>4.3 Work Package 3: Testbed Support (Option: 3rd Execution Stage: Task Order (Level of Effort or Completion)- Not to Exceed 1100 man-days)</b>         |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| <b>4.3 Testbed Support (Option: 3rd Execution Stage)</b>                                                                                                  |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| 4.3.1                                                                                                                                                     | Programme Test Requirements Baseline              | 4.11.4.3.2     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.2                                                                                                                                                     | Programme Test Plan                               | 4.11.4.4.1     | 3.19.4.2.3 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.3                                                                                                                                                     | System Security Requirements Specification        | 4.11.4.5.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.4                                                                                                                                                     | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.5                                                                                                                                                     | Security Test and Evaluation Plan                 | 4.11.4.5.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.6                                                                                                                                                     | Testbed High-Level Design                         | 4.11.4.6.1     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.7                                                                                                                                                     | Testbed Detailed Design                           | 4.11.4.6.2     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.8                                                                                                                                                     | Testbed Test Plan                                 | 4.11.4.6.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.3.9                                                                                                                                                     | Testbed Schedule                                  | 4.11.4.9.3     | 3.19.4.2.3 | Fill based on proposed PMS      | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | TOTAL PRICE CLIN 4.3                                                        | € |
| <b>4.4 Work Package 4: Project Assurance Support (Option: 3rd Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 540 man-days)</b> |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| <b>4.4 Project Assurance Support (Option: 3rd Execution Stage)</b>                                                                                        |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
| 4.4.1                                                                                                                                                     | Verification and Validation Plan                  | 4.15.4.2.2     | 3.19.4.2.4 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
| 4.4.2                                                                                                                                                     | Verification and Validation Report                | 4.15.4.3       | 3.19.4.2.4 | Monthly, NLT 2w after requested | Online     | NCIA, Workspace | Each | 1  | € | -                                                                           | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | TOTAL PRICE CLIN 4.4                                                        | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | TOTAL PRICE FOR 3rd EXECUTION STAGE (OPTION)                                | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | GRAND TOTAL PRICE FOR 2nd EXECUTION STAGE + 3rd EXECUTION STAGE             | € |
| <b>SUMMARY</b>                                                                                                                                            |                                                   |                |            |                                 |            |                 |      |    |   |                                                                             |   |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | GRAND TOTAL (BASIC CONTRACT: RAMP UP STAGE + 1st EXECUTION STAGE)           | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | GRAND TOTAL (OPTION 1: 2nd EXECUTION STAGE + OPTION 2: 3rd EXECUTION STAGE) | € |
|                                                                                                                                                           |                                                   |                |            |                                 |            |                 |      |    |   | GRAND TOTAL (ENTIRE CONTRACT)                                               | € |



The image shows a vertical rectangular area with a light blue background. It contains four horizontal bands of a fine grid pattern, each separated by a larger light blue space. The grid bands are composed of small, uniform squares. The first band is at the top, followed by a larger light blue space, then the second band, another larger light blue space, the third band, a third larger light blue space, and finally the fourth band at the bottom.

| CDR 2 Price Breakdown |          |      |             |       |             |          |       |          |        |     |       |
|-----------------------|----------|------|-------------|-------|-------------|----------|-------|----------|--------|-----|-------|
| Item                  | Quantity | Unit | Description | Price | Total Price | Material | Labor | Overhead | Profit | Tax | Notes |
| 1                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 2                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 3                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 4                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 5                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 6                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 7                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 8                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 9                     | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 10                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 11                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 12                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 13                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 14                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 15                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 16                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 17                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 18                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 19                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 20                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 21                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 22                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 23                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 24                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 25                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 26                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 27                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 28                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 29                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 30                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 31                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 32                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 33                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 34                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 35                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 36                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 37                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 38                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 39                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 40                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 41                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 42                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 43                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 44                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 45                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 46                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 47                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 48                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 49                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 50                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 51                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 52                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 53                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 54                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 55                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 56                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 57                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 58                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 59                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 60                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 61                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 62                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 63                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 64                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 65                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 66                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 67                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 68                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 69                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 70                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 71                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 72                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 73                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 74                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 75                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 76                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 77                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 78                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 79                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 80                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 81                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 82                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 83                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 84                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 85                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 86                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 87                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 88                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 89                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 90                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 91                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 92                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 93                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 94                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 95                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 96                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 97                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 98                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 99                    | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |
| 100                   | 1        | EA   | CDR 2       | 10000 | 10000       |          |       |          |        |     |       |

The image shows a vertical rectangular area with a light blue background. Within this area, there are four horizontal bands of a fine grid pattern, resembling graph paper. Each band is approximately 10 units high and 100 units wide. The bands are separated by larger, empty light blue spaces. The grid lines are thin and black, forming a consistent pattern across each band.



The image shows a vertical rectangular area with a light blue background. Within this area, there are four horizontal bands of a fine grid pattern. Each band consists of a series of small, closely spaced squares, resembling a technical drawing grid or a data table. The bands are separated by larger, empty light blue spaces. The grid bands are located at approximately the top, middle-top, middle-bottom, and bottom of the vertical area.



The image shows a vertical rectangular area with a light blue background. Within this area, there are four horizontal bands of a fine grid pattern, resembling graph paper. Each band is approximately 10 units high and 100 units wide. The bands are separated by larger, empty light blue spaces. The grid lines are thin and black, forming a consistent pattern across each band.





| NCI AGENCY INVENTORY OF SOFTWARE ASSETS                                                              |              |                                          |
|------------------------------------------------------------------------------------------------------|--------------|------------------------------------------|
| <b>SOFTWARE COSTS DATA:</b>                                                                          |              |                                          |
| <b>SECTION 1: PRODUCT DETAILS-Please enter details on product.</b>                                   |              |                                          |
| PRODUCT NAME:                                                                                        |              |                                          |
| VERSION:                                                                                             |              |                                          |
| VENDOR:                                                                                              |              |                                          |
| REFERENCE TO SOFTWARE BREAKDOWN STRUCTURE:                                                           |              |                                          |
| DEPARTMENT/OWNER:                                                                                    |              |                                          |
| LICENSE TYPE:                                                                                        |              |                                          |
| EXPIRATION DATE:                                                                                     |              |                                          |
| <b>SECTION 2: BREAKDOWN OF SW LICENSE COSTS-Please enter the breakdown of SW costs per licenses.</b> |              |                                          |
|                                                                                                      | <b>COSTS</b> | Check if the cost is recurrent in nature |
| COST OF SERVER LICENSE:                                                                              | € 0.00       | <input type="checkbox"/>                 |
| COST OF USER LICENSE:                                                                                | € 0.00       | <input type="checkbox"/>                 |
| ANNUAL SUPPORT (Maintenance) FEE:                                                                    | € 0.00       | <input type="checkbox"/>                 |
| ANNUAL UPGRADE (Maintenance) FEE:                                                                    | € 0.00       | <input type="checkbox"/>                 |
| NUMBER OF USERS:                                                                                     | 0            | <input type="checkbox"/>                 |
| ANNUAL COST PER USER (ADDITIONAL):                                                                   | € 0.00       | <input type="checkbox"/>                 |
| DISCOUNT RATE:                                                                                       | 0.00%        | <input type="checkbox"/>                 |
| OTHER FEES/COSTS:                                                                                    | € 0.00       | <input type="checkbox"/>                 |
| GENERAL DESCRIPTION:                                                                                 |              |                                          |
|                                                                                                      | <b>COSTS</b> |                                          |
| TOTAL QUOTED COSTS:                                                                                  | € 0.00       |                                          |
| <b>SECTION 3: FINANCIAL PROFILE</b>                                                                  |              |                                          |
| DISCOUNT PRICE BREAKS:                                                                               | 0.0000%      |                                          |
| Methodology:                                                                                         |              |                                          |
| DISCOUNT PRICE BREAKS(Options):                                                                      | 0.0000%      |                                          |
| Methodology:                                                                                         |              |                                          |
| <b>SECTION 4: CURRENT ISSUES/GROUNDRULES &amp; ASSUMPTIONS</b>                                       |              |                                          |
|                                                                                                      |              |                                          |
|                                                                                                      |              |                                          |

**NCI AGENCY INVENTORY OF SOFTWARE ASSET  
INFORMATION SHEET**

Bidders must fill all cells in yellow. If a cell is not applicable to this specific product, Bidders must indicate the reasons.

**SECTION 1: Product Details**

- Product Name: Please enter the name of your software product.
- Version: Please enter the version current being released or offered.
- Vendor: Please enter the name of vendor.
- Reference to Software Breakdown Structure: Please reference the Bidding Sheets and Schedule of Supplies & Services, and enter CLIN #.
- Department/Owner: (Internal Reference). Please ignore.
- License Type: Please enter the type of license, assumed perpetual per user.

**SECTION 2: Breakdown of SW License Costs**

All Cost should be formulated with a "per user" methodology.

- Cost of Server License: Please enter the cost of server license, if applicable.
- Cost of User License: Please enter the base cost of the license per user.
- Annual Support Fee: Noted as maintenance, this is the per user cost of technical support, if applicable.
- Annual Upgrade Fee: Also noted as maintenance, updates and upgrades to software after initial procurement, if applicable.
- Numbers of Users: (Internal Reference).
- Annual Cost Per User: Please enter any additional costs per year, per license, per user.
- Discount Rate: Please enter the discount rate, if applicable.
- Other Fees/Costs: Please enter any other costs billed in the per user price.
- General Description: Please provide a general description of the software being offered.
- Total Quoted Costs: (Internal Reference). Please ignore.

**SECTION 3: Financial Profile**

- Discount Price Breaks: Please enter the discount being offer in %.
- Methodology: Please enter the methodology used to develop this discount rate.
- Discount Price Breaks (Options): If applicable.
- Methodology: If applicable.

**SECTION 4: Current Issues/Groundrules & Assumptions**

- Please enter other issues surrounding the acquisition of the software being offered.

**CO-14171-PMIC**

**PROGRAMME MANAGEMENT AND INTEGRATION  
CAPABILITY (PMIC)**

**Project Serial No.: 2014/0IS03096**



**BOOK II**

**PROSPECTIVE CONTRACT**



NATO UNCLASSIFIED

**CO-14171-PMIC**

**PROGRAMME MANAGEMENT AND INTEGRATION  
CAPABILITY  
(PMIC)**

**PART I - CONTRACT SCHEDULES OF SUPPLIES AND  
SERVICES**

(see file: 5\_IFB CO-14171-PMIC Book II Part I SSS.xlsx)

**CO-14171-PMIC**

**PROGRAMME MANAGEMENT AND INTEGRATION  
CAPABILITY  
(PMIC)**

**PART II - CONTRACT SPECIAL PROVISIONS**

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## 1. INTERPRETATION, DEFINITIONS, AND ACRONYMS

- 1.1. This Clause supplements Clause 2 (Definitions of Terms and Acronyms) of the NCI Agency Contract General Provisions.
- 1.2. As used throughout this Contract, the following terms shall have the meanings specified below unless otherwise specified in the Contract:
  - 1.2.1. **“Compliance”**: strict conformity to the requirements and standards of the Prospective Contract.
  - 1.2.2. **“Contractor”**: the awardee which shall be responsible for the fulfilment of the requirements established in the Prospective Contract.
  - 1.2.3. **“Days”**: calendar days;
  - 1.2.4. **“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 (Contract Schedules) and as more particularly described in the Statement of Work (SOW), the System Requirements Specification (SRS), the Technical Solution or any other relevant Contract document;
  - 1.2.5. **“NATO Participating Country”**: any of NATO nation that has 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, THE NETHERLANDS, NORWAY, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, TURKEY, THE UNITED KINGDOM and THE UNITED STATES OF AMERICA.
  - 1.2.6. **“Purchaser”**: The Purchaser is defined as the current NCI Agency or its legal successor.
  - 1.2.7. **“Work Packages”**: Divisions of the total Contract work effort into a grouping of tasks/products that the Contractor shall deliver and/or perform as a bundle under the terms of this Contract. A description of all Contract Work Packages is provided in Section 3 to Part IV, Statement of Work.

## 2. ALTERATIONS, MODIFICATIONS AND DELETIONS OF THE NCI AGENCY CONTRACT GENERAL PROVISIONS

- 2.1. For the purposes of this Contract, the NCI Agency Contract General Provisions are modified, supplemented, or replaced as follows.

- 2.1.1. Clause 1 (Interpretation, Definitions and Acronyms) supplements Clause 2 (Definitions of Terms and Acronyms) of the NCI Agency Contract General Provisions.
- 2.1.2. Clause 4 (Order of Precedence) replaces Clause 1 (Order of Precedence) of the NCI Agency Contract General Provisions.
- 2.1.3. Clause 5 (Contract Type) replaces Clause 7 (Firm Fixed Price Contract) of the NCI Agency Contract General Provisions.
- 2.1.4. Clause 7 (Invoices and Payments) supplements Clause 25 (Invoices and Payment) of the NCI Agency Contract General Provisions.
- 2.1.5. Clause 9 (Pricing of Changes, Amendments and Claims) supplements Clause 19 (Pricing of Changes, Amendments and Claims) of the NCI Agency Contract General Provisions.
- 2.1.6. Clause 12 (Acceptance Procedures) modifies Clauses 21 (Inspection and Acceptance of Work) and 22 (Inspection and Acceptance of Documentation) of the NCI Agency Contract General Provisions.
- 2.1.7. Clause 16 (Liquidated Damages) replaces Clauses 38 (Liquidated Damages) of the NCI Agency Contract General Provisions.
- 2.1.8. Clause 17 (Risk of Loss or Damage) supplements Clause 24 (Ownership and Title) of the NCI Agency Contract General Provisions.
- 2.1.9. Clause 22 (Intellectual Property) supplements Clause 30 (Intellectual Property) of the NCI Agency Contract General Provisions.
- 2.1.10. Clause 27 (Purchaser Furnished Property and Services) supplements Clause 13 (Purchaser Furnished Property and Services) of the NCI Agency Contract General Provisions.
- 2.1.11. Clause 29 (Warranty Period) supplements Clause 27 (Warranty of Work (Exclusive of Software)) of the NCI Agency Contract General Provisions.
- 2.1.12. Clause 31 (Performance Guarantee) supplements Clause 8 (Performance Guarantee) of the NCI Agency Contract General Provisions.
- 2.1.13. Clause 32 (Security) supplements Clause 11 (Security) of the NCI Agency Contract General Provisions.

### **3. SCOPE OF WORK**

- 3.1. The Contractor shall deliver Programme Management and Integration Capability (PMIC) and associated services per Part IV - Statement of Work and in

accordance with Part I - Schedule of Supplies and Services for the firm fixed prices stated in this Contract.

3.2. At the time of its signature and unless a formal amendment is issued by the Purchaser’s Contracting Authority in accordance with the Contract terms, the scope of this Contract covers the performance of tasks and production of deliverable associated with the following performance Stages as defined in the Contract Statement of Work:

3.2.1. Ramp-Up Stage

3.2.2. 1st Execution Stage

3.2.3. 2nd Execution Stage (Option)

3.2.4. 3rd Execution Stage (Option)

3.3. These stages will support 16 management and C4ISR technical services as shown below:

| Management Services |                           | C4ISR Technical Services |                                  |
|---------------------|---------------------------|--------------------------|----------------------------------|
| 1                   | Programme Management      | 9                        | Systems Engineering              |
| 2                   | Change Management         | 10                       | Integration Management           |
| 3                   | Communications Management | 11                       | Software Engineering and Design  |
| 4                   | Risk Management           | 12                       | Operational User Experience (UX) |
| 5                   | Schedule Management       | 13                       | Requirements Management          |
| 6                   | Cost Management           | 14                       | Programme Assurance              |
| 7                   | Configuration Management  | 15                       | Transition Management            |
| 8                   | Quality Management        | 16                       | Information Security Management  |

3.4. Notwithstanding the prescriptions at paragraph above and subject to the prescriptions of Clause 10 of the Contract Special Provision and Clause 16 of the Contract General Provisions, at the time of its signature and unless a formal amendment is issued in accordance with its terms, the Purchaser’s obligation under this Contract is limited to the amounts, tasks and deliverables associated with the following stages as defined in the Contract Statement of Work and its Annex A:

3.4.1. Ramp-Up Stage (Contract Line Item Number (CLIN) 1 Schedule of Supplies and Deliverables)

3.4.2. 1st Execution Stage (CLIN 2 Schedule of Supplies and Deliverables)

#### 4. ORDER OF PRECEDENCE

4.1. This Clause replaces Clause 1 (Order of Precedence) of the NCI Agency Contract

General Provisions.

4.2. “In the event of any inconsistency in language, terms or conditions of the various parts of this Contract, precedence will be given in the following order:

1. The Signature Page
2. Part I (Contract Schedule of Supplies and Services)
3. Part II (Contract Special Provisions)
4. Part III (NCI Agency Contract General Provisions)
5. Part IV (Statement of Work)
6. Project Management and Engineering documentation as listed and approved in accordance with Clause 37.
7. The Contractor’s proposal (Technical Proposal and Price Quotation) in response to IFB-CO-14171-PMIC dated [date] and any clarifications thereto, incorporated herein by reference.

## 5. **CONTRACT TYPE**

5.1. This Clause replaces Clause 7 (Firm Fixed Price Contract) of the NCI Agency Contract General Provisions.

5.2. This is a Firm Fixed Price Contract. The prices stated herein are not subject to any adjustment on the basis of the Contractor’s cost experience in performing the Contract.

5.3. The total Firm Fixed Price of this Contract is stated on the Signature page of the Contract and is based on the price of Contract Line Item Numbers (CLINs) 1 through 4, unless revised by the Purchaser through formal Amendment to the Contract.

5.4. The priced Schedule of Supplies and Services of the present Contract list all services and/or deliverables, their due date, the place of delivery and their firm fixed price Contract line item price.

5.5. The Firm Fixed Price of this Contract includes any and all Contractor travel.

5.6. The Statement of Work (SOW) is defined in terms of performance standards. This means that the Contract:

5.6.1. Describes requirements in terms of results required rather than the methods of performance of the work;

5.6.2. Uses measurable performance standards (i.e., terms of quality, timeliness, quantity, etc.) and evolving performance assessment plans; and

5.6.3. Specifies procedures for payment in accordance with performance measurements.

- 5.7. The Contract also contains purchase options. These options are not part of the fixed price of the Contract. One or more of the options may be exercised by the Purchaser at such time as the corresponding requirements and needs are fully developed under the Contract.
- 5.8. The Purchaser assumes no liability for costs incurred by the Contractor in excess of the stated Total Price.

## 6. **CONTRACT TERM**

- 6.1. 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 a period of 18 months.
- 6.2. The 18 months cover successful completion of performance associated with Ramp-Up Stage (6 Months) and 1<sup>st</sup> Execution Stage (12 Months) or any performance rendered on the basis of Task Orders issued in accordance with Clause 11 whichever occurs the latest.
- 6.3. The Purchaser anticipated extending the initial 18-month Contract term through the exercise of up to two 12-months Options (for the Second and Third Execution Stages), if Contractor's overall performance during the initial term of 18 months is considered satisfactory.
- 6.4. Extension options shall be exercised through a formal Amendment to the Contract which shall be issued not later than 30 days before the end of the initial Contract term or extensions thereof.

## 7. **INVOICES AND PAYMENT TERMS**

- 7.1. This Clause supplements and replaces Clause 25 (Invoices and Payment) of the NCI Agency Contract General Provisions. Specifically, Clauses 7.2 and 7.3 (except 7.2.9) supplement Clause 25 (Invoices and Payment) of the NCI Agency Contract General Provisions while Clause 7.2.9 replaces Clause 25.5 of the of the NCI Agency Contract General Provisions

### 7.2. **Invoices**

- 7.2.1. The Contractor shall submit invoices quarterly for 25 % of the total amount specified in the Schedule of Supplies and Services for each Execution Stage (i.e. 1<sup>st</sup>, 2<sup>nd</sup> (option, if exercised), and 3<sup>rd</sup> (option, if exercised)).
- 7.2.2. For the Ramp-Up Stage, the Contractor shall submit an initial invoice equal to 25% of the amount stipulated in the Contract Schedule of Supplies and Deliverables for Ramp-Up Stage, one calendar month after the beginning of

performance. Subsequent payments relevant to Ramp-Up Stage occur as follows:

- 7.2.3. 35% of the total Ramp-Up Stage price as stipulated in the Contract Schedule of Supplies and Deliverables, three months after the beginning of performance.
- 7.2.4. 40% of the total Ramp-Up Stage price as stipulated in the Contract Schedule of Supplies and Deliverables, at the end of the Ramp-Up Stage.
- 7.2.5. The amount to be billed shall include any price reduction that may be determined according to the provisions of this Clause and the Price Reduction Section of the SOW Annex A.
- 7.2.6. Payment to the Contractor will be made within 45 days of receipt of properly supported and documented invoices and upon acceptance in writing by the Purchaser.
- 7.2.7. All invoices shall refer to CO-14171-PMIC Purchase Order Number [NCI Agency PO REF].
- 7.2.8. 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.
- 7.2.9. All invoices shall be sent electronically to: [accountspayable@ncia.nato.int](mailto:accountspayable@ncia.nato.int)
- 7.2.9.1. No paper invoices will be accepted.
- 7.2.10. Payment shall be made in the currency specified in the Contract following Purchaser acceptance

### **7.3. Payment Terms**

- 7.3.1. In consideration for the achievement of performance goals and standards specified in the Performance Goals Document (Annex A to the SOW) and for the Services and Deliverables to be performed under the basic scope of the Contract, the Contractor shall be paid the prices specified in Part I (Schedule of Supplies and Services).
- 7.3.2. The Purchaser will evaluate the Contractor's performance in each Stage (first and second and third (if exercised)) using the method of assessment specified in the SOW Annex A (Performance Goals - Price Reduction section). The stated method links progress payments to the outcome of quarterly performance evaluations. If at the end of an evaluation period, it is determined that the Contractor's performance during the period concerned has not met the specified performance goals and standards, the progress payment corresponding to that evaluation period shall be reduced from a minimum of 0.1 % to a maximum of 6 % of the original price in accordance with the guidelines provided in the Price

Reduction section of the SOW Annex A (Performance Goals), without prejudice to other Contract remedies to which the Purchaser may be entitled according to other terms of the Contract.

- 7.3.3. Amounts relevant to Task Orders (i.e. CLINs 1.3, 1.4, 2.3, 2.4, 3.3, 3.4, 4.3, and 4.4) issued by the Purchaser in accordance with Clause 11 shall be invoiced at the end of successful performance and upon acceptance of all deliverables unless otherwise stipulated in the Task Order. The price indicated in the Schedule of Supplies and Services is a ceiling price for all possible Task Orders.
- 7.3.4. Where Options are exercised, payments shall be made in accordance with the stipulations of the relevant amendment providing for the exercise of such Options.
- 7.3.5. No payment shall be made with respect to undelivered supplies, works not performed; services not rendered and/or incorrectly submitted invoices.
- 7.3.6. 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.

## **8. CONTRACTOR'S PERFORMANCE EVALUATION**

- 8.1. Beginning 3 months after the effective date of this Contract, the Purchaser shall evaluate the Contractor's performance every 3 months to determine the Contractor's level of achievement of performance goals and any applicable adjustments to the progress payments. These periodic evaluations will also serve to document the overall assessment of Contractor's performance and therefore may influence the Purchaser's decision to exercise extension options. The evaluation factors and rating scales are specified in the Performance Goals document (Annex A to the SOW), as are the percentage of the reductions to the progress payments that may be applied.
- 8.2. The Contractor's performance will be measured against stated goals and evaluation criteria by internally designated Purchaser's personnel, who will report their findings to the Project Board. This Board makes the final decision on payment/price determination based upon the Contractor's performance during the evaluation period.
- 8.3. The Contractor may submit a self-evaluation of performance for each evaluation period under consideration. These self-evaluations may be considered by the Purchaser in its evaluation.
- 8.4. In those instance in which the Contractor is assessed as achieving less than satisfactory progress during a quarter and a reduction is applied to the specified progress payment, at the next Quarterly Performance Review, if the Contractor is assessed as having continued to achieve less than satisfactory progress, a further

reduction will be applied for the purpose of the due quarterly payment in accordance with the SOW Annex A Price Reduction section.

- 8.5. Conversely in those instances in which the Contractor is assessed as having corrected its performance deficiencies and brought its progress back in line with the Stage Performance Goals, no price reduction will be applied for the quarterly payment of concern and the withheld portion of the previous progress payment will also be paid.
- 8.6. However, any percentage of the price which is not earned at the end of a Stage due to the failure to achieve the performance goals established for that Stage shall not be reallocated to future Execution Stages and will be regarded as no longer due. In such a case, the Contract Stage prices will be unilaterally modified by the Purchaser at the end of the applicable Stage in order to reflect in the Contract the revised total price of the Stage resulting from the application of price reductions.
- 8.7. Changes may be made to the Performance Goals and linked Price Reductions as stipulated in the SOW Annex A at any time subject to mutual agreement of the parties.

## **9. PRICING OF CHANGES, AMENDMENTS AND CLAIMS**

- 9.1. This Clause supplements Clause 19 (Pricing of Changes, Amendments and Claims) of the NCI Agency Contract General Provisions.
- 9.2. 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.
- 9.3. Changes, modifications, or 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 Annex 1 to the Contract General Provisions.
- 9.4. Contractor's pricing proposals for Changes, Amendments and Claims shall be priced in accordance with the schedules of forward labour rates and forward prices of COTS components established in the Contract Schedule of Supplies and Services (Part I), or, if not defined in the latter, which were submitted in the Contractor's bid incorporated in the Contract by reference.
- 9.5. Contractor price quotations and technical proposals for potential 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 Contractor submission to the Purchaser.

- 9.6.** All cost and pricing information contained in the cost breakdown sheets submitted with the Bidding sheets as part of the Contractor's proposal, to include forward pricing, shall constitute the basis of reference for future negotiations related to any amendments to this Contract.
- 9.7.** If new labour categories, not previously specified in are deemed necessary by the Purchaser during the course of this Contract; the prices for the new labour categories shall be within the range of 10% of rates listed for comparable labour services and skills in the Contract Schedules at Part I.
- 9.7.1. The Contractor shall be bound by the stated labour rates for the whole duration of this Contract.

## **10. OPTIONS**

- 10.1.** CLINs 3 and 4 (2<sup>nd</sup> and 3<sup>rd</sup> Execution Stages) under Part I Schedule of Supplies and Services of this Book are Options and are available for unilateral exercise by the Purchaser if the Contractor's overall performance during the initial term of 18 months (Basic Contract period: (i.e. Ramp Up and 1st Execution Stages)) is considered satisfactory.
- 10.1.1. For CLIN 3 (i.e. 2<sup>nd</sup> Execution Stage), this Option is available to be exercised unilaterally for a performance period of 12 months from the end of the Basic Contract period.
- 10.1.2. For CLIN 4 (i.e. 3<sup>rd</sup> Execution Stage), this Option is available to be exercised unilaterally for a performance period of 12 months from the end of the 2<sup>nd</sup> Execution Stage.
- 10.2.** The Contractor understands that there is no obligation 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). Further, the Purchaser reserves the right to order another Contractor (or the same), to perform the tasks described in the Options of the current Contract through a new Contract with other conditions.
- 10.3.** If an option is exercised, the Contractor will have a minimum period of forty-five (45) days between notification and the required Performance Start Date (PSD).
- 10.4.** Any Contract option shall be exercised by written amendment to the Contract.
- 10.5.** During the course of the Contract and in any case before the exercise of any Contract Option, the Purchaser and the Contractor shall mutually agree on the Performance Goals associated with the Contract Options (2<sup>nd</sup> and 3<sup>rd</sup> Execution Stages) as well as define in detail the scope of activities to be performed within the framework of the Contract price associated with the Options. Clause 7 referred Price Reduction guidance shall be established unilaterally by the Purchaser on the

basis of the agreed Performance Goals. Both the agreed Stage Performance Goals and the Purchaser determined Price Reductions shall then be incorporated into the Contract via the issuance of a formal Amendment.

- 10.6.** Should the Purchaser and the Contractor fail to reach a mutual agreement with respect to the Performance Goals and/or detailed scope of the Option to be exercised, the Purchaser may elect not to exercise the option and request Contractor performance on the basis of Task Orders to be issued in accordance with the stipulations in Clause 11.

## **11. TASK ORDERS**

- 11.1.** The following CLINs represent Indefinite Delivery/Indefinite Quantity options for services to support the PMIC program:

11.1.1. CLINs 1.3 and 1.4 (Ramp-Up Stage)

11.1.2. CLINs 2.3 and 2.4 (1st Execution Stage)

11.1.3. CLINs 3.3 and 3.4 (2nd Execution Stage (Option))

11.1.4. CLINs 4.3 and 4.4 (3rd Execution Stage (Option))

- 11.2.** The Purchaser anticipates both projected and incidental needs of these services but cannot provide the exact details on the dates, specific deliverables, and quantities to satisfy those needs.

- 11.3.** If the Purchaser requires these additional services, the Purchaser will, in advance of the issuance of the Task Order agree its detailed scope, price and performance period with the Contractor. The following prescription shall apply for the purpose of pricing the Task Orders:

11.3.1. Prices offered by the Contractor for specific deliverable and performance shall be coherent with those stipulated in the Contract Execution Stages for similar activities and deliverables.

11.3.2. Labour pricing shall strictly adhere with that stipulated in the Contract Labour Profile Schedule.

11.3.3. Costs for travel, per-diem and associated charges shall not exceed that applicable for NATO staff as indicated in Annex G of this document.

- 11.4.** Task Orders will be issued in writing by the Purchaser Contracting Authority in the format specified in Annex F, including those relevant to travel to be performed in direct support of the Contract. Task Orders may be issued in two types: Level of Effort (LOE) and Completion. Regardless of the type, issued Task Orders will include the following information:

- 11.4.1. Task Order reference and effective date.
- 11.4.2. Schedule of services and deliverables specifying the performance period and the amount of authorised expenses.
- 11.4.3. Statement of Work.
- 11.5. The Contractor shall commence performance of the Task Order within a period of fifteen days (15) days after its effective date or the date of its issuance whichever is the latest.
- 11.6. Task Orders may only be issued within the duration of the Contract pursuant this Clause.
- 11.7. Task Orders (if issued) shall be via an Amendment to the Contract.

## **12. ACCEPTANCE PROCEDURES**

- 12.1. This Clause modifies Clauses 21 and 22 of the NCI Agency Contract General Provisions.
- 12.2. Acceptance is the action by which the Purchaser formally acknowledges that the Contractor has fully demonstrated that Contract Deliverables are complete or have been performed according to the requirements set in the Contract.
- 12.3. Acceptance procedures are described in Clauses 21 and 22 of the NCI Agency Contract General Provisions.

## **13. CONTRACT ADMINISTRATION**

- 13.1. The Purchaser is the NATO Communications and Information Agency (NCI Agency). The Purchaser is the Point of Contact for all Contractual and Technical issues.
- 13.2. The Contractor shall accept Contract modifications only in writing from the Purchaser's Contracting Authority.
- 13.3. The Purchaser reserves the right to re-assign this Contract to a representative(s) for administrative purposes, in whole or in part, provided that the Purchaser shall always be responsible for its obligations under the Contract and for actions or lack of actions of its assigned administrator. The Purchaser undertakes to advise the Contractor in writing whenever this right is to be exercised.
- 13.4. All notices and communications between the Contractor and the Purchaser shall be written in English and may be personally delivered, mailed, or emailed at the following address:

13.4.1.

|             |            |
|-------------|------------|
| Contractor: | Name:      |
|             | Attn:      |
|             | Title      |
|             | Address:   |
|             |            |
|             | Telephone: |
|             | E-mail:    |

13.4.2.

|             |                                                                                            |
|-------------|--------------------------------------------------------------------------------------------|
| NCI Agency: | Avenue du Bourget 140                                                                      |
|             | 1110 Brussels, Belgium                                                                     |
|             | Acquisition Directorate                                                                    |
|             | Attn: Ms. Ijeoma Ezeonwuka (Contracting Officer)                                           |
|             | Telephone: +32.2.707.8104                                                                  |
|             | E-mail: <a href="mailto:Ijeoma.Ezeonwuka@ncia.nato.int">Ijeoma.Ezeonwuka@ncia.nato.int</a> |

or to such address as the Purchaser may from time to time designate in writing.

## 14. TECHNICAL DIRECTION

14.1. 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: Mr. Hakan Kosal  
 PMIC Project Manager  
 Telephone: +31 70 374 3653  
 E-mail: [Hakan.Koksal@ncia.nato.int](mailto:Hakan.Koksal@ncia.nato.int)

14.2. The Purchaser's Project Manager will provide the detailed tasking and instruction on how to proceed.

14.3. 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.

14.4. Notwithstanding the prescriptions of this Clause, 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.

**14.5.** Upon receipt of such notification above, the Purchaser's Contracting Authority will:

14.5.1. confirm the effort requested is within scope, or

14.5.2. confirm that the instructions received constitute a change and request a quotation for a modification of scope and/or price, or

14.5.3. rescind the instructions.

## **15. LANGUAGE OF WORK**

**15.1.** All notices and communications between the Contractor and the Purchaser shall be written and conducted in English.

**15.2.** The working language of the Project Team is English and the associated technical documents are printed in English.

## **16. LIQUIDATED DAMAGES**

**16.1.** This Clause replaces Clause 38 (Liquidated Damages) of the Contract General Provisions.

**16.2.** If the Contractor fails to meet the delivery/performance at the times specified in the Schedule of Supplies and Services (SSS) (Part I), or any agreed extension thereto, 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 liquidated damages of ten hundreds of one per cent (0.1%) of the value of the associated payment milestone in the payment schedule set forth in Clause 7 of the Contract Special Provisions per day of delinquent delivery/performance.

**16.3.** Alternatively, 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 of the Contract General Provisions.

**16.4.** 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 its judgement the findings of fact justify an extension.

- 16.5.** Liquidated damages shall be payable to the Purchaser from first day of delinquency in achieving the specified milestone and shall accrue at the rate specified in paragraph 16.2 to a maximum of Fifteen Per Cent (15%) of the applicable payment for the milestone.
- 16.6.** The amount of Liquidated Damages due by the Contractor shall be recovered by the Purchaser in the following order of priority:
- 16.6.1. By deducting such damages from the amounts due to the Contractor against the Contractor's invoices.
- 16.6.2. By proceeding against any surety.
- 16.6.3. By reclaiming such damages through appropriate legal remedies.

## **17. RISK OF LOSS OR DAMAGE**

- 17.1.** This Clause supplements Clause 24 (Ownership and Title) of the Contract General Provisions.
- 17.2.** Risk of loss or damage to Deliverables covered by this Contract shall remain with the Contractor until, and shall pass to the Purchaser upon Acceptance by the Purchaser or receipt of the supplies by the Purchaser at the destination specified in the Contract, whichever is the later.
- 17.3.** Notwithstanding paragraph 17.2, the risk of loss or damage to supplies which fail to conform to the requirements of the Contract shall remain with the Contractor until cure and Acceptance, at which time 17.2 shall apply.
- 17.4.** Notwithstanding paragraph 17.2 above the Contractor shall not be liable for the loss of or damage to supplies caused by the negligence of officers, agents or employees of the Purchaser acting within the scope of their employment.

## **18. COTS PRODUCTS REPLACEMENT**

- 18.1.** 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.
- 18.2.** 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 Clause.

## **19. LOCAL STANDARDISATION**

- 19.1.** For reasons of efficiency, some Purchaser sites have standardised some or their entire computer baseline on a specific suite of hardware from one or more particular vendors. As the process of site standardisation will continue as the prospective Contract is being executed, the Purchaser reserves the right to require the Contractor to substitute, for one or more system components, an equivalent item compatible with a site-specified standard.
- 19.2.** Pricing proposed for the substituted equipment shall be fair and reasonable and consistent with the market prices reserved for large buyers and/or Governmental Institutions.
- 19.3.** In the event that the Purchaser chooses to exercise this right, the required substitutions will be negotiated through a bilateral Contract amendment issued under the authority of this clause.

## **20. INDEPENDENT CONTRACTOR**

- 20.1.** The Contractor shall provide and pay, as required, qualified personnel as needed for the proper performance of the services required under this Contract; it shall strictly comply with all Host Nation Labour Laws, tariffs and social security and other regulations applicable to the employment of its personnel.
- 20.2.** The Personnel provided by the Contractor are at all times employees of the Contractor and not the Purchaser. In no case shall the 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.
- 20.3.** The Purchaser shall not be responsible for securing work permits, lodging, leases nor tax declarations, driving permits, etc., with national or local authorities. Contractor's employees, agents, or representatives are not eligible for any diplomatic privileges nor NATO employee benefits.
- 20.4.** The Contractor shall inform its employees, agents, and representatives under this Contract of the terms of the Contract and the conditions of the working environment.

## **21. KEY PERSONNEL**

- 21.1.** The individuals listed in Annex A are considered to be key to the performance of this Contract and shall not be replaced by the Contractor with substitute personnel without the prior written approval of the Purchaser.
- 21.2.** In such cases where the services of the Key Personnel are lost to the Contractor beyond the reasonable control of the Contractor (e.g. resignation, sickness, incapacity, etc.), 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 30 working days.
- 21.3.** If the Contractor is unable to nominate and/or replace the lost personnel within the timeframe mentioned in paragraph 21.2 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.
- 21.4.** The Purchaser has the right to refuse any proposed substitution not meeting the qualifications and request the Contractor to offer another qualified individual in lieu thereof. The Purchaser will confirm any consent given to a substitution in writing and only such written consent shall be deemed as valid evidence of Purchaser consent.
- 21.5.** The Purchaser reserves the right, even after acceptance of Contractor personnel on the basis of their Curriculum Vitae (CV)/Resume and/or interview, to require the Contractor immediately to cease to employ any Key Personnel under the present Contract if, in the sole opinion of the Purchaser, the individual is not meeting the required level of competence and/or its employment as Key Personnel is considered undesirable. The Purchaser will inform the Contractor, in writing, in cases where such a decision is taken and the Contractor shall propose and make qualified substitute Key Personnel available within 15 working days after the written notification. The Purchaser's removal of Contractor Key Personnel shall in no way relieve the Contractor of its responsibility to achieve the Contractual and technical requirements of this Contract nor imply any responsibility of the Purchaser.

## **22. INTELLECTUAL PROPERTY**

- 22.1.** This Clause supplements Clause 30 (Intellectual Property) of the NCI Agency Contract General Provisions.
- 22.2.** The Contractor intends to use the Background IPR stated in Annexes C and D hereto for the purpose of carrying out work pursuant to this Contract.

- 22.3.** 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 NCI Agency Contract General Provisions.
- 22.4.** The Purchaser shall consider open source solutions alongside proprietary ones in developments provided that such solutions are fully compliant with the requirements of this Contract and, particularly, Clauses 9 (Participating Countries) and 30 (Intellectual Property) of the Contract General Provisions. The Contractor shall disclose in advance the open source licence associated with the contemplated open source solution. The Purchaser reserves the right to refuse the incorporation of open source solutions that are deemed inadequate for incorporation in a NATO application.
- 22.5.** Any use 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 its 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 defence purpose.
- 22.6.** In addition, the Purchaser shall have the right to further re-transfer this software to NATO companies eligible for NATO procurements, subject to an appropriate license agreement.

## **23. PERMISSIBLE SCOPE OF USE FOR SOFTWARE LISTED AS BACKGROUND IPR**

- 23.1.1.** Unless otherwise stated in this Contract, software provided by the Contractor as part of PMIC and included in the Contract as Background IPR (Annexes C and D), shall be subject to a non-exclusive, royalty-free and irrevocable licence throughout NATO, NATO entities, NATO operations, and its individual or collective member nations to use and authorise others to use on the Purchaser's behalf any such software for the purpose of exploiting or otherwise using PMIC for any defence purpose. In addition, the Purchaser shall have the right to further re-transfer this software to NATO companies eligible for NATO procurements.

## **24. CONFIDENTIALITY AND NON-DISCLOSURE**

- 24.1.** For purposes of this clause, "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".

- 24.2.** 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.
- 24.3.** 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.
- 24.4.** The provisions of this clause 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 clause, 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.
- 24.5.** The Contractor shall include the substance of the language of this clause in any subcontract/Contract issued for the purpose of the fulfilment of the obligations Contracted under this Contract regardless of the legal nature of the entity subscribing such subcontract. Additionally, all Contractor personnel assigned under this Contract shall be required to sign the Non-Disclosure Certificate at Annex B.
- 24.6.** The Contractor agrees that compliance with the obligations imposed by the terms of this clause is of the essence and that failure to abide to these terms shall constitute sufficient grounds for the termination of the Contract for default.

## **25. EXCLUSION CLAUSE**

- 25.1.** This Contract has an exclusion clause and it is as follows:
- 25.1.1.** The Contractor and its sub-Contractors shall be excluded from award of future Contract(s) and sub-Contract(s) for consultancy, hardware or software implementation under the Bi-Strategic Automated Information Systems (Bi-SC

AIS) and NATO General Communication Services (NGCS) Programmes.

- 25.1.2. The Contractor and its sub-Contractors are also excluded from currently holding any Contract(s) or sub-Contract(s) for consultancy, hardware or software implementation under the Bi-Strategic Automated Information Systems (Bi-SC AIS) and NATO General Communication Services (NGCS) Programmes.
- 25.2. For informational purposes, the current list of BI-SC AIS and NGCS projects can be found in Table 1 of paragraph 1.2 of the SOW (Book II, Part IV). This list is subject to frequent updates (with newly approved Bi-SC and NGCS Capability Packages (CPs)) via amendments to the Contract.
- 25.3. The NCI Agency shall not consider mitigation plans regarding this exclusion.
- 25.4. This exclusion clause does not apply to parent companies of the Contractor and their wholly owned subsidiaries provided that the parent company or its subsidiaries provides proof to the satisfaction of the Purchaser that they operate as a separate legal entity in a completely distinguishable and different business domain. Proof as mentioned above may consist of:
- 25.4.1. Company's structure
  - 25.4.2. Roles and responsibilities within structure
  - 25.4.3. Business domain
  - 25.4.4. Ownership and control
  - 25.4.5. And any other proof that will fulfil the purpose of the exclusion clause
- 25.5. This exclusion clause shall remain valid for a period of two (2) years after Contract completion.
- 25.6. Once the validity period of this exclusion clause has expired, the limitations imposed by this exclusion clause shall no longer apply.
- 25.7. The Contractor shall insert the substance of paragraphs 25.1 through 25.6 of this clause in all subcontracts for work performed under this Contract. It is the responsibility of the Contractor to ensure that their subcontractor(s) are made aware of this exclusion clause prior to the subcontractor(s) commencing performance under this Contract.
- 25.8. The Contractor agrees that compliance with this exclusion clause is of the essence and that failure to abide to these terms shall constitute sufficient grounds for the Termination for Default of the Contract in accordance with Clause 39 of the NCI Agency Contract General Provisions.

## 26. CONFLICT OF INTEREST

- 26.1. 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. 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.

- 26.2.** 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.
- 26.3.** 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 Clause 39 (Termination for Default) of the Contract General Provisions.
- 26.4.** The Contractor's notice called for in paragraph 26.2 above 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 analysing the situation. Any changes to the Contractor's Conflict of Interest Mitigation Plan, if any is incorporated in the Contract, should be also detailed.
- 26.5.** 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.
- 26.6.** 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. 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.

- 26.7. 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.

## **27. PURCHASER FURNISHED PROPERTY AND SERVICES**

- 27.1. This Clause supplements Clause 13 (Purchaser Furnished Property and Services) of the NCI Agency General Contract Provisions.

- 27.2. The Purchaser shall provide the Contractor with the following property and services for the performance of the Contract:

27.2.1. Office space and office tools as specified in paragraph 3.9 of the SOW.

## **28. CARE AND DILIGENCE OF PROPERTY**

- 28.1. The Contractor shall use reasonable care to avoid damaging building, equipment, and work site. If the Contractor damages any such building, equipment, or worksite, they shall repair the damage as directed by the Purchaser and at no expenses to the Purchaser. If they fail or refuses to make such repair or replacement, the Contractor shall be liable for the cost thereof, which may be deducted from the Contract price.

- 28.2. The Purchaser shall exercise due care and diligence for Contractor's equipment, tools and materials on site premises. The Purchaser will not assume any liability except for gross negligence and wilful misconduct. The Purchaser will, however, not assume any liability except for gross negligence and wilful misconduct on the part of the Purchaser's personnel or agents.

- 28.3. The Contractor shall, at all times, keep the site area, including storage areas used by the Contractor, free from accumulations of waste. On completion of all work the Contractor is to leave the site area and its surroundings in a clean and neat condition.

## **29. WARRANTY PERIOD**

- 29.1. This Clause supplements Clause 27 (Warranty of Work (Exclusive of Software)) of the NCI Agency General Contract Provisions.

- 29.2. The Warranty Period for any deliverables and services performed under this Contract shall be the longer of: (a) the specific warranty periods established in the SOW for individual deliverables; or (c) 12 months. The Warranty Period in all cases must commence upon NCI Agency Acceptance.

- 29.3. Throughout the Warranty Period the Contractor shall make good any:

29.3.1. Defects in the Deliverables;

29.3.2. Breach of warranties specified in Clause 27 (Warranty of Work (Exclusive of Software)) of the NCI Agency General Contract Provisions; and

29.3.3. Breach of any other express or implied warranties that may be applicable;

arising out of or in connection with the Contractor's failure to perform its obligations under this Contract (herein after collectively referred to as "Warranty Period Incidents") in accordance with this Clause 23 (Use and Possession Prior to Acceptance) and 27 (Warranty of Work (Exclusive of Software)) of the NCI Agency General Contract Provisions.

29.4. The Contractor shall correct all Warranty Period Incidents arising during the Warranty Period without cost to the Purchaser.

29.5. If the Contractor fails to correct any Warranty Period Incidents within the timeframe specified in 27 (Warranty of Work (Exclusive of Software)) of the NCI Agency Contract General Provisions or Section 6 of the SOW for the type of incident concerned, or if no specific timeframe has been established in the referred Clause or in the SOW for the type of incident concerned, within 30 working days of notification, the Purchaser may on 10 working days written notice:

29.5.1. correct the Warranty Period Incident or employ a third party to correct it; and

29.5.2. deduct from the prices to be paid, draw from the performance guarantee, or recover as a debt due from the Contractor, all reasonable costs in so doing.

29.6. The Contractor shall deploy all such additional resources as are reasonably required to remedy any Warranty Period Incident as efficiently and quickly as possible.

## **30. WARRANTY FOR SERVICES**

30.1. Contractor warrants that it has all rights necessary to fulfil the requirements of this Contract, and that Contractor, employees, and lower-tier subcontractors are fully qualified to perform hereunder. Additionally, Contractor warrants that all services performed hereunder, including without limitation, development of software, shall be performed to the highest professional standards.

## **31. PERFORMANCE GUARANTEE**

31.1. This Clause supplements Clause 8 (Performance Guarantee) of the NCI Agency Contract General Provisions.

31.2. The amount of the performance Guarantee is established in €300,000 or equivalent in the currency in which this Contract is expressed.

- 31.3.** The Purchaser may allow reductions in the amount of the Performance Guarantee in accordance with the Purchaser's cost estimate of the work remaining to be completed under the Contract. In order to benefit from such reductions, the Contractor must provide the Purchaser with an updated copy of the Project Master Schedule for completion of the remaining work, and detailed cost breakdowns, prepared in accordance with the pricing principles and standards established in the Contract, which indicate the percentage of work completed for each Contract line item. These requests for reduction shall be submitted in writing to the NCI Agency Point of Contact established in paragraph 13.4.2.
- 31.4.** The reductions specified in paragraph 7 shall be treated as a concession to the Contractor and, therefore, shall be supported by sufficient consideration. Further, the decision to accept or reject an application for reduction of Performance Guarantee shall be a unilateral decision made solely at the discretion of the Purchaser.
- 31.5.** The validity of the Performance Guarantee shall be limited in time to the total Period of Performance of the Contract (i.e. Base Period plus any exercised options).

## **32. SECURITY**

- 32.1.** This Clause supplements Clause 11 (Security) of the NCI Agency Contract General Provisions.
- 32.2.** Contractor's personnel working at the Purchaser's facilities shall possess a valid security clearance up to the level of "NATO SECRET" so as to be able to have unescorted access to classified security areas where work will be performed.
- 32.3.** Without prejudice to other Purchaser's rights, failure to comply with the requirements stated in Clause 32.2 above shall constitute grounds for Contract termination under the clause 39 "Termination For Default" of the NCI Agency Contract General Provisions and entitle the Purchaser to collect liquidated damages in case of delay as specified in Clause 16 above and Clause 38 of the NCI Agency Contract General Provisions.
- 32.4.** Notwithstanding paragraph 32.3 above, if the Contractor fails to comply with the requirement stated in paragraph 32.2 of this Clause, the Purchaser may opt for providing escorts to allow Contractor's personnel to perform work in a classified area without being in possession of the prerequisite security clearance. In such cases, the Contractor agrees that the Purchaser shall be entitled to collect an amount equivalent to € 800 per escort assigned to supervise Contractor's personnel and per day of escorting. This compensation shall be collected through the same mechanisms established in Clause 23 above for the case of liquidated damages.

- 32.5.** Contractor's staff members shall hold a valid passport and are required to maintain its validity for the duration of the contract.
- 32.6.** The Contractor shall note that there are restrictions regarding the carriage and use of electronic devices (e.g. laptops) in NATO designated Security Areas. The Contractor shall be responsible for satisfying and obtaining from the appropriate NCI Agency Authorities the necessary clearance to introduce and utilize any such equipment into the facility.

### **33. SUPPLEMENTAL AGREEMENTS**

- 33.1.** 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 the Clause 39 (Termination For Default) of the NCI Agency Contract General Provisions.
- 33.2.** 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.

### **34. TOTAL SYSTEM PERFORMANCE RESPONSIBILITY AND COMPREHENSION**

- 34.1.** The Contractor warrants that it has read, understood and agreed to implement each and all terms, clauses, and conditions specified in the Contract and that its signature of the Contract is an acceptance, without reservations, of the said Contract terms within their normal and common meaning.
- 34.2.** The Statement of Work (SOW) sets 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 Deliverables will meet the performance requirements of the said SOW.

- 34.3.** The Contractor hereby acknowledges that it has no right to assert against the Purchaser any claims or demands with respect to the aforesaid specifications as are in effect on the date of award of this Contract that are 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.
- 34.4.** Notwithstanding the “Changes” Clause (Clause 16 of the NCI Agency Contract General Provisions) or any other Clause of the Contract, the Contractor hereby agrees that no changes to the aforesaid SOW 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.

## **35. REACH CAPABILITY**

- 35.1.** The purpose of this clause is to define the conditions under which specific Purchaser provided REACH capability could be made available to the Contractor during the performance of this Contract.
- 35.2.** The provision of the REACH capability is not governed by the standard Clause 13 of the Contract General Provisions (Purchaser Furnished Property) but solely by the Service Level Agreement (SLA) in Annex H of the Contract Special Provisions.
- 35.3.** Should the Purchaser choose not to make the REACH capability available to the Contractor, or should the Purchaser not be able to meet the Service Level Agreement (SLA) related to the provision of the REACH capability as laid down in Annex H of the Contract Special Provisions, the Contractor shall not be entitled to claim an excusable delay nor any compensation.

## **36. THIRD PARTIES**

- 36.1.** The Contractor shall be aware of the possible need to work closely with and participate in meetings and reviews to be held jointly with third parties who perform work which contributes to, or is strongly related to, work conducted under this Project.
- 36.2.** The Contractor shall have no rights to raise claims, ask for delays, or interrupt the performance of the Contract on the basis of, or in connection with, its responsibilities to work/co-ordinate with third parties running work on or related to this Project.
- 36.3.** The above described effort is already included in the Total Firm Fixed price of this Contract and the Contractor shall have no recourse for additional costs or

delays in the performance of this Contract on the basis of the above described effort.

- 36.4.** The Purchaser reserves the right to make technical documentation, even in draft version, delivered under this Project available to any third parties.

## **37. INCORPORATION OF REVISED PROJECT MANAGEMENT AND ENGINEERING DOCUMENTATION DELIVERABLES**

- 37.1.** The following set of documentation is part of the Contract:

37.1.1. Project Management Plan (PMP)

37.1.2. Ramp-Up Stage Plan

37.1.3. First Stage Execution Plan

37.1.4. Programme Risk Management Plan

37.1.5. Programme Support Plan

- 37.2.** This documentation because of the nature of the performance under the Contract will be subject to changes and revisions. The frequency and dynamics of these changes and revisions would make it unfeasible to ratify a new version of the documentation via a formal Contract amendment at the time it is produced and approved by the Purchaser. Consequently during the course of formal reviews the Purchaser Contracting Authority will evaluate any changed documentation and subject to the terms of the Contract validate its adequacy and, at its sole discretion provide for its approval in writing indicating which updated documentation is approved.

- 37.3.** Subject to the exception noted in paragraph 37.4 below, any formally Purchaser approved documentation shall be deemed as made part of the Contract and shall replace any existing previous version.

- 37.4.** The Purchaser is under no obligation to approve any proposed revised document except as in accordance with the terms of the present Contract. Rejection of any proposed changes shall not discharge the Contractor, in whole or in part, of its responsibility for the performance under the Contract.

- 37.5.** Nothing in this Clause is to be construed as a waiver to any other obligation of the Contractor under the Contract.

**END OF CLAUSES**

**ANNEX A. KEY PERSONNEL**

The following Key Personnel shall be subject to the stipulations contained in Clause 21 (Key Personnel) of the Contract Special Provisions for the period of designation indicated below:

| <b>Position</b>        | <b>SOW Reference</b> | <b>Labour Category</b>                       | <b>Name</b>                                  | <b>Designation Period</b>            |
|------------------------|----------------------|----------------------------------------------|----------------------------------------------|--------------------------------------|
| Project Manager        | 3.3.2.1              | <i>[To be inserted after Contract award]</i> | <i>[To be inserted after Contract award]</i> | EDC through Contract expiration date |
| Deputy Project Manager | 3.3.2.2              | <i>[To be inserted after Contract award]</i> | <i>[To be inserted after Contract award]</i> | EDC through Contract expiration date |

*EDC: Effective Date of Contract*

**ANNEX B. NON DISCLOSURE DECLARATION**

To be signed by all Contractor personnel assigned under Contract CO-14171-PMIC.

I UNDERSTAND:

That I must preserve the security of all information which comes to my knowledge as a result of the Contract with the NCI Agency stated above and that I undertake to comply with all relevant security regulations.

That I must not divulge to any unauthorised person even within my own company, any classified/commercial-in confidence information gained by me as a result of my Contract with the NCI Agency, unless prior permission for such disclosure has been granted by the General Manager of the NCI Agency.

That I must not, without the approval of the General Manager of the NCI Agency, publish (in any document, article, book, CD, video, film, play, or other form) any classified /commercial-in-confidence information which I have acquired in the course of my official duties for the NCI Agency.

That, at the end of Contract and after performance of all required tasks, I must surrender any official document or material made or acquired by me in the course of my official duties, save such as I have been duly authorised to retain.

That if I violate prescribed security practices either intentionally or accidentally, my Contract shall be immediately terminated.

That the provisions of the above Declaration apply not only during the period of the referred Contract with the NCI Agency, but also after the stated Contract has ceased and that I am liable to prosecution if either by intent or negligence I allow classified/commercial-in-confidence information to pass into unauthorised hands.

That I commit to fulfil my obligations for the period of performance mentioned in the Contract Schedules and the Special Provisions of the Contract referred above (including the optional periods) unless major events beyond my reasonable control happen.

That should I decide for personal interest to leave the position, I will do my best effort to fulfil my obligations until the Company that is currently employing me has provided NATO with an acceptable suitable substitute (and in accordance with Clause 21 of the Contract Special Provisions (for Key Personnel)).

\_\_\_\_\_  
Full name (in block capitals)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**ANNEX C. 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 <sup>1</sup> |
|------|----------------------------|-------------------------------|
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |

- 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 22 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 NCI Agency Contract General Provisions.

<sup>1</sup> Indicate whether the IPR is applicable to a COTS product as defined in the Contract General Provisions.

**ANNEX D. 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 <sup>1</sup> |
|------|----------------------------|-------------------------------|
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |
|      |                            |                               |

- 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 22 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 NCI Agency Contract General Provisions.

<sup>1</sup> Indicate whether the IPR is applicable to a COTS product as defined in the Contract General Provisions.

**ANNEX E. STANDBY LETTER OF CREDIT TEMPLATE**

Standby Letter of Credit Number:

Issue Date: \_\_\_\_\_

Beneficiary: NCI Agency, Financial Management Office  
Boulevard Leopold III, B-1110, Brussels  
Belgium

Expiry Date: \_\_\_\_\_

1. 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 CO-14171-PMIC dated \_\_\_\_\_.
2. 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:
  - a) (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 it does not consider its Bid valid or agree to be bound by its Bid, or
  - b) (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
  - c) 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
  - d) 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.
3. 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.

4. 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.
5. 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.
6. 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

“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).”

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.

7. 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.
8. Multiple drawings are allowed.
9. Drafts drawn hereunder must be marked, “Drawn under {issuing bank} Letter of Credit No. {number}” and indicate the date hereof.
10. 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.

11. 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.
12. This Letter of Credit is subject to The International Standby Practices-ISP98 (1998 Publication) International Chamber of Commerce Publication No.590.

**ANNEX F. TASK ORDER FORM**

| <b>CONTRACT CO-14171-PMIC</b>                                               |                                                         |                               |  |
|-----------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------|--|
| <b>1. Task Order Number:</b>                                                |                                                         | <b>2. Amendment</b>           |  |
| <b>3. Issuing Office:</b>                                                   | NATO Communications and Information Agency, HQ Brussels |                               |  |
| <b>4. Project Manager:</b>                                                  |                                                         |                               |  |
| <b>7. Tasks</b>                                                             |                                                         |                               |  |
| <b>8. Delivery Time and Period of Performance:</b>                          |                                                         |                               |  |
| <b>9. Total Value of the Order:<br/>DDP Destination</b>                     |                                                         | <b>10. Travel</b>             |  |
| <b>11. Total Cumulative Value of Task Orders Issued under the contract.</b> |                                                         |                               |  |
| <b>12. Commitment No.:</b>                                                  |                                                         |                               |  |
| <b>13. Project No.:</b>                                                     |                                                         |                               |  |
| <b>14. Effective Date of Order:</b>                                         |                                                         |                               |  |
| <b>15. For The Contractor:</b>                                              |                                                         | <b>16. For the Purchaser:</b> |  |
| 17. Signature:                                                              |                                                         | 18. Signature:                |  |
| 19. Printed Name and Title                                                  |                                                         | 20. Printed Name and Title    |  |
| 21. Date                                                                    |                                                         | 22. Date                      |  |

**ANNEX G. NCI AGENCY PER DIEM RATES AND KILOMETRIC ALLOWANCE 2016**

- Belgium: EUR 0.50
- The Netherlands: EUR 0.57

**AIR TRAVEL:****PER DIEM RATES**

- **EURO Countries (Full Daily Rates)**

| <b>COUNTRY</b>         | <b>EUR</b> | <b>COUNTRY</b> | <b>EUR</b> | <b>COUNTRY</b>        | <b>EUR</b> |
|------------------------|------------|----------------|------------|-----------------------|------------|
| Afghanistan            | 184.00     | France, Paris  | 234.00     | Netherlands           | 209.00     |
| Albania                | 181.00     | Georgia        | 180.00     | Poland                | 186.00     |
| Andorra                | 134.00     | Germany        | 210.00     | Portugal              | 179.00     |
| Armenia                | 149.00     | Greece         | 185.00     | Romania               | 177.00     |
| Austria                | 184.00     | Hungary        | 181.00     | Russian Federation    | 293.00     |
| Azerbaijan             | 223.00     | Iceland        | 182.00     | San Marino            | 169.00     |
| Belgium                | 228.00     | Ireland        | 193.00     | Serbia                | 198.00     |
| Bosnia and Herzegovina | 140.00     | Italy          | 240.00     | Slovakia              | 166.00     |
| Bulgaria               | 166.00     | Latvia         | 159.00     | Slovenia              | 186.00     |
| Croatia                | 180.00     | Lithuania      | 158.00     | Spain                 | 184.00     |
| Cyprus                 | 185.00     | Luxembourg     | 210.00     | The former Yugoslav   | 149.00     |
| Czech Republic         | 180.00     | Malta          | 150.00     | Republic of Macedonia |            |
| Estonia                | 162.00     | Moldova        | 156.00     | Turkey                | 157.00     |
| Finland                | 224.00     | Monaco         | 220.00     | Ukraine               | 210.00     |
| France, elsewhere      | 212.00     | Montenegro     | 158.00     | United Arab Emirates  | 252.00     |

- **NON - EURO Countries (Full Daily Rates)**

| <b>COUNTRY</b>     | <b>CURRENCY</b> | <b>AMOUNT</b> |
|--------------------|-----------------|---------------|
| UK, London         | GBP             | 216.00        |
| UK, Elsewhere      | GBP             | 186.00        |
| Norway             | NOK             | 1,949.00      |
| Denmark            | DKK             | 1,782.00      |
| Canada             | CAD             | 304.00        |
| USA, Washington    | USD             | 361.00        |
| USA, New York City | USD             | 409.00        |
| USA, Elsewhere     | USD             | 337.00        |
| Sweden             | SEK             | 2,477.00      |
| Switzerland        | CHF             | 322.00        |

## ANNEX H. SERVICE LEVEL AGREEMENT (SLA) FOR THE PROVISION OF REACH CAPABILITY

### 1. Introduction

- 1.1. NATO Communications and Information Agency (NCI Agency) via the NCI Agency REACH Service capability is offering a service to access a collaborative environment able to process, store and handle project deliverables, supporting documentation and other project related information up to and including NATO RESTRICTED.

### 2. Parties

- 2.1. This Service Level Agreement is only valid between the parties listed hereafter.
  - 2.1.1. Service Provider: NATO Communications and Information Agency (hereinafter referred to as “NCI Agency”)
  - 2.1.2. Service Sponsor: CUSTOMER PROJECT NAME (hereinafter referred to as “The Customer”)

### 3. Service period

- 3.1. **Start Date:** DATE (Hereinafter the Start Date is referred to as “Service Start”)
- 3.2. **End Date:** DATE (Hereinafter the End Date is referred to as “Service End”)
- 3.3. This SLA shall cover the period between Start Date and End Date. (Hereinafter this period is referred to as "*Service Period*")

### 4. Signatures

|                                                                                                                                                                            |                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>For the Service Provider:</b><br/>                 .....<br/>                 Name:<br/>                 Title: REACH Service Manager<br/>                 Date:</p> | <p><b>For the Service Sponsor:</b><br/>                 .....<br/>                 Name:<br/>                 Title:<br/>                 Date:</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|

### 5. References

- A. NC3A-RD-2780 – BLST Services Catalogue Edition 1.0 (19.05.2009).

**6. Funding**

- 6.1. All service charges for REACH service delivery to *The Customer* will be covered by the Project Service Costs (PSC) of **PROJECT NUMBER & ID**. The PM will assure availability of adequate funding for continuation of the REACH services to *The Customer* until project closure.

**7. Service Charges**

**7.1. Standard Charges**

7.1.1. NCI Agency is providing numbers of REACH systems: [TBD] (#), (Hereinafter this period is referred to as “*The Requested Number*”).

7.1.2. Total amount: [TBD]

7.1.3. The annual cost per REACH capability for duration of the *Service Period* is calculated at:

- 7.1.3.1. 2,000 Euro/year for a *Service Period* of three years
- 7.1.3.2. An optional cost of 3,000 Euro for delivery, identity management and mandatory training at customer location.

7.2. If *The Customer* terminates the Contract prior to the *Service End* and prior to the full payment of the total cost for the *Service Period*, *The Customer* will be charged a compensation fee of 1,000 Euro per REACH.

**7.3. Payment and Invoices**

7.3.1. NCI Agency will invoice *The Customer* as specified in the table below to the address indicated herein. Payment is due within 30 days of the date of invoice.

| Invoice Dates                         | Amount  | Description                           |
|---------------------------------------|---------|---------------------------------------|
| Upon acceptance of Proposal/agreement | € [TBD] | [TBD] REACH subscriptions for 3 years |

| Optional REACH Service | Description                                             | Duration | Costs/Invoice Dates                               |
|------------------------|---------------------------------------------------------|----------|---------------------------------------------------|
| Option No 1            | Additional REACH capability                             | N/A      | After 3 years subscription: 2,000 Euro/piece/year |
| Option No 2            | Deployment of REACH capability at any European location | N/A      | 3,000 Euro                                        |

|          |                                                                      |     |     |
|----------|----------------------------------------------------------------------|-----|-----|
|          | different from the Hague (NLD) or Brussels (BEL)                     |     |     |
| Option 3 | Deployment of REACH capability at any location different from Europe | N/A | TBD |

NCI Agency costs are not subject to VAT.

**8. Roles**

**8.1. Customer, points of contact:**

| Organisation | Name, Position and Role | Address and Contact Information |
|--------------|-------------------------|---------------------------------|
| POC          |                         |                                 |

**8.2. REACH Users**

| REACH # | Organisation | Name, Position and Role | Address and Contact Information |
|---------|--------------|-------------------------|---------------------------------|
| User 1  |              |                         |                                 |
| User x  |              |                         |                                 |

**8.3. NCI Agency:**

| Points of contact     | Name, contact information                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Address               | NCI Agency<br>Oude Waalsdorperweg 61,<br>2591 AK The Hague<br>The Netherlands                                                       |
| Project Manager       |                                                                                                                                     |
| Account Manager       |                                                                                                                                     |
| Service Owner         | [TBD]                                                                                                                               |
| Service Level Manager | [TBD]                                                                                                                               |
| Incident Manager:     | Mark Vandevenne<br>Phone: +32 2 707 8767<br>Email: <a href="mailto:mark.vandevenne@ncia.nato.int">mark.vandevenne@ncia.nato.int</a> |
| Service Desk          | [TBD]                                                                                                                               |

**9. General Overview**

9.1. NCI Agency will deliver the REACH capability to support The Customer under this agreement.

9.2. This is a project between the NCI Agency and The Customer to establish the:

9.2.1. Provision of REACH capability for The Customer;

9.2.2. General levels of response, availability, and maintenance associated with the REACH capability;

9.2.3. Responsibilities of NCI Agency and the Customer.

## 10. Provided Capability

### 10.1. References

10.1.1. NCI Agency NC3A-RD-2780 – BLST Services Catalogue Edition 1.0 specifies in chapter 6.1 the Managed Desktop/Laptop Service and the definitions for such capability. The REACH capability refers to the BLST Managed Desktop/Laptop Service and offers:

10.1.1.1. REACH enabled Laptop including Microsoft Office 2013 Professional and the associated collaboration toolset (E-mail, Instant Messaging, Live meeting and Presence Awareness);

10.1.1.2. Access to the collaborative environment of the REACH community with the capability to communicate, store, and process information up to and including NATO RESTRICTED;

10.1.1.3. Remote Access at NR level via the NCI Agency Service Delivery REACH capability;

10.1.1.4. Support through NCI Agency Service Desk.

10.1.1.5. The following software and tools are provided through the REACH capability:

10.1.1.5.1. Microsoft Windows 7;

10.1.1.5.2. Microsoft Office 2013 Professional;

10.1.1.5.3. Lync 2013;

10.1.1.5.4. McAfee Anti-Virus protection;

10.1.1.5.5. Adobe Reader XI;

10.1.1.5.6. Cisco AnyConnect VPN Client;

10.1.1.5.7. NCI Agency Reach Compliance Check application;

### 10.2. Scope

10.2.1. The support level is specified as minimum Level 2 as defined in the BLST Services Catalogue chapter 2.2.

10.2.2. The availability of the REACH capability is 24/7 – the time to resolve issues is 24h during business weeks.

### 10.3. Aim

10.3.1. The REACH capability enables exchanges of information and collaboration up to and including NATO Restricted classification.

### 10.4. Limits

10.4.1. The use of the REACH capability requires a NATO Security clearance at NATO SECRET level.

10.4.2. The exchange and collaboration of information is provided through e-mail and Instant Messaging.

10.4.3. Direct printing capability is not provided, but can be arranged through an extension of this agreement requested by *The Customer*.

10.4.4. In case of any problems, which cannot be solved remotely from the NCI Agency Service Desk (The Hague, NLD), the equipment needs to be sent to *NCI Agency*, The Hague on *The Customer* expenses. Any damages resulting from inappropriate operation or operation in harsh environment or adverse weather conditions, as well as a loss of the system are not covered by the agreed charges and have to be compensated by *The Customer*.

10.4.5. A maximum of two users can be configured to share the REACH capability.

10.4.6. The Service provider grants one-time interchange of the user's rights during the usual period of Contract, which is three years.

### 10.5. Assumptions

10.5.1. The following assumptions apply to this project:

10.5.1.1. Any support by *NCI Agency* is clearly documented through this project description and the Managed Desktop/Laptop service description (ref. [1] chapter 6.1);

10.5.1.2. The REACH capability will be provided in accordance with the BLST Service Catalogue conditions (ref. [1] chapter 2 and chapter 4);

10.5.1.3. Security violations of the non-NCI Agency REACH users are investigated through their local security officers/managers applying NATO rules (CM (2002)49, NCI Agency AD3-2, and NCI Agency Service Delivery NR SECOPS).

- 10.5.1.4. Required changes to this project description and/or the provision of the REACH capability will be jointly assessed and the implementation agreed between the Parties. The implementation of changes may have an impact on the charges which will be handled through an update of this project description.
- 10.5.1.5. Management and scheduling of all *NCI Agency* activities related to the provision of the REACH capability will be conducted in accordance with the service description (ref. [1]).

## 11. Standards and Quality

- 11.1. *NCI Agency* applies PRINCE 2 methodology for project management and ITIL best practices for service management.

## 12. Roles and Responsibilities

- 12.1. The roles and responsibilities for the provision of the REACH capability are defined in Reference A, but summarized also herein:
  - 12.1.1. *The Customer* receives *The Requested Number* of REACH system terminals.
  - 12.1.2. *NCI Agency* provides the REACH capability and related services.
- 12.2. **NCI Agency's responsibilities**
  - 12.2.1. *NCI Agency's* responsibilities are:
    - 12.2.1.1. Provides the REACH capability including basic end-user training (1.5 hours duration) at the NCI Agency Service Delivery The Hague or Brussels site;
    - 12.2.1.2. Grants temporary use of REACH hardware and the software licences for the Contracted period;
    - 12.2.1.3. Meets response times associated with the priority assigned to incidents and change requests as stipulated in the Service Catalogue;
    - 12.2.1.4. Notifies *The Customer* about all scheduled maintenance through email;
    - 12.2.1.5. Communicates all issues with *The Customer*;

- 12.2.1.6. Implements the processes defined in this project description and in the NCI Agency BLST Service Catalogue to support the REACH capability;
- 12.2.1.7. Provides backup on portals and shred drives.

### **12.3. *The Customer Team Responsibilities***

12.3.1. *The Customer* has the following responsibilities and/or requirements:

- 12.3.1.1. Provides the internet access required for Remote Access via NCI Agency Service Delivery REACH;
- 12.3.1.2. Backup of files and data of the REACH on NR accredited media on an authorized Removable Storage Device provided by service provider;
- 12.3.1.3. Provides a NATO security clearance for up to and including NATO SECRET for the personnel using the REACH capability. It is the responsibility of the REACH capability user to ensure that the Service Provider has a valid and registered Security Clearance during the service period. If the user fails to provide a valid Security Clearance, the user account will automatically be disabled on the recorded expiration date on the registered Security Clearance;
- 12.3.1.4. Provides the contact details of the local Security Officer/Manager and the commitment to apply NATO rules as defined in CM(2002)49, NCI Agency AD3-2, and NCI Agency NR SECOPS for the investigation;
- 12.3.1.5. Signs and implements the NR SECOPS;
- 12.3.1.6. Returns the equipment at the end of the project at its expenses to NCI Agency Service Desk.

### **13. Hours of Coverage, Response Times & Escalation**

- 13.1. NCI Agency Service Desk operates from 07:00 - 19:00 CET (Mon-Thursday) and 07:00 - 16:30 CET (Friday) and in accordance with the corresponding SLA of the NCI Agency Internet Service Provider. Support outside the normal business hours as defined above is not provided. In no event will *NCI Agency* be liable for damages of any kind arising out of or in connection with the use of the REACH.

## 14. Incidents

14.1. Any incidents (Problems/issues) need to be reported either by email to [servicedesk@ncia.nato.int](mailto:servicedesk@ncia.nato.int) or by phone to +31703743320.

14.2. *Response to Incidents:*

14.2.1. *NCI Agency* will assess the incident, identify criticality and respond to *The Customer* within one business day.

14.3. *Prioritization:*

14.3.1. Any prioritization with respect to time and effort for the incidents, which cannot be resolved immediately, will be discussed with *The Customer*.

14.4. *Resolution of disagreements:*

14.4.1. In case of disagreements, all disputes shall be resolved by consultation between the Parties and shall not be referred to any national or international tribunal or other third party for settlement.

## 15. Changes

15.1. For any changes of the REACH capability which will be required to be made during the use of the REACH capability, *NCI Agency* will inform *The Customer* one week prior to the event and inform about the required consequences.

15.2. Any changes concerning the elements provided by *The Customer* need to be communicated to the POC Service Owner as per 8.3 above one week prior to the event.

## 16. Maintenance

16.1. Use of the REACH capability and/or related components require regularly scheduled maintenance (“Maintenance Window”) performed by *NCI Agency*. These activities will render systems and/or applications unavailable for normal user interaction as communicated via email.

## 17. Reporting, Reviewing and Auditing

17.1. A report will be provided every three months on the availability of the system and issues during these three months, including the feedback from *The Customer*.

## 18. Associated Policies, Processes and Procedures

- 18.1. All related policies, processes and procedures are defined in BLST Services Catalogue (ref. [1]).

## 19. Duration, Termination

- 19.1. The REACH capability will be provided for *The Service Period*.
- 19.2. If the *NCI Agency* discontinues the REACH capability for any reason, it will notify such termination with three (3) months written notice.
- 19.3. *The Customer* may terminate this agreement with three (3) months written notice. Charges for early termination may apply.
- 19.4. For a one year subscription *The Customer* may terminate this agreement with no refund.
- 19.5. The hardware must be returned to the NCI Agency Service Desk. It is recommended to request a receipt from the NCI Agency Service Desk upon returning the hardware.

| BOOK II-PART I-SCHEDULE OF SUPPLIES AND SERVICES (SSS)                                                                                      |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------|--------------|---------------------------------|-----------------|----------------------|------|-----|------------|--------------------------------------|----------|
| IFB-CO-14171-PMIC                                                                                                                           |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| BASIC CONTRACT (RAMP-UP STAGE (6 months) + 1st EXECUTION STAGE (12 months))                                                                 |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| RAMP-UP STAGE (6 months)                                                                                                                    |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| CLIN                                                                                                                                        | DESCRIPTION                                       | SOW REFERENCE  | WP REFERENCE | REQUIRED COMPLETION DATE        | DELIVERY METHOD | DELIVERY DESTINATION | UNIT | QTY | UNIT PRICE | PRICE (Currency)                     | Comments |
| <b>1.1 Work Package 1: Project Management (Ramp-Up Stage)</b>                                                                               |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>1.1 Project Management (Ramp-Up Stage)</b>                                                                                               |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| 1.1.1                                                                                                                                       | Project Management Plan                           | 3.6            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.2                                                                                                                                       | Stage Plan                                        | 3.7            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.3                                                                                                                                       | Project Workspace                                 | 3.10           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.4                                                                                                                                       | Project Work Breakdown Structure                  | 3.11           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.5                                                                                                                                       | Project Master Schedule                           | 3.12           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.6                                                                                                                                       | Risk Log                                          | 3.13           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.7                                                                                                                                       | Project Kick-off Meeting                          | 3.15.2         | 3.19.4.2.1   | EDC + 2w                        | N/A             | NCIA, The Hague      | Each | 1   | €          | -                                    | €        |
| 1.1.8                                                                                                                                       | Project Checkpoint Reviews                        | 3.15.3         | 3.19.4.2.1   | Monthly                         | N/A             | NCIA, The Hague      | Each | 6   | €          | -                                    | €        |
| 1.1.9                                                                                                                                       | Other Meetings                                    | 3.15.4         | 3.19.4.2.1   | As required                     | N/A             | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.10                                                                                                                                      | Meeting Minutes                                   | 3.15           | 3.19.4.2.1   | Meeting + 3D                    | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.1.11                                                                                                                                      | Project Highlight Reports                         | 3.16           | 3.19.4.2.1   | Monthly                         | Electronic      | NCIA, Workspace      | Each | 6   | €          | -                                    | €        |
| 1.1.12                                                                                                                                      | Draft Task Orders                                 | 3.22           | 3.19.4.2.1   | As required                     | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
|                                                                                                                                             |                                                   |                |              |                                 |                 |                      |      |     |            | <b>TOTAL PRICE CLIN 1.1</b>          | <b>€</b> |
| <b>1.2 Work Package 2: PMIC Programme/Project Support (Ramp-Up Stage)</b>                                                                   |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>1.2 PMIC Programme/Project Support (Ramp-Up Stage)</b>                                                                                   |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| 1.2.1                                                                                                                                       | Programme Brief                                   | 4.2.3.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.2                                                                                                                                       | Bi-SC AIS Implementation Plan (BAIP)              | 4.2.4.3.1      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.3                                                                                                                                       | Project Dossiers                                  | 4.2.4.3.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.4                                                                                                                                       | Programme Product Breakdown Structure             | 4.2.4.3.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.5                                                                                                                                       | Dependency Structure Matrix                       | 4.2.5.1.4      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.6                                                                                                                                       | Project Models                                    | 4.2.10.1       | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.7                                                                                                                                       | Project Brief                                     | 4.2.10.2.1.2.1 | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.8                                                                                                                                       | Programme Issue Log                               | 4.3.2.1.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.9                                                                                                                                       | Project Issue Log                                 | 4.3.3.2.2.1    | 3.19.4.2.2   | NLT 2w after requested          | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.10                                                                                                                                      | Programme Communications Plan                     | 4.4.2.2.1      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.11                                                                                                                                      | Programme Highlight Report                        | 4.4.2.6.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.12                                                                                                                                      | Investment Committee Report                       | 4.4.2.6.4      | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.13                                                                                                                                      | Programme Risk Management Strategy                | 4.5.2.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.14                                                                                                                                      | Programme Risk Log                                | 4.5.2.1.3      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.15                                                                                                                                      | Project Risk Log                                  | 4.5.3.2.2.1    | 3.19.4.2.2   | NLT 2w after requested          | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.16                                                                                                                                      | Programme Master Schedule                         | 4.6.2.1.2      | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.17                                                                                                                                      | Project Schedule                                  | 4.6.3.2.1.1    | 3.19.4.2.2   | NLT 2w after requested          | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.18                                                                                                                                      | Programme Configuration Management Plan           | 4.8.2.2.1.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.19                                                                                                                                      | Programme Configuration Management Repository     | 4.8.2.3.3.1.2  | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.20                                                                                                                                      | Programme Quality Log                             | 4.9.4.1.4      | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.21                                                                                                                                      | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.22                                                                                                                                      | Programme Open Technical Repository Design Review | 4.12.2.1.6.3   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.23                                                                                                                                      | Programme Service Catalogue                       | 4.10.2.1.5.1   | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.24                                                                                                                                      | Programme Architecture Repository                 | 4.12.2.1.6     | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.25                                                                                                                                      | Programme Requirements Baseline                   | 4.14.2.1.3     | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.26                                                                                                                                      | Test Scenario                                     | 4.11.2.1.1.2   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.27                                                                                                                                      | Service Provisioning Models                       | 4.16.3.2.1.1   | 3.19.4.2.2   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.28                                                                                                                                      | Process Documentation                             | 4.13.3         | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.29                                                                                                                                      | Process Asset Library                             | 4.4.2.5.2.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.2.30                                                                                                                                      | Lessons Learned Log                               | 4.2.11.10.2    | 3.19.4.2.2   | Fill based on proposed PMS      | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
|                                                                                                                                             |                                                   |                |              |                                 |                 |                      |      |     |            | <b>TOTAL PRICE CLIN 1.2</b>          | <b>€</b> |
| <b>1.3 Work Package 3: Testbed Support (Ramp-Up Stage: Task Order (Level of Effort or Completion)-Not to Exceed 550 man-days)</b>           |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>1.3 Testbed Support (Ramp-Up Stage)</b>                                                                                                  |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| 1.3.1                                                                                                                                       | Programme Test Requirements Baseline              | 4.11.4.3.2     | 3.19.4.2.3   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.2                                                                                                                                       | Programme Test Plan                               | 4.11.4.4.1     | 3.19.4.2.3   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.3                                                                                                                                       | System Security Requirements Specification        | 4.11.4.5.1     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.4                                                                                                                                       | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.5                                                                                                                                       | Security Test and Evaluation Plan                 | 4.11.4.5.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.6                                                                                                                                       | Testbed High-Level Design                         | 4.11.4.6.1     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.7                                                                                                                                       | Testbed Detailed Design                           | 4.11.4.6.2     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.8                                                                                                                                       | Testbed Test Plan                                 | 4.11.4.6.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.3.9                                                                                                                                       | Testbed Schedule                                  | 4.11.4.9.3     | 3.19.4.2.3   | Fill based on proposed PMS      | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
|                                                                                                                                             |                                                   |                |              |                                 |                 |                      |      |     |            | <b>TOTAL PRICE CLIN 1.3</b>          | <b>€</b> |
| <b>1.4 Work Package 4: Project Assurance Support (Ramp-Up Stage: Task Order (Level of Effort or Completion)-Not to Exceed 135 man-days)</b> |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>1.4 Project Assurance Support (Ramp-Up Stage)</b>                                                                                        |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| 1.4.1                                                                                                                                       | Verification and Validation Plan                  | 4.15.4.2.2     | 3.19.4.2.4   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 1.4.2                                                                                                                                       | Verification and Validation Report                | 4.15.4.3       | 3.19.4.2.4   | Monthly, NLT 2w after requested | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
|                                                                                                                                             |                                                   |                |              |                                 |                 |                      |      |     |            | <b>TOTAL PRICE CLIN 1.4</b>          | <b>€</b> |
|                                                                                                                                             |                                                   |                |              |                                 |                 |                      |      |     |            | <b>TOTAL PRICE FOR RAMP-UP STAGE</b> | <b>€</b> |
| <b>1st EXECUTION STAGE (12 months)</b>                                                                                                      |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>2.1 Work Package 1: Project Management (1st Execution Stage)</b>                                                                         |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| <b>2.1 Project Management (1st Execution Stage)</b>                                                                                         |                                                   |                |              |                                 |                 |                      |      |     |            |                                      |          |
| 2.1.1                                                                                                                                       | Project Management Plan                           | 3.6            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.2                                                                                                                                       | Stage Plan                                        | 3.7            | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.3                                                                                                                                       | Project Workspace                                 | 3.10           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.4                                                                                                                                       | Project Work Breakdown Structure                  | 3.11           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.5                                                                                                                                       | Project Master Schedule                           | 3.12           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Electronic      | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.6                                                                                                                                       | Risk Log                                          | 3.13           | 3.19.4.2.1   | EDC + 4w and as changes occur   | Online          | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |
| 2.1.7                                                                                                                                       | Project Checkpoint Reviews                        | 3.15.3         | 3.19.4.2.1   | Monthly                         | N/A             | NCIA, The Hague      | Each | 12  | €          | -                                    | €        |
| 2.1.8                                                                                                                                       | Other Meetings                                    | 3.15.4         | 3.19.4.2.1   | As required                     | N/A             | NCIA, Workspace      | Each | 1   | €          | -                                    | €        |

|                             |                           |      |            |              |            |                 |      |    |   |   |   |   |   |
|-----------------------------|---------------------------|------|------------|--------------|------------|-----------------|------|----|---|---|---|---|---|
| 2.1.9                       | Meeting Minutes           | 3.15 | 3.19.4.2.1 | Meeting + 3D | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 2.1.10                      | Project Highlight Reports | 3.16 | 3.19.4.2.1 | Monthly      | Electronic | NCIA, Workspace | Each | 12 | € | - | € | - |   |
| 2.1.11                      | Draft Task Orders         | 3.22 | 3.19.4.2.1 | As required  | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 2.1</b> |                           |      |            |              |            |                 |      |    |   | € | - | € | - |

|                                                                                 |                                                   |                |            |                            |            |                 |      |   |   |   |   |   |   |
|---------------------------------------------------------------------------------|---------------------------------------------------|----------------|------------|----------------------------|------------|-----------------|------|---|---|---|---|---|---|
| <b>2.2 Work Package 2: PMIC Programme/Project Support (1st Execution Stage)</b> |                                                   |                |            |                            |            |                 |      |   |   |   |   |   |   |
| <b>2.2 PMIC Programme/Project Support (1st Execution Stage)</b>                 |                                                   |                |            |                            |            |                 |      |   |   |   |   |   |   |
| 2.2.1                                                                           | Programme Brief                                   | 4.2.3.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.2                                                                           | Bi-SC AIS Implementation Plan (BAIP)              | 4.2.4.3.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.3                                                                           | Project Dossiers                                  | 4.2.4.3.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.4                                                                           | Programme Product Breakdown Structure             | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.5                                                                           | Programme Blueprint                               | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.6                                                                           | Dependency Structure Matrix                       | 4.2.5.1.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.7                                                                           | Programme Tranches                                | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.8                                                                           | Project Brief                                     | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.9                                                                           | Programme Issue Log                               | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.10                                                                          | Project Issue Log                                 | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.11                                                                          | Programme Communications Plan                     | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.12                                                                          | Programme Highlight Report                        | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.13                                                                          | Investment Committee Report                       | 4.4.2.6.4      | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.14                                                                          | Programme Risk Management Strategy                | 4.5.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.15                                                                          | Programme Risk Log                                | 4.5.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.16                                                                          | Project Risk Log                                  | 4.5.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.17                                                                          | Programme Master Schedule                         | 4.6.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.18                                                                          | Project Schedule                                  | 4.6.3.2.1.1    | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.19                                                                          | Programme Configuration Management Plan           | 4.8.2.2.1.2    | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.20                                                                          | Programme Configuration Management Repository     | 4.8.2.3.3.1.2  | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.21                                                                          | Programme Quality Log                             | 4.9.4.1.4      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.22                                                                          | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.23                                                                          | Programme Open Technical Repository Design Review | 4.12.2.1.6.3   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.24                                                                          | Programme Service Catalogue                       | 4.10.2.1.5.1   | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.25                                                                          | Programme Architecture Repository                 | 4.12.2.1.6     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.26                                                                          | Programme Requirements Baseline                   | 4.14.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.27                                                                          | Test Scenario                                     | 4.11.2.1.1.2   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.28                                                                          | Service Provisioning Models                       | 4.16.3.2.1.1   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.29                                                                          | Process Documentation                             | 4.13.3         | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.30                                                                          | Process Asset Library                             | 4.4.2.5.2.2    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.2.31                                                                          | Lessons Learned Log                               | 4.2.11.10.2    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 2.2</b>                                                     |                                                   |                |            |                            |            |                 |      |   |   | € | - | € | - |

|                                                                                                                                          |                                            |            |            |                               |            |                 |      |   |   |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------|------------|-------------------------------|------------|-----------------|------|---|---|---|---|---|---|
| <b>2.3 Work Package 3: Testbed Support (1st Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 1100 man-days)</b> |                                            |            |            |                               |            |                 |      |   |   |   |   |   |   |
| <b>2.3 Testbed Support (1st Execution Stage)</b>                                                                                         |                                            |            |            |                               |            |                 |      |   |   |   |   |   |   |
| 2.3.1                                                                                                                                    | Programme Test Requirements Baseline       | 4.11.4.3.2 | 3.19.4.2.3 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.2                                                                                                                                    | Programme Test Plan                        | 4.11.4.4.1 | 3.19.4.2.3 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.3                                                                                                                                    | System Security Requirements Specification | 4.11.4.5.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.4                                                                                                                                    | Security Accreditation Plan                | 4.11.4.5.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.5                                                                                                                                    | Security Test and Evaluation Plan          | 4.11.4.5.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.6                                                                                                                                    | Testbed High-Level Design                  | 4.11.4.6.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.7                                                                                                                                    | Testbed Detailed Design                    | 4.11.4.6.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.8                                                                                                                                    | Testbed Test Plan                          | 4.11.4.6.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.3.9                                                                                                                                    | Testbed Schedule                           | 4.11.4.9.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 2.3</b>                                                                                                              |                                            |            |            |                               |            |                 |      |   |   | € | - | € | - |

|                                                                                                                                                   |                                    |            |            |                                 |            |                 |      |   |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------|------------|---------------------------------|------------|-----------------|------|---|---|---|---|---|---|
| <b>2.4 Work Package 4: Project Assurance Support (1st Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 540 man-days)</b> |                                    |            |            |                                 |            |                 |      |   |   |   |   |   |   |
| <b>2.4 Project Assurance Support (1st Execution Stage)</b>                                                                                        |                                    |            |            |                                 |            |                 |      |   |   |   |   |   |   |
| 2.4.1                                                                                                                                             | Verification and Validation Plan   | 4.15.4.2.2 | 3.19.4.2.4 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 2.4.2                                                                                                                                             | Verification and Validation Report | 4.15.4.3   | 3.19.4.2.4 | Monthly, NLT 2w after requested | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 2.4</b>                                                                                                                       |                                    |            |            |                                 |            |                 |      |   |   | € | - | € | - |

**TOTAL PRICE FOR 1st EXECUTION STAGE** € -

**GRAND TOTAL PRICE FOR RAMP-UP STAGE + 1st EXECUTION STAGE** € -

**CONTRACT OPTION (2nd EXECUTION STAGE (12 months) + 3rd EXECUTION STAGE (12 months))**

|                                                                             |                                  |        |            |                               |            |                 |      |    |   |   |   |   |   |
|-----------------------------------------------------------------------------|----------------------------------|--------|------------|-------------------------------|------------|-----------------|------|----|---|---|---|---|---|
| <b>2nd EXECUTION STAGE (12 months)</b>                                      |                                  |        |            |                               |            |                 |      |    |   |   |   |   |   |
| <b>3.1 Work Package 1: Project Management (Option: 2nd Execution Stage)</b> |                                  |        |            |                               |            |                 |      |    |   |   |   |   |   |
| <b>3.1 Project Management (Option: 2nd Execution Stage)</b>                 |                                  |        |            |                               |            |                 |      |    |   |   |   |   |   |
| 3.1.1                                                                       | Project Management Plan          | 3.6    | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.2                                                                       | Stage Plan                       | 3.7    | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.3                                                                       | Project Workspace                | 3.10   | 3.19.4.2.1 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.4                                                                       | Project Work Breakdown Structure | 3.11   | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.5                                                                       | Project Master Schedule          | 3.12   | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.6                                                                       | Risk Log                         | 3.13   | 3.19.4.2.1 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.7                                                                       | Project Checkpoint Reviews       | 3.15.3 | 3.19.4.2.1 | Monthly                       | N/A        | NCIA, The Hague | Each | 12 | € | - | € | - |   |
| 3.1.8                                                                       | Other Meetings                   | 3.15.4 | 3.19.4.2.1 | As required                   | N/A        | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.9                                                                       | Meeting Minutes                  | 3.15   | 3.19.4.2.1 | Meeting + 3D                  | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 3.1.10                                                                      | Project Highlight Reports        | 3.16   | 3.19.4.2.1 | Monthly                       | Electronic | NCIA, Workspace | Each | 12 | € | - | € | - |   |
| 3.1.11                                                                      | Draft Task Orders                | 3.22   | 3.19.4.2.1 | As required                   | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 3.1</b>                                                 |                                  |        |            |                               |            |                 |      |    |   | € | - | € | - |

|                                                                                         |                                      |           |            |                            |            |                 |      |   |   |   |   |   |
|-----------------------------------------------------------------------------------------|--------------------------------------|-----------|------------|----------------------------|------------|-----------------|------|---|---|---|---|---|
| <b>3.2 Work Package 2: PMIC Programme/Project Support (Option: 2nd Execution Stage)</b> |                                      |           |            |                            |            |                 |      |   |   |   |   |   |
| <b>3.2 PMIC Programme/Project Support (Option: 2nd Execution Stage)</b>                 |                                      |           |            |                            |            |                 |      |   |   |   |   |   |
| 3.2.1                                                                                   | Programme Brief                      | 4.2.3.1.2 | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 3.2.2                                                                                   | Bi-SC AIS Implementation Plan (BAIP) | 4.2.4.3.1 | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 3.2.3                                                                                   | Project Dossiers                     | 4.2.4.3.2 | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |

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|-----------------------------|---------------------------------------------------|----------------|------------|----------------------------|------------|-----------------|------|---|---|---|---|---|---|
| 3.2.4                       | Programme Product Breakdown Structure             | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.5                       | Programme Blueprint                               | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.6                       | Dependency Structure Matrix                       | 4.2.5.1.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.7                       | Programme Tranches                                | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.8                       | Project Brief                                     | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.9                       | Programme Issue Log                               | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.10                      | Project Issue Log                                 | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.11                      | Programme Communications Plan                     | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.12                      | Programme Highlight Report                        | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.13                      | Investment Committee Report                       | 4.4.2.6.4      | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.14                      | Programme Risk Management Strategy                | 4.5.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.15                      | Programme Risk Log                                | 4.5.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.16                      | Project Risk Log                                  | 4.5.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.17                      | Programme Master Schedule                         | 4.6.2.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.18                      | Project Schedule                                  | 4.6.3.2.1.1    | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.19                      | Programme Configuration Management Plan           | 4.8.2.2.1.2    | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.20                      | Programme Configuration Management Repository     | 4.8.2.3.3.1.2  | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.21                      | Programme Quality Log                             | 4.9.4.1.4      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.22                      | Security Accreditation Plan                       | 4.11.4.5.2     | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.23                      | Programme Open Technical Repository Design Review | 4.12.2.1.6.3   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.24                      | Programme Service Catalogue                       | 4.10.2.1.5.1   | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.25                      | Programme Architecture Repository                 | 4.12.2.1.6     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.26                      | Programme Requirements Baseline                   | 4.14.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.27                      | Test Scenario                                     | 4.11.2.1.1.2   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.28                      | Service Provisioning Models                       | 4.16.3.2.1.1   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.29                      | Process Documentation                             | 4.13.3         | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.30                      | Process Asset Library                             | 4.4.2.5.2.2    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.2.31                      | Lessons Learned Log                               | 4.2.11.10.2    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 3.2</b> |                                                   |                |            |                            |            |                 |      |   |   | € | - | € | - |

|                             |                                                                                                                                               |            |            |                               |            |                 |      |   |   |   |   |   |   |
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| <b>3.3</b>                  | <b>Work Package 3: Testbed Support (Option: 2nd Execution Stage: Task Order (Level of Effort or Completion)- Not to Exceed 1100 man-days)</b> |            |            |                               |            |                 |      |   |   |   |   |   |   |
| <b>3.3</b>                  | <b>Testbed Support (Option: 2nd Execution Stage)</b>                                                                                          |            |            |                               |            |                 |      |   |   |   |   |   |   |
| 3.3.1                       | Programme Test Requirements Baseline                                                                                                          | 4.11.4.3.2 | 3.19.4.2.3 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.2                       | Programme Test Plan                                                                                                                           | 4.11.4.4.1 | 3.19.4.2.3 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.3                       | System Security Requirements Specification                                                                                                    | 4.11.4.5.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.4                       | Security Accreditation Plan                                                                                                                   | 4.11.4.5.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.5                       | Security Test and Evaluation Plan                                                                                                             | 4.11.4.5.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.6                       | Testbed High-Level Design                                                                                                                     | 4.11.4.6.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.7                       | Testbed Detailed Design                                                                                                                       | 4.11.4.6.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.8                       | Testbed Test Plan                                                                                                                             | 4.11.4.6.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.3.9                       | Testbed Schedule                                                                                                                              | 4.11.4.9.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 3.3</b> |                                                                                                                                               |            |            |                               |            |                 |      |   |   | € | - | € | - |

|                             |                                                                                                                                                       |            |            |                                 |            |                 |      |   |   |   |   |   |   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------------|------------|-----------------|------|---|---|---|---|---|---|
| <b>3.4</b>                  | <b>Work Package 4: Project Assurance Support (Option: 2nd Execution Stage: Task Order (Level of Effort or Completion)-Not to Exceed 540 man-days)</b> |            |            |                                 |            |                 |      |   |   |   |   |   |   |
| <b>3.4</b>                  | <b>Project Assurance Support (Option: 2nd Execution Stage)</b>                                                                                        |            |            |                                 |            |                 |      |   |   |   |   |   |   |
| 3.4.1                       | Verification and Validation Plan                                                                                                                      | 4.15.4.2.2 | 3.19.4.2.4 | EDC + 4w and as changes occur   | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| 3.4.2                       | Verification and Validation Report                                                                                                                    | 4.15.4.3   | 3.19.4.2.4 | Monthly, NLT 2w after requested | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 3.4</b> |                                                                                                                                                       |            |            |                                 |            |                 |      |   |   | € | - | € | - |

**TOTAL PRICE FOR 2nd EXECUTION STAGE (OPTION)** € -

|                                        |                                                                         |        |            |                               |            |                 |      |    |   |   |   |   |   |
|----------------------------------------|-------------------------------------------------------------------------|--------|------------|-------------------------------|------------|-----------------|------|----|---|---|---|---|---|
| <b>3rd EXECUTION STAGE (12 months)</b> |                                                                         |        |            |                               |            |                 |      |    |   |   |   |   |   |
| <b>4.1</b>                             | <b>Work Package 1: Project Management (Option: 3rd Execution Stage)</b> |        |            |                               |            |                 |      |    |   |   |   |   |   |
| <b>4.1</b>                             | <b>Project Management (Option: 3rd Execution Stage)</b>                 |        |            |                               |            |                 |      |    |   |   |   |   |   |
| 4.1.1                                  | Project Management Plan                                                 | 3.6    | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.2                                  | Stage Plan                                                              | 3.7    | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.3                                  | Project Workspace                                                       | 3.10   | 3.19.4.2.1 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.4                                  | Project Work Breakdown Structure                                        | 3.11   | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.5                                  | Project Master Schedule                                                 | 3.12   | 3.19.4.2.1 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.6                                  | Risk Log                                                                | 3.13   | 3.19.4.2.1 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.7                                  | Project Checkpoint Reviews                                              | 3.15.3 | 3.19.4.2.1 | Monthly                       | N/A        | NCIA, The Hague | Each | 12 | € | - | € | - |   |
| 4.1.8                                  | Other Meetings                                                          | 3.15.4 | 3.19.4.2.1 | As required                   | N/A        | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.9                                  | Meeting Minutes                                                         | 3.15   | 3.19.4.2.1 | Meeting + 3D                  | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| 4.1.10                                 | Project Highlight Reports                                               | 3.16   | 3.19.4.2.1 | Monthly                       | Electronic | NCIA, Workspace | Each | 12 | € | - | € | - |   |
| 4.1.11                                 | Draft Task Orders                                                       | 3.22   | 3.19.4.2.1 | As required                   | Electronic | NCIA, Workspace | Each | 1  | € | - | € | - |   |
| <b>TOTAL PRICE CLIN 4.1</b>            |                                                                         |        |            |                               |            |                 |      |    |   | € | - | € | - |

|            |                                                                                     |                |            |                            |            |                 |      |   |   |   |   |   |
|------------|-------------------------------------------------------------------------------------|----------------|------------|----------------------------|------------|-----------------|------|---|---|---|---|---|
| <b>4.2</b> | <b>Work Package 2: PMIC Programme/Project Support (Option: 3rd Execution Stage)</b> |                |            |                            |            |                 |      |   |   |   |   |   |
| <b>4.2</b> | <b>PMIC Programme/Project Support (Option: 3rd Execution Stage)</b>                 |                |            |                            |            |                 |      |   |   |   |   |   |
| 4.2.1      | Programme Brief                                                                     | 4.2.3.1.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.2      | Bi-SC AIS Implementation Plan (BAIP)                                                | 4.2.4.3.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.3      | Project Dossiers                                                                    | 4.2.4.3.2      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.4      | Programme Product Breakdown Structure                                               | 4.2.4.3.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.5      | Programme Blueprint                                                                 | 4.2.4.3.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.6      | Dependency Structure Matrix                                                         | 4.2.5.1.4      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.7      | Programme Tranches                                                                  | 4.2.9.3.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.8      | Project Brief                                                                       | 4.2.10.2.1.2.1 | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.9      | Programme Issue Log                                                                 | 4.3.2.1.3      | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.10     | Project Issue Log                                                                   | 4.3.3.2.2.1    | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.11     | Programme Communications Plan                                                       | 4.4.2.2.1      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.12     | Programme Highlight Report                                                          | 4.4.2.6.3      | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |

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| 4.2.13                      | Investment Committee Report                       | 4.4.2.6.4     | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.14                      | Programme Risk Management Strategy                | 4.5.2.1.2     | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.15                      | Programme Risk Log                                | 4.5.2.1.3     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.16                      | Project Risk Log                                  | 4.5.3.2.2.1   | 3.19.4.2.2 | NLT 2w after requested     | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.17                      | Programme Master Schedule                         | 4.6.2.1.2     | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.18                      | Project Schedule                                  | 4.6.3.2.1.1   | 3.19.4.2.2 | NLT 2w after requested     | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.19                      | Programme Configuration Management Plan           | 4.8.2.2.1.2   | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.20                      | Programme Configuration Management Repository     | 4.8.2.3.3.1.2 | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.21                      | Programme Quality Log                             | 4.9.4.1.4     | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.22                      | Security Accreditation Plan                       | 4.11.4.5.2    | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.23                      | Programme Open Technical Repository Design Review | 4.12.2.1.6.3  | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.24                      | Programme Service Catalogue                       | 4.10.2.1.5.1  | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.25                      | Programme Architecture Repository                 | 4.12.2.1.6    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.26                      | Programme Requirements Baseline                   | 4.14.2.1.3    | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.27                      | Test Scenario                                     | 4.11.2.1.1.2  | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.28                      | Service Provisioning Models                       | 4.16.3.2.1.1  | 3.19.4.2.2 | Fill based on proposed PMS | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.29                      | Process Documentation                             | 4.13.3        | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.30                      | Process Asset Library                             | 4.4.2.5.2.2   | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.2.31                      | Lessons Learned Log                               | 4.2.11.10.2   | 3.19.4.2.2 | Fill based on proposed PMS | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| <b>TOTAL PRICE CLIN 4.2</b> |                                                   |               |            |                            |            |                 |      |   |   |   | € | - |

|                             |                                                                                                                                               |            |            |                               |            |                 |      |   |   |   |   |   |
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| <b>4.3</b>                  | <b>Work Package 3: Testbed Support (Option: 3rd Execution Stage: Task Order (Level of Effort or Completion)- Not to Exceed 1100 man-days)</b> |            |            |                               |            |                 |      |   |   |   |   |   |
| <b>4.3</b>                  | <b>Testbed Support (Option: 3rd Execution Stage)</b>                                                                                          |            |            |                               |            |                 |      |   |   |   |   |   |
| 4.3.1                       | Programme Test Requirements Baseline                                                                                                          | 4.11.4.3.2 | 3.19.4.2.3 | EDC + 4w and as changes occur | Online     | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.2                       | Programme Test Plan                                                                                                                           | 4.11.4.4.1 | 3.19.4.2.3 | EDC + 4w and as changes occur | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.3                       | System Security Requirements Specification                                                                                                    | 4.11.4.5.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.4                       | Security Accreditation Plan                                                                                                                   | 4.11.4.5.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
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| 4.3.6                       | Testbed High-Level Design                                                                                                                     | 4.11.4.6.1 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.7                       | Testbed Detailed Design                                                                                                                       | 4.11.4.6.2 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.8                       | Testbed Test Plan                                                                                                                             | 4.11.4.6.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| 4.3.9                       | Testbed Schedule                                                                                                                              | 4.11.4.9.3 | 3.19.4.2.3 | Fill based on proposed PMS    | Electronic | NCIA, Workspace | Each | 1 | € | - | € | - |
| <b>TOTAL PRICE CLIN 4.3</b> |                                                                                                                                               |            |            |                               |            |                 |      |   |   |   | € | - |

|                             |                                                                                                                                                       |            |            |                                 |            |                 |      |   |   |   |   |   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------------------------------|------------|-----------------|------|---|---|---|---|---|
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| <b>TOTAL PRICE CLIN 4.4</b> |                                                                                                                                                       |            |            |                                 |            |                 |      |   |   |   | € | - |

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|------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|---|---|
| <b>TOTAL PRICE FOR 3rd EXECUTION STAGE (OPTION)</b>                                |  |  |  |  |  |  |  |  |  |  | € | - |
| <b>GRAND TOTAL PRICE FOR 2nd EXECUTION STAGE + 3rd EXECUTION STAGE</b>             |  |  |  |  |  |  |  |  |  |  | € | - |
| <b>SUMMARY</b>                                                                     |  |  |  |  |  |  |  |  |  |  |   |   |
| <b>GRAND TOTAL (BASIC CONTRACT: RAMP UP STAGE + 1st EXECUTION STAGE)</b>           |  |  |  |  |  |  |  |  |  |  | € | - |
| <b>GRAND TOTAL (OPTION 1: 2nd EXECUTION STAGE + OPTION 2: 3rd EXECUTION STAGE)</b> |  |  |  |  |  |  |  |  |  |  | € | - |
| <b>GRAND TOTAL (ENTIRE CONTRACT)</b>                                               |  |  |  |  |  |  |  |  |  |  | € | - |

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NATO Communications and Information Agency  
Agence OTAN d'information et de communication

Technical Report TR/2015/OIS03096/01

**BI-SC AIS IMPLEMENTATION PLAN VERSION 8.0**

**Bi-SC AIS Implementation Office**



June 2015

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Technical Report TR/2015/0IS03096/01

## BI-SC AIS IMPLEMENTATION PLAN VERSION 8.0

NCIA/Bi-SC AIS Implementation Office

*Keywords: Bi-SC AIS, planning, governance, service line, roadmap, services, capability packages (CP), PMIC, AIRC2, BMD, ITM, AGS, DCIS, FMN, Communications, IV&V*

### **Abstract**

*The Bi-SC AIS Implementation Plan (BAIP) has four broad purposes: Set the Vision for the Programme; explain the Implementation strategy approach within the Programme; outline the Implementation plan for the next three years; and provide the programme management overview.*

The work described in this report was carried out under NSE000881 of the NCIA Programme of Work for 2015 and was concluded in June 2015.

Approved: \_\_\_\_\_

  
J.P. MASSART

Project Board Executive

NATO Communications and Information Agency  
The Hague  
June 2015

This document consists  
of 123 pages  
(excluding covers)

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## EXECUTIVE SUMMARY

The Bi-SC AIS Implementation Plan outlines the Programme's strategic drivers, the vision, and an overview of the implementation projects and activities. This year's plan provides a forecast of implementation activities over the next three years—from mid 2015 through the end of 2017. This period will be one of considerable transformation.

On one hand, the NCI Agency optimization phase, the need for cost savings, a life cycle approach to service implementation and operational support, and new processes and organizational arrangements to support them have been recognized.

On the other hand, with the transition of operations in Afghanistan until 2016, the initial implementation of the Federated Mission Networking and the Connected Forces initiative, the Ballistic Missile Defence (BMD) priority, the Alliance Ground Surveillance (AGS) programme, and the IT Modernization project, the Bi-SC AIS programme will need to develop new capabilities and adapt the existing ones to ensure the most effective support to the needs of the Alliance.

The plan covers the following:

Introduction – an overview of the plan and its purpose within some of the new Agency Directives developed during the last year.

Strategic Context – an assessment of the strategic Alliance factors affecting the programme's direction over the next three years. This chapter includes the most relevant conclusions from the last Wales Summit (section 2.3) that have had a significant impact on Bi-SC capability implementation plan.

Programme Implementation Vision – a description of how NCI Agency proposes to implement the programme's capabilities. After last year approval of the 9C0150 Capability Package, a number of NSIP projects have been initiated. They are described in detail in section 3.6. Additionally, section 3.7 collects useful Bi-SC AIS information on other Programmes considering the planning and requirements perspective. The Bi-SC AIS services, required by BMD IOC and AGS CORE capabilities, have become a key element for the 2015-2017 implementation plan. All these initiatives will be implemented in line with the Software Intensive Project (SIP) Task Force recommendations (section 3.4 and 4.2).

Implementation Strategy – an overview of the Bi-SC AIS implementation strategy through specific and implementable guidance available as part of programme governance mechanisms. This guidance is result of the Software Intensive Task Force recommendations, the implementation of Directives from NCIA's Service Strategy, as well as work from the Bi-SC AIS Implementation Office based on implementation project support. This chapter also describes the main Programmatic risks and issues, related to the above Implementation Strategy, discussed during the last BAIP WS in Mons in March 2015.

Bi-SC AIS Implementation Roadmap for 2015-2017 – is the main planning chapter. It contains a review of the implementation activities planned for all Bi-SC AIS services over the next three years and also main planning artifacts used by Bi-SC AIS Implementation Office (section 5.3). The chapter contains a new annex E Service Dependencies Plan and summarizes some communication projects (NCI, LTX, Secure VoIP and PIA projects) in order to facilitate the planning alignment of infrastructure and communication services.

Bi-SC AIS Programme Management – an overview of the governance and management arrangements for the Bi-SC AIS within the new NCI Agency Governance arrangements. This chapter also includes main monitor and control artifacts used by Bi-SC AIS Implementation Office (section 6.3.3).

The present plan still comprises two major elements: a static element, of which the main body of the plan is the largest part; and a dynamic element based on the information managed on a daily basis by PMIC, which is provided in the Annexes (annexes A to J) and which will be updated and published to stakeholders on a weekly basis via the Programme portal (<https://biscais.ncia.nato.int>). NCI Agency publishes an updated version of the full plan once a year.

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## 1. INTRODUCTION

### 1.1 PURPOSE

The Bi-SC AIS Implementation Plan (BAIP) has four broad purposes:

#### **Set the Vision for the Programme<sup>1</sup>**

Analyse the strategic factors influencing the evolution of the Bi-SC AIS and show how Bi-SC AIS capabilities support Alliance objectives.

Create a common “implementation view” of the Bi-SC AIS within the Federated Mission Networking (FMN) scope and align with other Programmes (BMD, AirC2, AGS, DCIS) within the C3 Classification Taxonomy Framework.

Provide information to stakeholders about the evolution of the Programme Capability Baseline throughout the 2015-2017 period.

Review the current programming in Capability Packages and identify how it links to Bi-SC AIS service implementation plans.

#### **Explain the Implementation strategy approach within the Programme**

Define an implementation framework for Bi-SC AIS Programme Management coherent with NCI Agency Service Strategy, specifying principles applicable to Bi-SC AIS needs, rules and guidelines for the Implementation Authority (IA) and for Host Nations.

Provide a management tool for the Implementation Authority by showing how Bi-SC AIS projects have been organized, scoped and scheduled in the most efficient and effective way, minimizing implementation and integration risks.

#### **Outline the Implementation plan for the next three years (2015-2017)**

Inform Stakeholders external to NCI Agency about the current status and expected progress of Bi-SC AIS implementation and its contributions to the NCI Agency Service Catalogue.

Facilitate implementation project coordination with HN projects and other Programmes.

Create a better understanding about the relationship between strategic capabilities and architecture implementation priorities, and dependencies between services within the BI-SC AIS context.

Provide service line chiefs and project teams with a better understanding about how individual projects contribute to the overall evolution of Bi-SC AIS capabilities.

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<sup>1</sup> According to the new NCI Agency CONOPS 2014, the Bi-SC AIS capability will not be considered as an independent Programme any more. However, the Bi-SC AIS projects Dossier require a specific coordination to achieve C2 Services alignment. Section 6 of this document will describe more deeply the new NCI Agency governance context.

**Provide the programme management overview**

Describe how the programme is managed within NCI Agency and with stakeholders.

**1.2 BACKGROUND**

The Bi-SC AIS (Bi-Strategic Command Automated Information System) is the collection of information systems and services supporting the operational and administrative processes of NATO Commands in static and deployed environments. The Bi-SC AIS dates from 1999, when, at the Washington Summit, the North Atlantic Council (NAC) directed that the information systems developed and operated by the two NATO Strategic Commands would be merged into a single capability.

Although it is treated as a single information network for programme management purposes, it actually comprises several different networks operating at different security levels: NATO Secret; NATO Unclassified; training networks; and limited implementations of NATO Restricted and Mission Secret networks.

Bi-SC AIS sites are interconnected by the NATO General Communication System (NGCS), also referred to as the NATO Communications Infrastructure (NCI)<sup>2</sup>. The NCI provides the backbone for connectivity among commands, to SATCOM ground stations, and to NATO Nations, other NATO organizations, and NATO-associated multinational organizations.

The bulk of the implementation activities under the Bi-SC AIS are carried out under Capability Packages (CPs) approved by the NAC. The concept development activities led by Allied Command Transformation (ACT) under its Transformation Programme of Work (POW) are critical for four aspects: capturing user requirements; clarifying concepts; assessing technology maturity levels; and identifying the DOTMLPFI<sup>3</sup> elements of Bi-SC AIS capabilities.

It is a goal for all NATO Consultation, Command and Control (C3) / Communications and Information Systems (CIS) organizations to be aligned in taking an enterprise-wide life-cycle approach to C3 capabilities and a more service-based approach to provision. This alignment is particularly critical given the diverse resourcing arrangements and governance mechanisms in place across the full scope of NATO as an enterprise.

With the establishment of the NATO Communications and Information Agency (NCI Agency) in July 2012, however, a significant step toward this goal has been taken. The NCI Agency is chartered to “act as NATO’s principal C3 capability deliverer and CIS service provider for the full range of its entitled requirements holders and customers.” Formed by merging the former NATO C3 Agency, NATO Communications and Information Services Agency, NATO ACCS Management

---

<sup>2</sup> NATO Communications Infrastructure (NCI), the NATO Communications part of the NATO Information Infrastructure (NII) supporting the NNEC.

<sup>3</sup> Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, Facilities and Interoperability.

Agency, and elements of the NATO Headquarters Information and Communications Technology Management division, the NCI Agency now contains the organisational entities involved in the implementation and support of the bulk of NATO C3 capabilities (see BAIP Section 6.1).

NATO has made strategic decisions to deliver integrated capabilities in response to new operational concepts and challenges. The Bi-SC AIS was not only identified as a critical capability for the Alliance at the November 2010 Lisbon Summit (see Section 2.1), but supports all other CIS-intensive Critical Capabilities delivered through the Bi-SC AIS Programme are required to be integrated with products emerging from other NATO and national programmes in support of achieving former NNEC.

In their assessment of Capability Development Priorities<sup>4</sup>, the Bi-SC stressed the need to continue to improve the ability of Nations to use NATO applications, databases and services and operate with different technology and standards. The criticality of the Bi-SC AIS to Alliance operations was illustrated in the Military Committee's advice on the Federated Mission Networking (FMN) Concept<sup>5</sup>, in which it was noted that seven of the ten essential capabilities for FMN are being provided by the Bi-SC AIS programme.

One of the first tasks undertaken by the NCI Agency after its establishment was a comprehensive study of the need for, and expected cost and performance benefits to be realized through, an overall upgrade of the existing NATO information technology (IT) infrastructure to a consolidated, standardized and centrally-managed baseline. As reported by the General Manager to the Agency Supervisory Board (ASB) on 29 November 2012, such an upgrade would lead to significant savings—enough to recover the investment cost within the space of a few years. This study confirms the general direction already taken within the Bi-SC AIS and reflected in the scope of information infrastructure services projects in CP 9C0150 already approved.

There is a need to achieve integration among Bi-SC AIS Core Services, Community of Interest (COI) Services and between Core and COI Services. For all these needs it is clear that Programme Governance and Management Framework is required (see Section 6). To facilitate this essential integration, the Bi-SC AIS Implementation Office, supported by the Programme Management and Integration Capability (PMIC) project, was developed and it is fully active providing support to the implementation projects within the Programme.

Bi-SC AIS implementation is an evolving process that involves the parallel but coordinated development of over 70 projects (see Annex I- Projects Dossier). This plan describes how this implementation is to be performed to achieve the necessary integration between projects.

---

<sup>4</sup> 5000 TSC FRX 0030/TT-8532/Ser:NU0047 - A SUMMARY OF THE 2012 BI-SC CAPABILITY DEVELOPMENT PRIORITIES - 26 October 12

<sup>5</sup> C-M(2012)0096, Military Committee (MC) advice on the Future Mission Network (FMN) Concept, 30 November 2012

Finally, the plan covers programme-level as well as project-level activities through the full implementation project life cycle from the programming stage ( see Annex A: Capability Package List) until handover to the Service Provision Authority (see Annex F – Sites Deployment Plan).

### 1.3 BAIP CONTEXT WITHIN NCI AGENCY

The scope of the BAIP is focused on the implementation of the Programme. However, the current document also looks beyond this. According to the new NCI Agency’s Service Orientation, the Bi-SC AIS programme plans to review the next BAIP version and align it with NCI Agency’s Service Governance artifacts once they are available. The following figure illustrates some of the main Strategic artifacts related with the Programme's implementation documentation.

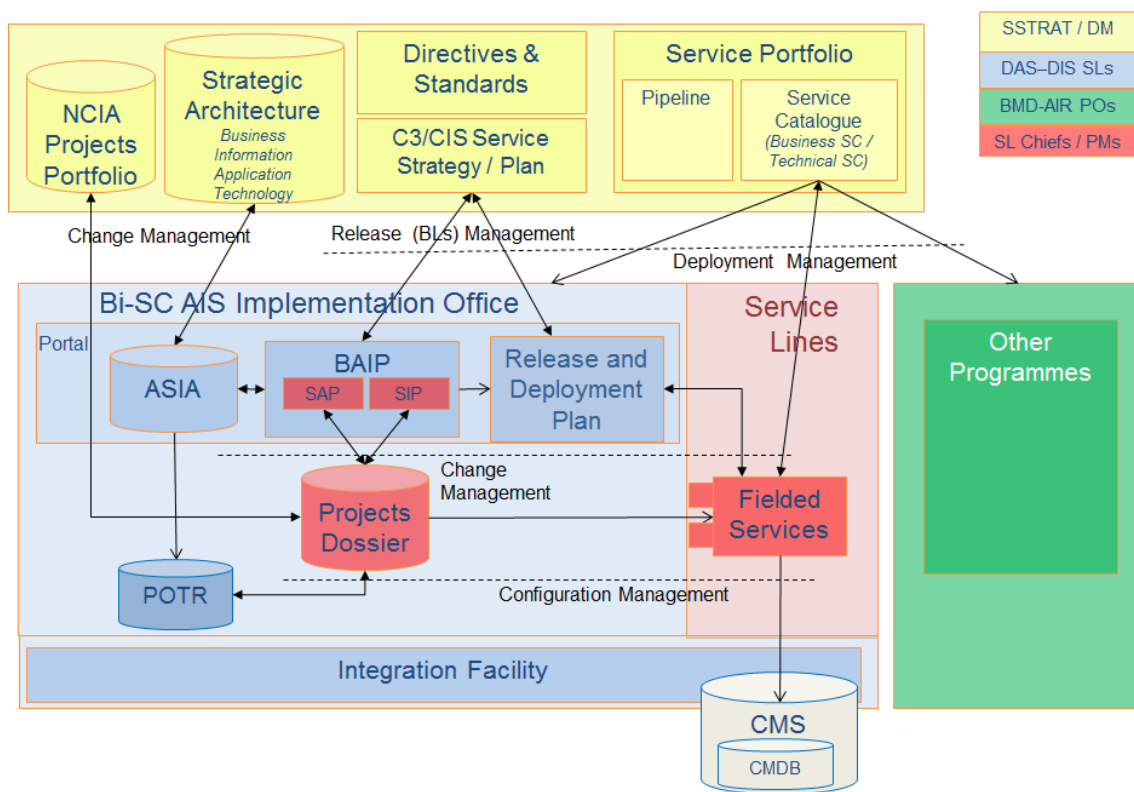


Figure 1 NCI Agency’s Service Implementation Governance artefacts

The group of artifacts would include, as the above figure shows:

Demand Management and Service Strategy level:

- C3/CIS Service Strategy and Plan
- Strategic Architecture
- Directives and Standards
- Service Portfolio including Pipeline and Service Catalogue

Programme and Service Lines Level:

- BAIP Document currently including the current Bi-SC AIS projects Dossier: Service application and Infrastructure Plans (SAP and SIP) are planned coordinately between the Bi-SC AIS Implementation Office and different Service Lines
- Release Plan within the NCI Agency Release Strategy
- AIS Service Implementation Architecture (ASIA) aligned with the Enterprise Architecture
- Programme Open Technical Repository (POTR)
- Configuration Management System (CMS) including the Configuration Management DataBase (CMDB)
- Programme Integration Facility integrated with other Test environments.

Service Lines and Projects Level:

- Bi-SC AIS projects Dossier within the NCI Agency Portfolio<sup>6</sup>

Fielded Services according to the NCI Agency Service Catalogue and the NCI Agency Deployment Management. Some of these artifacts has been drawn up throughout 2014, through different directorate's initiatives in order to support the lifecycle process within the Agency. The list below includes some of the new Agency Directives (AD) related to the Programme Planning Process:

- AD Release Management<sup>7</sup>
- AD Deployment Management<sup>8</sup>
- AD Service Change Management through the Lifecycle.<sup>9</sup>

Draft documents information and links are included within the present document to facilitate the information access.

#### 1.4 BAIP SCOPE

The scope of this plan is defined along three different axes:

- the *Services* to be implemented by Bi-SC AIS Programme;
- the *Timeframe* to implement them; and
- The *Maturity Level* of the implemented services from the enterprise perspective.

It means that each update of the BAIP will be described based on:

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<sup>6</sup> Application Portfolio Repository. <http://nrncisv0115:9080/fp/servlet/Login> (SSTRAT)

<sup>7</sup> NCIARECCEN-4-26092 Release Management

<sup>8</sup> NCIARECCEN-4-26093 Deployment Management

<sup>9</sup> NCIARECCEN-4-32346 Change Directive

- the *Services* that will be implemented during the period covered by the plan;
- the *Timeframe* covered by the plan, which is the three years following the release of the plan—in this case, 2015 through 2017; and
- The *Maturity Level* of the services covered by the plan.

The content of the plan has been developed and reviewed at a Bi-SC AIS Implementation Planning Workshop that was conducted at Mons on 25-26 March 2015. It is the NCI Agency's intent to make this planning workshop a bi-annual event to support updates of the BAIP. The BAIP serves as the Programme's Implementation Baseline for 2015-2017, coherent and aligned with other plans within the CIS life-cycle.

## 1.5 TARGET AUDIENCE

This Implementation Plan targets the full range of Bi-SC AIS stakeholders:

- Nations
- CNAD
- BMD SC
- AMDC SC
- Commands and user groups within the Commands
- Bi-SC PMO
- Other Host Nations
- NATO HQ Office of Resources (NOR)
- Working Group of National Technical Experts (WGNTTE)
- Investment Committee
- Military Budget Committee
- Agency Supervisory Board (ASB)
- NATO C3 Board
- C3 Capabilities Panels
- NCI Agency staff
- Bi-SC AIS Service Line Chiefs
- Bi-SC AIS Service Line Segment Architects (DAS and DIS)
- Bi-SC AIS Service Deployment Managers (SMC)
- Bi-SC AIS Project Managers
- Bi-SC AIS Project Technical Leads
- Bi-SC AIS Project Boards
- Capability Coordinators
- AIS Integrated Project Steering Group members
- Programme Management Group
- C3 Capability Management Board
- Experts supporting the implementation of Bi-SC AIS projects
- Bi-SC AIS Lifecycle Managers
- Capability Package Coordinators
- Mission Sponsors
- Operational Requirement Holders

This implementation plan is intended to be used as a tool by the primary audience in directing and controlling its execution over the period 2015-2017. However, it also serves the wider audience by informing them on how Bi-SC AIS capabilities will evolve during this period and to raise the visibility of the programme as a whole.

The document can be used to support:

- Implementation Planning

Guide the preparation of Supplemental Information Documents (SID) and Architecture Perspective Documents (APD) and the initiation of projects

Enable planning of supporting and affected activities

- Implementation Steering

Providing a framework for project and programme implementation activities, including C3 IMP community, Integrated Project Management Teams (IPMTs) and Integrated Project Steering Groups (IPSGs)

- Capability Development

Identifying needs for future Transformation activities coordinately with ACT

- Education and Awareness

Informing stakeholders on programme's scope, strategy, and plans

## 1.6 DOCUMENT CONTENT

The BAIP has six main static sections and a set of detailed Annexes. Most of the main body is static content and it will be updated once a year.

However, the detailed planning information included in the Annexes, will be managed and updated dynamically via the PMIC information toolset. This information status will be reviewed and aligned through the bi-annual BAIP Workshop

Stakeholders can access directly to all BAIP annexes as elements of the BAIP through the Bi-SC AIS Portal ( <https://biscais.ncia.nato.int/default.aspx> ). It will also be distributed as one complete document once a year.

### 1.6.1 Main chapters (Static)

1. Introduction: This section includes the main purpose and a brief description of the document's scope based on the new implementation approach made possible with the support of the PMIC.
2. Strategic context: This section details the major influences on the planning and implementation of the programme over the period from 2015 to 2017.
3. Programme Implementation Vision: The third section opens with a summary of the vision for the Bi-SC AIS in 2016. It then reviews the general NNEC vision (currently evolved to FMN) as the broad implementation framework for the Bi-SC AIS. After that, it analyses this framework from the strategic context perspective, identifying constraints and relevant assumptions to be considered within planning activities. Finally, it details the Capability Package (CP) vision and proposes further CP evolution.
4. Implementation Strategy: In previous versions of this implementation plan, this chapter included a view on how the road to the NNEC, or SOA, is to be travelled. Although still valid, more specific and directly implementable guidance has since been made available, as a result of the Software Intensive Taskforce

recommendations, and through directives from NCIA's Service Strategy, as well as work from the Bi-SC AIS Implementation Office.

5. Bi-SC AIS Implementation Roadmap (2015-2017): This section brings in the main information from a tactical implementation perspective. It is composed of a set of annexes (from C to G) that are described in section 5.3. These artefacts are used as planning tool throughout the project's lifecycle consolidating within programme view reports.
6. Programme Management: Finally, this section of the document describes the Bi-SC AIS Programme stakeholders and the Programme Governance and Management approach as supported by the Bi-SC AIS Implementation Office and Integration Capability (PMIC).

### 1.6.2 Detailed Annexes (Dynamic)

The detailed annexes in this plan are as follows:

#### **Annex A: Capability Packages List (ref. chapter 3)**

This annex lists all Capability Packages and projects within the scope of the Bi-SC AIS.

#### **Annex B: Capability Package Presentation (CP-projects) (ref. chapter 3)**

The annex provides the list of Capability Packages with their associated projects.

#### **Annex C: Roadmap Plan (2015-2017) (ref. chapter 5)**

The Roadmap illustrates how the AIS Services will be developed or completed in the three year interval.

#### **Annex D: Capability Implementation Schedule (ref. chapter 5)**

This annex is a dynamic planning tool maintained by the Programme. It consolidates information about capabilities, legacy systems and projects that implement services which provides corresponding capabilities including main milestones.

#### **Annex E: Service Dependencies Plan (ref Chapter 5) (2015-2017) (ref. chapter 5)**

The report provides a integrated view of the Bi-SC AIS per service, including increment scope and dependencies identified with other services (FSs and CES). This report was used for first time during the last BAIP WS in Mons.

#### **Annex F: Sites Deployment Plan (2015-2017) (ref. chapter 5)**

This annex identifies the implementation projects which will be deployed in each site, based on existing project schedules, during a specific period (2015-2017). The plan is aligned with the Capability Implementation Schedule of Bi-SC AIS Programme.

#### **Annex G: Sites Deployment Scope (2015-2017) (ref. chapter 5)**

This annex adds the following information to the previous plan: list of sites and projects indicating type of deployment (physical, remote) and the current status (planned, in progress, completed).

#### **Annex H: Programme phase Overview (ref. chapter 6)**

This report provides information on the status of the active and programmed projects depicting their stage in the NSIP project lifecycle.

**Annex I: Projects Dossier (ref. chapter 6)**

This annex provides summary information of all identified projects, whether they are programmed or currently active within the Bi-SC AIS Programme. It also details the relevant information of individual implementation projects.

**Annex J: Projects Progress Status (ref. chapter 6)**

The annex includes table-based information on the expected and accomplished milestones within the Bi-SC AIS Projects Dossier.

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## 2. STRATEGIC CONTEXT

This chapter identifies the major influences on the planning and implementation of the programme over the period from 2014 to 2016. It then assesses how well the programme is positioned to address these factors.

### 2.1 2010 LISBON CRITICAL CAPABILITIES

The Lisbon Critical Capabilities remain an important driver and prioritization mechanism that also affects the Bi-SC AIS programme.

The Bi-SC AIS was deemed critical "to enable more informed and effective holistic oversight, decision-making and command and control." The statement on critical capabilities, however, expressed concern that work was still needed to better align the programme's ambitions with the expectations of the resource community: "While the whole can be agreed as an excellent ambition, much detailed development work within individual programmes remains to be done by the NATO military authorities and relevant resource and programme management bodies, for instance with regard to dependencies and linkages with other systems, including tactical systems."

Furthermore, the NAC directed that, "The relevant resource and programme management bodies should ensure that further development of these capabilities and the allocation of resources to them accord with the Alliance's needs as expressed in the framework of the NDPP." Finally, it tasked those involved in the programme "to ensure the essential parts of these systems are considered in the most cost-effective and affordable way."

Thus, while providing a strong endorsement of the need to continue implementing the Bi-SC AIS, the NAC also made it clear that the programme plans need to fit within the resource constraints of the existing financial plans.

#### 2.1.1 NATO Command Restructure

The NATO Command Restructure initiative, as defined during the Lisbon summit, is now being implemented. It aims at fully implementing the new NATO Command Structure, with its agreed geographical footprint, to be more effective, leaner and affordable and manned with trained personnel as soon as possible. It also aims to enhance the relationship between NCS and national entities, thus improving NATO's ability to meet regional challenges. Finally, the NATO Command Restructure initiative aims to build a new intelligence infrastructure, based on a new architecture that allows for sharing all types of intelligence at every level, from strategic to tactical.

The Bi-SC AIS programme has translated the changes in the NATO Command Structure into associated changes in the functional requirements and physical scope of some projects. With the closure of Force Commands Madrid and Heidelberg and Joint Command Lisbon, for example, the AirC2IS project can now shift the assets intended for these sites to address the new requirements at the Combined Air Operations Centres (CAOCs) in Torrejon and Udem and at the Deployable Air Command and Control Centre (DACC) at Poggio Renatico in support of the of seamless Command and Control of Air Operations.

### **2.1.2 Cyber Defence**

In its Lisbon Summit statement, the NAC made a strong commitment to improve the cyber defence capabilities of the Alliance. “We will strive in particular to accelerate NATO Computer Incident Response Capability (NCIRC) to Full Operational Capability (FOC) by 2012 and the bringing of all NATO bodies under centralised cyber protection.”

The Bi-SC AIS programme is the principal implementation vehicle for cyber defence among NATO organizations. The bulk of the capabilities required to achieve the NAC’s goals for cyber defence are programmed under Capability Packages 0A0155, 0A0155 Addendum 1, and 9C0150, and the majority of these capabilities are information services that fall within the scope of the Bi-SC AIS.

During 2013-2014, NCIRC has achieved relevant capabilities. The Cyber Threat assessment Cell (CTAC) service activation took place on 28th Feb 2014 and the final system acceptance took place in May 2014.

The Cyber Security Service Line (CSSL) continue to build upon the NCIRC FOC project, with the implementation of the JFAI findings in relation to the FOC Project, and authorised deployments to 10 additional sites over 2015, 2016 and 2017. This however does not implement additional capabilities such as Increment 5. NCIRC Increment 5 is an alternate capability to the NCIRC Technical Centre (TC). The budget is programmed, but the project hasn’t been authorized by IC yet. SCs have been requested to provide operational requirements for this capability.

The NCI Agency anticipates a need to adapt and enhance the NCIRC FOC capabilities to align with the changes to the IT infrastructure that will be delivered as part of the IT Modernization programme.

## **2.2 2012 CHICAGO SUMMIT**

The 2012 Chicago Summit<sup>10</sup> discussed the impact of relevant events, such as the Arab Spring, Libyan civil war, as well as the global financial crisis, and transition for NATO forces in Afghanistan. A series of decisions designed to make sure that the Alliance remains capable of tackling the full range of security challenges, even in times of economic austerity were taken.

### **2.2.1 NATO Operations in Afghanistan**

The NAC has committed to a transitional strategy, handing over command of combat missions to Afghan forces while shifting to a support role of advising, training and assisting the Afghan security forces. This would culminate in a withdrawal of the bulk of NATO forces. A new and different NATO mission would then advise, train and assist the Afghan security forces until 2016.

Several impacts of these changes can be anticipated for the Bi-SC AIS programme. First, there will be a decreasing appetite for significant changes in ISAF C3 capabilities and fewer

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<sup>10</sup> Chicago Summit Declaration :

[http://www.nato.int/cps/en/SID-2639914C-153B6347/natolive/official\\_texts\\_87593.htm?selectedLocale=en](http://www.nato.int/cps/en/SID-2639914C-153B6347/natolive/official_texts_87593.htm?selectedLocale=en)

requirements for implementation of Bi-SC AIS capabilities into the theatre. However, the shift from combat to supporting tasks may generate new requirements for services to enable and improve the exchange of information with civil and non-governmental organisations. Such new requirements may be strongly correlated with similar needs emerging from the developing role of the Comprehensive Crisis and Operations Management Centre (CCOMC) at SHAPE.

### **2.2.2 Smart Defence and Connected Forces**

As consequence of shrinking defence budgets the NATO leaders agreed to share the costs of weapons and equipment as part of a so-called “Smart Defence” initiative. The Smart Defence Initiative is all about “doing more with less by doing it together” and aims to offers Allies a way to acquire capabilities that they could not afford individually. To do so there is a need to line up national requirements and NATO’s requirements and enable cooperation and specialization.

While Smart Defence is about building capabilities together, the Connected Forces Initiative aims to be able to work together in a truly connected way. It puts a premium on training and education, exercises, and a better use of technology. It implies Common command and control arrangements, Common standards and common doctrine and procedures.

There are three focus areas defined in the coming years: expanded education and training; increased exercises, especially with the NATO Response Force; and better use of technology.<sup>11</sup> As specific efforts are developed within the context of Smart Defence and Connected Forces, it’s likely that there will be resulting changes in operational arrangements and information exchange requirements that will need to be reflected in Bi-SC AIS projects. The work done by the Bi-SC AIS implementation office to improve the visibility of the status of projects and the technical capabilities of its services and interfaces should prove a significant enabler for both initiatives.

### **2.2.3 Missile Defence**

During the 2010 Lisbon summit, the NAC agreed to establish a missile defence system that would have the capability of covering all member states in Europe, as well as the United States and Canada. At the Chicago Summit, the leaders declared that this system had reached an interim capability. The interim capability provides basic command and control for Headquarters Allied Air Command in Ramstein, Germany, while NATO Allies provide sensors and interceptors to connect to the system.

The NATO missile defence system is expected to reach fully operational capability in 2018, through the complete delivery of Target Architecture 1 (TA-1). The new revision to the Capability Package for Missile Defence, CP 0A1303, includes scope to implement further adaptations and enhancements of Bi-SC AIS services within the context of integrated air and missile defence.

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<sup>11</sup> NATO Secretary General outlines Smart Defense proposals:  
<http://natosource.tumblr.com/post/18622754681/nato-secretary-general-outlines-smart-defence-proposals>

## **2.3 2014 WALES SUMMIT**

On 4-5 September 2014, the United Kingdom hosted the NATO Summit of Heads of State and Government in Newport, Wales.

The Wales Summit Declaration<sup>12</sup> noted that “NATO needs, now more than ever, modern, robust, and capable forces at high readiness, in the air, on land and at sea, in order to meet current and future challenges. We are committed to further enhancing our capabilities. To this end, today we have agreed a Defence Planning Package with a number of priorities, such as enhancing and reinforcing training and exercises; command and control, including for demanding air operations; intelligence, surveillance, and reconnaissance; NATO's ballistic missile defence capability, in accordance with the decisions taken at the 2010 Lisbon and 2012 Chicago Summits, including the voluntary nature of national contributions; cyber defence; as well as improving the robustness and readiness of our land forces for both collective defence and crisis response. Fulfilment of these priorities will increase the Alliance's collective capabilities and better prepare NATO to address current and future threats and challenges. We have agreed this Package in order to inform our defence investments and to improve the capabilities that Allies have in national inventories. In this context, NATO joint air power capabilities require longer-term consideration.” (Ref n.64)

### **2.3.1 Ballistic Missile Defence (BMD)**

NATO's aim “remains to provide the Alliance with a NATO operational BMD that can provide full coverage and protection for all NATO European populations, territory, and forces, based on voluntary national contributions, including nationally funded interceptors and sensors, hosting arrangements, and on the expansion of the Active Layered Theatre Ballistic Missile Defence (ALTBMD) capability. Only the command and control systems of ALTBMD and their expansion to territorial defence are eligible for common funding (Ref n.58)”.

### **2.3.2 Intelligence, surveillance, and reconnaissance**

NATO continues “to emphasise multinational cooperation. Following the Joint Intelligence, Surveillance and Reconnaissance (JISR) initiative launched at our Chicago Summit, work is on track to deliver an initial operational capability to support NATO operations and NATO Response Force rotations from 2016 onwards. In this context, we note the progress in the development of the Alliance Ground Surveillance capability that will become available for operational deployment in 2017. Furthermore, NATO's Airborne Early Warning and Control Force will continue to be modernised to maintain its full operational capability. JISR exemplifies the advantages of multinational cooperation in capability development and employment among Allies, which allow for significant operational and cost benefits. In this spirit, several Allies are establishing a multinational MQ-9 remotely-piloted air system users group, in particular to enhance interoperability and reduce overall costs.” (Ref n.65)

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<sup>12</sup> The Wales Summit Declaration: [http://www.nato.int/cps/ic/natohq/official\\_texts\\_112964.htm](http://www.nato.int/cps/ic/natohq/official_texts_112964.htm)

### **2.3.3 Connected Forces Initiative (CFI)**

NATO will “continue to build on the experience gained in recent operations and improve our interoperability through the Connected Forces Initiative (CFI). Today we have endorsed a substantial CFI Package consisting of six key deliverables, including the high-visibility exercise Trident Juncture 2015, with 25,000 personnel to be hosted by Spain, Portugal, and Italy; a broader and more demanding exercise programme from 2016 onwards; and a deployable Special Operations Component Command headquarters. As a key component in delivering NATO Forces 2020, the CFI addresses the full range of missions, including the most demanding, thereby demonstrating the continued cohesion and resolve of the Alliance. It provides the structure for Allies to train and exercise coherently; reinforces full-spectrum joint and combined training; promotes interoperability, including with partners; and leverages advances in technology, such as the Federated Mission Networking framework, which will enhance information sharing in the Alliance and with partners in support of training, exercises and operations.” (Ref n.69)

### **2.3.4 Cyber Defence**

NATO “are committed to developing further our national cyber defence capabilities, and we will enhance the cyber security of national networks upon which NATO depends for its core tasks, in order to help make the Alliance resilient and fully protected. Close bilateral and multinational cooperation plays a key role in enhancing the cyber defence capabilities of the Alliance. We will continue to integrate cyber defence into NATO operations and operational and contingency planning, and enhance information sharing and situational awareness among Allies. Strong partnerships play a key role in addressing cyber threats and risks. We will therefore continue to engage actively on cyber issues with relevant partner nations on a case-by-case basis and with other international organisations, including the EU, as agreed, and will intensify our cooperation with industry through a NATO Industry Cyber Partnership. Technological innovations and expertise from the private sector are crucial to enable NATO and Allies to achieve the Enhanced Cyber Defence Policy's objectives. We will improve the level of NATO's cyber defence education, training, and exercise activities. We will develop the NATO cyber range capability, building, as a first step, on the Estonian cyber range capability, while taking into consideration the capabilities and requirements of the NATO CIS School and other NATO training and education bodies.” (Ref. n.73)

## **2.4 IT MODERNIZATION (ITM)**

With the endorsement of the ASB, the NCI Agency undertook a study of NATO IT Modernization<sup>13</sup> with the support of the Network Centric Operations Industry Consortium (NCOIC). Its goal was to build an overall business case for bringing all NATO into a single enterprise Information Technology (IT) structure. The NCI Agency believes that there are considerable savings possible if the current situation can be consolidated and rationalized, and a degree of homogeneity

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<sup>13</sup> Technical Report (TR-2012/NCA008822/01) NATO IT MODERNIZATION STUDY DELIVERABLE P1.1 BASELINE – August 2012

brought to the infrastructure and application spaces, as well as to the service management and control domain. As reported to the ASB in November 2012, the study confirmed this belief.

The current IT infrastructure operated by the NCI Agency is based on the assets and facilities of its predecessor organizations and those assets that were previously owned by the NATO Command Structure headquarters. Due to the factors, much of the IT infrastructure is fully embedded within customer facilities and depends on locally provided services such as security, electricity and HVAC.

The NCI Agency is now in the process of developing a detailed plan for transforming the existing infrastructure to a consolidated, standardized and centrally managed one. This transformation will heavily leverage recent and ongoing projects such as the new Joint Force Command Headquarters in Lago Patria, the upgrade of AirC2 commands, and the Active Network Infrastructure (ANWI) for the new NATO Headquarters.

The effort will also take advantage of work already planned under the scope of CP 9C0150, including the implementation of the initial Infrastructure as a Service (IAAS) capabilities. The NCI Agency proposes to approach IT Modernization as a programme and will certainly leverage extensively the tools and processes for programme management and integration already established under the Bi-SC AIS programme.

The IT Modernization will increase the efficiency and operational effectiveness of NATO's IT infrastructure services by:

- Renewing obsolete / obsolescent IT infrastructure
- Increasing the availability of IT services
- Enhancing the Business Continuity and Disaster Recovery posture
- Enhancing the Information Security posture
- Increasing operational agility and flexibility
- Increasing mobility and flexible working
- Reducing the manpower required to provide and maintain services; reducing costs

Three of the projects within the CP0150 together provide the scope and funding to implement a modern, centrally managed IT infrastructure, namely IT Modernization (ITM). ITM is one of the pillars of the Agency benefits and saving plan. This includes the expansion of the scope to include normally ineligible NATO entities, in order to create a true NATO-Enterprise perspective and to achieve greater rationalisation of the infrastructure and thus increase the achievable savings and benefits. The CP150 approval by the NAC was in March 2014.

On 29 April 2015 the Invitation for Bids (IFB) for the major contract (WP1)<sup>14</sup> of the ITM project was sent to industry. NATO is looking for a long-term partnership, not only for the

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<sup>14</sup> For more details see Section 5.2.3.1.2 of this document

implementation phase but also for aspects of follow-on support. Although services will be delivered by NCI Agency staff, the IFB package that has been released includes a significant effort for contracted logistics support, catering for software licenses, hardware maintenance and spares. It also includes outsourcing of printing, scanning and copying services.<sup>15</sup>

## 2.5 FEDERATED MISSION NETWORKING (FMN)

The Future Mission Network (FMN) Concept<sup>16</sup> was developed in response to the Military Committee tasking of 07 July 2011, requiring Allied Command Transformation (ACT), in close coordination with Allied Command Operations (ACO), to “develop a generic concept informed by the best practices and lessons learned from the implementation of the Afghanistan Mission Network (AMN).”

The initial FMN concept has evolved to a new one named as the Federated Mission Networking (FMN), what it means connected forces as a result of:

- Federated – there is no one main contributor. Participants commit to common processes, organisation and provide materiel
- Mission – operational (including exercises). FMN is based on understand what operational processes are going to be needed – named them Mission Threads, before fielding a network in a federation starts. The Mission drives the solution
- Networking - interaction of people, processes, and technology to exchange information and/or services. FMN is an important enabler for the Connected Forces Initiative.

As defined in the concept, FMN is the CIS Capability, including the governance processes and procedures, to support Command and Control (C2) from static or deployed Headquarters in a federated coalition environment including NATO and non-NATO members<sup>17</sup>. ACT is tasked by the Military Committee in MCM-0157-2010 to lead the effort to implement FMN.

One of the key aspects of FMN is that of the Day Zero capability. Day Zero capability refers to the minimum capabilities required to support the needs of the Commander during the pre-deployment and initial deployment phases of an operation, and to support rapid, smooth, and efficient transition from pre-deployment to initial operations. Day Zero capability should be drawn from the FMN Framework Portfolio Standing Capability. To fulfill this requirement, MN Day Zero capability should include as minimum, human-to-human communications, pre-certified services, pre-populated information repositories, minimum standing governance and management capability and standing verification and testing capabilities. The Day Zero capability should also include an information

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<sup>15</sup> <https://intranet.nr.ncia/articles/Pages/150430-ITMod-IFB.aspx>

<sup>16</sup> 5000 FCX 0030/TT-8717/Ser: NR0065 Future Mission Network Concept - 17 October 2012

<sup>17</sup> Tidepedia - Federated Mission Networking (FMN) Portal:  
[http://tide.act.nato.int/tidepedia/index.php?title=Future\\_Mission\\_Network\\_\(FMN\)\\_Portal](http://tide.act.nato.int/tidepedia/index.php?title=Future_Mission_Network_(FMN)_Portal)

management capability for maintaining an operational record and providing an interface to NATO relevant archives.

The FMN capability will encompass Information Assurance services – including Cyber Defence services – to ensure confidentiality, integrity and availability of information, services and resources of a Mission Network.

The FMN Concept is based on the principle of maximum reuse of existing and planned capabilities from NATO and the Nations<sup>18</sup> and it covers four environments<sup>19</sup>:

- Verification and Validation Environment. This provides FMN Affiliates with the ability to collectively verify the technical interoperability of proposed service solutions. It also enables the demonstration and validation that any proposed solution (or change to a solution) will support the business processes of the FMN Mission Threads.
- Education and Training Environment. This provides support to the collective preparation, staff training, exercising and mission rehearsal of the HQ Staffs and Forces of FMN Affiliates that need to stay ready for potential emergent missions.
- Operations Planning Environment. This enables a collective information sharing environment that is a prerequisite for successful operational mission planning. The planning environment will enable the FMN Affiliates to exchange mission planning information at any time.
- Mission Execution Environment. This enables FMN Affiliates to connect their pre-validated infrastructure to form a Federated Mission Network. Over this pre-validated infrastructure the FMN Affiliates will collectively provide a minimum catalogue of mission essential services to the users on the Mission network. All Interconnections will fully comply with the FMN Instructions.

The NATO FMN Implementation Plan (NFIP)<sup>20</sup> will prescribe standards and profiles so that NATO and Nations can join operations with minimal additional materiel acquisition<sup>21</sup>. NATO is implementing the NFIP with a federated evolution and development line as well as a federated operational readiness line. The Plan consists of three volumes, associated annexes and appendices (see section 3.2).

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<sup>18</sup> Tidepedia – Future Mission Network (FMN) Concept:  
[http://tide.act.nato.int/tidepedia/index.php?title=Future\\_Mission\\_Network\\_\(FMN\)\\_Concept](http://tide.act.nato.int/tidepedia/index.php?title=Future_Mission_Network_(FMN)_Concept)

<sup>19</sup> Tidepedia – NATO FMN Implementation Plan – Way Ahead:  
[http://tide.act.nato.int/tidepedia/index.php?title=NATO\\_FMN\\_Implementation\\_Plan\\_-\\_Way\\_Ahead](http://tide.act.nato.int/tidepedia/index.php?title=NATO_FMN_Implementation_Plan_-_Way_Ahead)

<sup>20</sup> 5000/TSC-FCX-0010/TT/8870/Ser:NU0862, NATO Federated Mission Networking Implementation Plan-Volume I. FMN Implementation Overview, dated 17 December 2013

<sup>21</sup> Tidepedia – NATO FMN Implementation Plan – Way Ahead:  
[http://tide.act.nato.int/tidepedia/index.php?title=NATO\\_FMN\\_Implementation\\_Plan\\_-\\_Way\\_Ahead](http://tide.act.nato.int/tidepedia/index.php?title=NATO_FMN_Implementation_Plan_-_Way_Ahead)

User-level education and training modules will have a building block approach providing understanding on capabilities and restrictions, operator-specific training, operator-specific support for routine functions as well as one or more modules aimed at dedicated training and handling of mission or exercise related data. For these modules, the requirement for the development and provision of user specific education and training resources will need to be integrated in the contracting and acquisition process for the near term delivery of training.

Finally, the Bi-SC AIS programme will work to anticipate the needs of FMN by ensuring that its Core and Functional Services projects include in their scope the FMN requirements to develop a baseline that will apply in both a static and a deployable mission network environment.

On 29 January 2015, the NATO Federated Mission Networking Implementation Plan (NFIP) was approved by the North Atlantic Council (NAC). The NFIP will require changes to the technologies, standards and configurations of the networks provided by the Nations, Partner Nations and common funded NATO resources. It will also require collective changes to the processes and organizations that establish and develop the capabilities required for operations networks.<sup>22</sup>

## **2.6 NATO RESPONSE FORCE (NRF) / DEPLOYABLE NATO CIS**

The purpose of the NRF is to provide NATO with a robust and credible high readiness capability, which is fully trained and certified as a joint and combined armed force, able to deploy quickly to participate in the full spectrum of NATO missions wherever required. The concept of NRF was first endorsed with a declaration of NATO's Heads of State at the Prague Summit on 22 November 2002. In its statement at the Lisbon Summit, the NAC confirmed its commitment to the NATO Response Force as, "a vehicle for pursuing transformation and capability development for NATO and nations."

The deployable CIS capabilities in support of the NATO command elements of the NRF are programmed under Addendum 1 to Capability Package 0A0149. This CP specifically excludes scope for the provision of functional or Community of Interest (COI) services, which is addressed under the respective CPs for these services. The Core Services for the deployable forces were also evolved independent from the Bi-SC AIS.

With the NRF DCIS project, however, along with the initiation of a project to upgrade and extend the lifespan of the Limited Interim NRF Capability (LINC) and LINC-E equipment, it is clear that there is a strong synergy between deployable and static information services. In addition, as the target for initial operation of the NRF DCIS by mid-2016 nears the pressure to harmonize the plans for the Bi-SC AIS and the information service elements of the NRF DCIS increases.

Through the Deployable CIS Integrated Project Steering Group (IPSG), NCI Agency, ACT and SHAPE are working to identify links between the two programmes and to coordinate the implementation of Core and COI services in the DCIS environment. The NCI Agency intends to link

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<sup>22</sup> <https://intranet.nr.ncia/articles/Pages/140506-NATO%20FMN.aspx>

its delivery plans with SHAPE's plans to manage changes to the NRF information services baseline on an annual cycle. This approach will greatly simplify planning for both Bi-SC AIS project teams and SHAPE DCIS capability managers. In future, the NRF cycles will provide the Bi-SC AIS programme with an annual milestone for base-lining its operational C2 tool kit of COI and Core services.

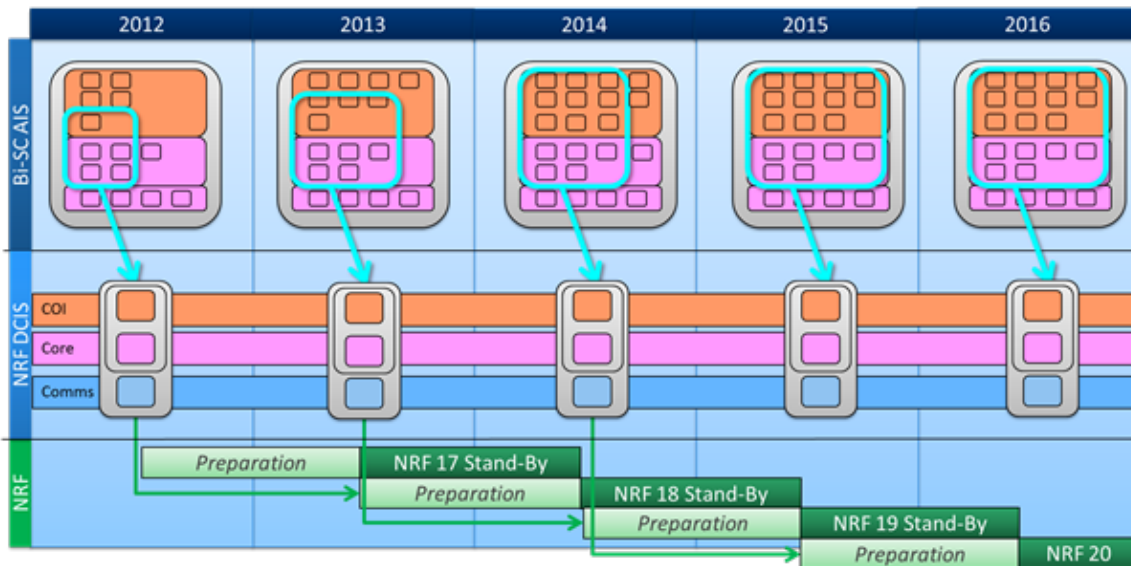


Figure 2 Aligning Bi-SC AIS Baselines to NRF Cycles

Although the NRF is not the only operational user base for the Bi-SC AIS, there are significant advantages for planning and training purposes in aligning the provision of deployable Bi-SC AIS services with the NRF preparation process. This will enable the programme to ensure the NRF baseline is implemented at the Joint Warfare Centre and Joint Force Training Centre for training purposes and that it will be distributed to deployable information service enclaves. It will also enable feedback from NRF exercises to be fed into follow-on increments of these services.

The provisioning model for the Static/Deployable CES and IS Capabilities is organised through the different CP's, as depicted in the following table:

Table 1  
Provisioning model for Static and Deployed Capabilities

|                          | Static/NCS | Deployed/NRF |
|--------------------------|------------|--------------|
| Core Enterprise Services | CP 9C0150  | CP 9C0150    |
| Infrastructure Services  | CP 9C0150  | CP 0A0149    |

This table shows that middleware services, licenses, etc, are provisioned through the same CP for both static and deployed capabilities, while the provisioning for Hardware and Operating System Software comes from the respective CPs for static AIS infrastructure (CP 9C0150) and deployable CIS (CP 0A0149).

The interrelation, synergy and dependencies between the static and deployable systems become increasingly clear and must be actively managed to support the Future Mission Network “Day Zero” concept. This requires a number of changes in how deployable AIS is provided:

The Bi-SC AIS and DCIS programmes will need to cooperatively manage the dependencies between their projects.

Both Core and Functional Services will need to design software baselines and support arrangements that will allow the services to work in both the static and deployed modes and to manage the exchange of information between the two.

Core Services will need to be configured with standing, pre-defined domains to enable the rapid generation of deployable networks for training, exercises and operations.

Both Core and Functional Services will need to support data preparation while the systems and staff are still in garrison: a deployed system with no data in it is useless.

## **2.7 NST C&I PARTNERSHIP**

At the NATO Chicago Summit in May 2012, Alliance leaders underlined their determination to ensure that NATO retains and develops the capabilities necessary to perform its essential core tasks and thereby promote security in the world. The Alliance set itself the goal of “NATO Forces 2020”: modern and tightly connected forces equipped, trained, exercised and commanded so that they can operate together and with partners in any environment<sup>23</sup>.

A core element of NATO Forces 2020 is the Connected Forces Initiative (CFI). The Alliance will expand education and training of personnel, complementing in this way essential national efforts. The Alliance will enhance exercises, and link networks together even more by strengthening the bonds between NATO Command Structure (NCS), the NATO Force Structure (NFS) and our national headquarters. More focus will be dedicated to Training and Exercises (T&E), Testing and Validation (T&V), use of NATO Response Forces (NRF) and Special Operations Forces (SOF) with the opportunity to effectively insert new technologies.<sup>24</sup>

The figure below shows graphically the NATO and National CIS alignment including the NATO Software Tools C&I Partnership (NST C&IP) Initiative.

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<sup>23</sup> Press Release (2012) 064, Summit Declaration on Defence Capabilities: Toward NATO Forces 2020, dated 20 May 2012.

<sup>24</sup> TR-2013/MNT009246/01, Feasibility Study on Multinational NATO Software Tools (MN NST FS), dated November 2013

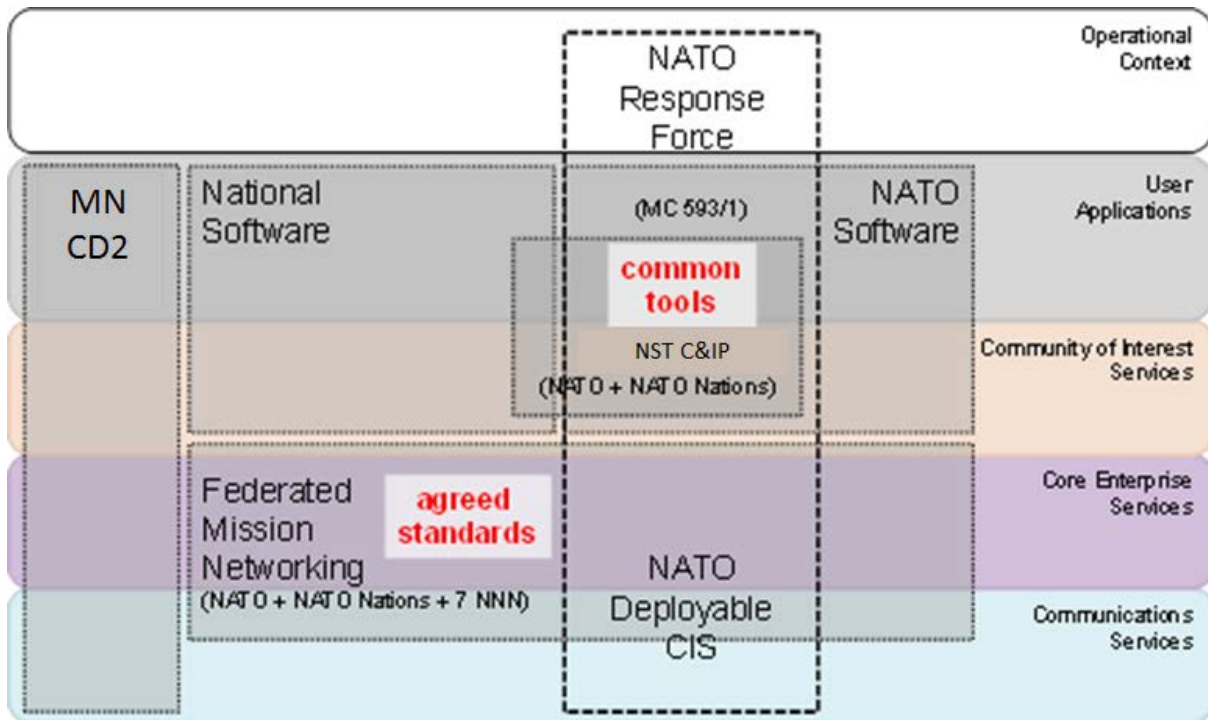


Figure 3 NATO and National CIS alignment

Following the 2012 Chief Information Officers Conference, 2013 brought two significant developments: One was the establishment of Routine Delivery of NATO Software Tools, allowing for requesting, and downloading 19 NATO Software Tools through a password-protected website. Until today, 24 nations and 5 Graduated Readiness Forces signed up and downloaded the software.

Secondly, over 2013, under Feasibility Study on Multinational NATO Software Tools, 10 NATO nations together with NCI Agency, investigated the optimization, cost efficiencies and interoperability increase through multinational approach to the use of the NATO Software tools by the NATO nations for national purposes. This way the shortfalls of the Routine Delivery were addressed: provision of support and training. The Third party release remains being addressed on case by case basis. The Feasibility Study report was released in November 2013 to all Allies and it recommended using the C&I Partnership framework for addressing the provision of the NATO Software Tools, installation, support and training to the nations. The NST C&IP can potentially be linked to a number of on-going and prospective multinational projects supported by the NCI Agency (e.g. the Federated Mission Network (FMN) Implementation Plan, the Joint Intelligence Surveillance and Reconnaissance (JISR) Implementation Plan, the preparation for NRF rotations, and others).

Following the recommendations of the Multinational NATO Software Tools Feasibility Study, year 2014 brought 7 nations: FR, IT, NL, NO, PL, SP, UK working together with the NCI Agency to prepare the establishment and execution of the NATO Software Tools C&I Partnership. Through a series of workshops and regular work with the nations, the final project deliverables were prepared: C&IP legal framework - General Rules and Partnership Arrangement and Year 1 Program of Work. The C&IP framework and approach for establishment of NST C&IP were presented to the ASB at the Plenary Meeting on 04 June 2015. As of 24 June the national inputs provided at the ASB Meeting and outcome of consultations with NSPO are being integrated into the framework and the

proposed model being refined, including through the TT1572 for the preferred C&IP model and through a coordination meeting with nations on 17 July 2015.

The proposed scope for the NST C&IP is as follows: initial baseline of 10 Tools: JCHAT, JOCWATCH, IGEOSIT, NIRIS, ICC, JTS, NITB, JOIIS, TOPFAS, LOGFAS. This initial baseline will be gradually expanded to incorporate other software tools as they become available through the NSIP acquisitions. Minimum 3-year participation and funding by 5 nations is required and the NST C&IP will provide an essential set of installation, support and training services, as well as optional services. The NST C&IP is also to provide mechanism for collecting the national demand for software tools for possible inclusion in future NATO software acquisitions and supporting the collection, consultation and integration of national requirements into the NATO baselines.

In parallel, the NCI Agency also continued supporting the nations in the development of the NATO Software Management Policy. Obviously, the NST C&IP will respect the applicable NATO Policies, such as the Software Management Policy, in particular with regard to the Single NATO Software baseline as referred therein.

Finally, the NCI Agency worked on the NATO First Solution (N1S) Initiative. NFS for NATO Force Structure aims to provide unified yet tailored NCI Agency CIS Support for the NATO Force Structure in the context of NATO Response Force. This concept provides Common Funded Developed Capacities to the NATO Force Structure to meet their NRF Capability Requirements (MC-593).<sup>25</sup>

The 2014 plenary Chief Information Officers' Conference (CIOC) focused on the Nations' feedback on NFS implementation, multinational initiatives in progress and on the way forward for the implementation of a CFI Cooperation Platform to support information sharing between the various stakeholders in the NFS implementation.<sup>26</sup> A key outcome of the CIOC 2014 is the implementation of the NATO First Communication Platform hosted by DNBL.

## **2.8 ALLIANCE GROUND SURVEILLANCE (AGS)**

Alliance Ground Surveillance (AGS) responds to one of the critical capabilities of the Lisbon Summit. The AGS Core will be an integrated system consisting of an air segment, a ground segment and a support segment.

The air segment consists of five Global Hawk Block 40 high-altitudes, long-endurance UAVs. The UAVs will be equipped with a state-of-the-art, multi-platform radar technology insertion program (MP-RTIP) ground surveillance radar sensor, as well as an extensive suite of line-of-sight

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<sup>25</sup> NATO First Solution in Support of Interoperable Capabilities (May 2014) [https://executivemanagement.nr.ncia/Executive%20Representations%20Workspace/Document%20Library/278/20140516\\_ReliableSwordDVD%20-%20FINAL.pptx](https://executivemanagement.nr.ncia/Executive%20Representations%20Workspace/Document%20Library/278/20140516_ReliableSwordDVD%20-%20FINAL.pptx)

<sup>26</sup> <https://intranet.nr.ncia/articles/Pages/141126-CIO-Conference.aspx>

and beyond-line-of-sight, long-range, wideband data links. The air segment will also contain the UAV flight control stations.

The ground segment will provide an interface between the AGS Core system and a wide range of command, control, intelligence, surveillance and reconnaissance (C2ISR) systems to interconnect with and provide data to multiple deployed and non-deployed operational users, including reach-back facilities remote from the surveillance area.

The AGS Core support segment will include dedicated mission support facilities at the AGS main operating base (MOB) in Sigonella, Italy. It will be tightly linked with the Bi-SC AIS and DCIS capabilities.

Under Capability Package 0A0201, approved in April 2012, NATO agreed to provide a set of common-funded capabilities in support of AGS. These include the implementation of Bi-SC AIS capabilities at the Main Operating Base (MOB) as well as the adaptation of Bi-SC AIS services to integrate AGS into the C2 arrangements within the NATO Command Structure. These projects were initiated in 2013 and implemented over the course of the following 4-5 years to support activation of the NATO AGS Force.

The AGS Target Architecture delivered in May 2014, including main Bi-SC AIS services to be considered within AGS Programme scope. During 2014, the Bi-SC AIS implementation office intends to work on them by ensuring that its Core and Functional Services projects include in their scope the requirement to develop a aligned AGS baseline (see section 3.9.6).

With the bulk of business being conducted and information exchanged on the NATO SECRET, the SCs are prevented from fully exploiting NATO's mobile workforce due to NATO security policies. To conduct effective collaboration and coordination within the NATO enterprise and with external partners, the SCs require the ability to conduct business processes at the appropriate security classification from a range of locations.

### 3. PROGRAMME IMPLEMENTATION VISION

#### 3.1 INTRODUCTION

In this chapter, the vision for the implementation of Bi-SC AIS Programme is presented:

The Bi-SC AIS Vision in 2016, comprising:

- The basic elements of the Federate Mission Networking Implementation Plan that will provide the future framework for implementation of the Bi-SC AIS
- The physical scope of the Bi-SC AIS programme and the organizations and locations to which its capabilities are delivered
- A summary of the Software Intensive Projects Task Force Final Report, including SC's considerations.
- An outline of Reference Architecture for the Bi-SC AIS, based on the CIS Taxonomy as key factor on the Capability Package planning.
- An outline of the primary Capability Packages covering the programme.
- The high level planning agreements with other programmes or wide scope projects (AirC2, BMD, DCIS, NGCS, New NATO HQ and AGS).

#### 3.2 NATO FMN IMPLEMENTATION PLAN<sup>27</sup>

The NFIP has been developed during a time of transition in NATO. A new Strategic Concept; changes in operational missions; Smart Defence; the Connected Forces Initiative (CFI); NATO Reform; and Alliance-wide limitations and constraints on resources have all played a role in shaping development of the Plan. Application of the lessons learned from the Afghanistan Mission Network (AMN) experience directly influenced the solutions proposed in the Plan. Execution of the Plan will set the conditions for enabling the federation of mission networks in the coming decades. It is anticipated that stakeholders with a previous experience in AMN will benefit in terms of time and resources required for implementation of FMN at a national level.

The achievement of the target FMN Capability can not be deferred, however, until some timeframe in the distant future: the implementation of improved FMN must begin today as an operational necessity. The urgency for the Plan is driven by the CFI and pressing real-world needs for support to federated mission networks in theatre and major exercises. The Plan includes steps to achieve an initial capability that can positively influence missions in the near term whether operation, exercise, and or training event. It also shows the use of an evolutionary, spiral approach to enable the FMN Capability to adapt to emerging requirements for ongoing NATO operations.

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<sup>27</sup> On 29 January 2015, the NATO Federated Mission Networking Implementation Plan (NFIP) V 4.0 was approved by the North Atlantic Council (NAC) [Ref. C-M(2015)0003-AS1, dated 30 Jan 2015]

Therefore, the primary purpose of the Plan is to guide the establishment of a capability to enable the federation of mission networks. The Plan defines a path to deliver the three elements of the FMN Capability: governance, FMN Framework and Mission Network.

Although the Plan was developed to meet the tasking of the C3B and guide development of a comprehensive capability for each DOTMLPFI element –based around the achievement of Milestones and associated Spirals – it also provide options for a graduated level of interoperability that is consistent with nations levels of ambition: depends on reuse of Nations capability. This includes adopting advice and recommendations on best practice, and the use of national exercises to validate capability development - uses gap analyses, in both NATO and the Nations to define where further development is required - reflects lessons learned from theater and the information needs of key communities of interest - and last but not least, the plan is based on the outcomes of CP Projects in a cost-effective path for development.

To provide for flexibility propose options for a graduated level of interoperability that is consistent with nations levels of ambition and ensuring the mature areas of development could move to Military Committee (MC) endorsement and NAC approval the plan was divided into three volumes:

**Volume I:** interprets the MC tasking and guidance from the FMN concept; Describes the FMN Capability and the approach; Provides an actions plan for implementation of FMN; Describes potential risks

**Volume II:** sets the framework for all affiliates to the FMN; Defines the overall standing activities in terms of required processes and organisation; Sets out the federated G&M structures; Identifies the instructions required for all MN participants; Provides NATO nations, non-NATO nations and/or other organisations with a comprehensive view of the commitments, processes, organisations and capabilities required for FMN.

- Spiral Requirements Specification (NFIP Annex P)
- Reference Architecture (NFIP Annex Q)
- Interoperability Standards Profile (NFIP Annex R)
- Instructions & Configuration Templates (NFIP Annex S)

**Volume III:** provide detail of NATO's implementation strategy

- Results of stock-take and gap analysis
- Details of what NATO should provide in terms of common funded capabilities to fulfil the goal of being a FMN Affiliate
- Indicates what NATO can currently contribute
- Outlines a NATO Roadmap of what it will contribute in support of future operation/missions
- Provides and initial cost estimate for NATO to achieve FMN Spiral 1

The first milestone of the Federated Mission Network Architecture is to replicate the good parts of the AMN but to make it repeatable and: simpler (less options), more robust (redundant peering / TACOMS), faster to set-up (template solutions), easier to manage (common Svc. Mgmt.),

more flexible (no dependency on a single core), easier to share across domains (labelling), and more cost effective (cross provisioning of services).

Over the next year the Agency will be required to re-focus many of its services and implementation programs and projects to support the successful implementation of the FMN capability within NATO and the Alliance. Key events for the Agency will be Steadfast Cobalt 2015 for which we are tasked to demonstrate the application of FMN principles to the High Visibility Exercise in October 2015 as well as NRF 16.

FMN will be an essential element of NATO in 2015 and beyond. The Bi-SC AIS implementation office will collaboratively work on the NFIP and BAIP alignment during next years. A consideration, that should be taken into account, is to identify the FMN requirements in the Bi-SC AIS projects in the case of a functional service is to be added to a future mission networking portfolio.

### 3.3 THE BI-SC AIS PROGRAMME SCOPE

The Bi-SC AIS is an evolutionary programme. It will likely exist in some form for as long as the Alliance has a command structure and needs to organize and coordinate its operations.

The Bi-SC AIS comprises over 30 major information services, which are being developed, implemented and delivered through individual projects working under the guidance of the Bi-SC AIS Implementation Office.

To meet the diverse needs of the NATO Command Structure (see Table 2), these services range from tools, such as document management and financial accounting and reporting used in everyday command administration, to command and control information services used to plan and coordinate the engagement of Alliance forces in crisis response operations.

Bi-SC AIS capabilities are designed to support all NATO military functions—from Combined Joint Operations to Logistics and Intelligence.

The Bi-SC AIS programme includes

- All NATO Command Structure Sites
- Gateways/Enclaves in 28 Nations
- 100+ Projects in 17 Capability Packages
- Host Nations: NCI Agency + 9 Territorial HNs (Norway, United Kingdom, Poland, Portugal, Spain, Italy, Turkey, Denmark, Germany)

Currently, the programme' service scope includes:

- **COI Specific Services:** these functions aim to support directly the specific command & control needs of the different commands
- **COI Enabling Services:** these services regroup functionality which are common to the Commands
- **Core Enterprise & Infrastructure Services:** these services represent basic IT functionality
- **Information Assurance** provides the information security services
- **Service Management & Control (SMC)** includes capabilities to coherently manage and operate and maintain services.

### 3.3.1 Supported Command and Centres

The Bi-SC AIS principally supports the NATO Command Structure. As a result of the Lisbon Summit, which directed both the restructure of the NATO Command Structure and the creation of the NCI Agency, this customer base will still evolve over the course of the period covered by this plan (2014 to 2015).

A new ACO Implementation Report of May 2015 has been published, providing a summary of progress and a strategic-level assessment on the implementation of the new NATO Command Structure (NCS) in ACO.<sup>28</sup>

The table below summarizes the current and future NATO Command organizations supported by the Bi-SC AIS.

Table 3  
– Supported Commands and Centres by Bi-SC AIS

|                                     | Former Organization                                                           | New Organization                          |
|-------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------|
| <b>Strategic Command Level</b>      |                                                                               |                                           |
| Allied Command Operations (ACO)     | Supreme Headquarters Allied Powers Europe (SHAPE) – Mons, Belgium             |                                           |
| Allied Command Transformation (ACT) | Headquarters Supreme Allied Commander Transformation - HQ SACT - Norfolk, USA |                                           |
| <b>Operational Level</b>            |                                                                               |                                           |
| Joint Forces Commands (JFC)         | JFC Brunssum, The Netherlands                                                 | Joint Force Headquarters (JFHQ), Brunssum |
|                                     | JFC Naples, Italy                                                             | JFHQ, Naples                              |
|                                     | JFC Lisbon, Portugal                                                          | -                                         |
| <b>Component/Tactical Level</b>     |                                                                               |                                           |
| Component Commands (CC)             | Force Command (FC) Heidelberg, Germany                                        | Land Command (LANDCOM) Izmir, Turkey      |
|                                     | Allied Air Command (AC) Ramstein, Germany                                     | Air Command (AIRCOM) Ramstein             |
|                                     | Allied Maritime Command (MC) Northwood, UK                                    | Maritime Command (MARCOM) Northwood, UK   |

<sup>28</sup> THE NEW NATO COMMAND STRUCTURE IN ALLIED COMMAND OPERATIONS - IMPLEMENTATION REPORT (13 May 2015)

|                                       |                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                   |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | FC Madrid, Spain                                                                                                                                                                                                                                                                                                                      | -                                                                                                                                                                                 |
|                                       | AC Izmir, Turkey                                                                                                                                                                                                                                                                                                                      | -                                                                                                                                                                                 |
|                                       | MC Naples, Italy                                                                                                                                                                                                                                                                                                                      | -                                                                                                                                                                                 |
| Combined Air Operation Centres (CAOC) | Poggio Renatico, Italy                                                                                                                                                                                                                                                                                                                | Torrejon, Spain                                                                                                                                                                   |
|                                       | Uedem, Germany                                                                                                                                                                                                                                                                                                                        | Uedem, Germany                                                                                                                                                                    |
|                                       | Larissa, Greece                                                                                                                                                                                                                                                                                                                       | -                                                                                                                                                                                 |
|                                       | Finderup, Denmark                                                                                                                                                                                                                                                                                                                     | -                                                                                                                                                                                 |
| Deployable Air Operations Units       | <ul style="list-style-type: none"> <li>• Deployable Combined Air Operations Centre (DCAOC)</li> <li>• Uedem, Germany</li> <li>• DCAOC Poggio Renatico, Italy</li> <li>• Deployable Recognized Air Picture Production Centre &amp; Sensor Fusion Post (DARS) Nieuw Millingen, The Netherlands</li> <li>• DARS, Moron, Spain</li> </ul> | Deployable Air Command and Control Centre (DACCC) Poggio Renatico, Italy                                                                                                          |
| NATO-operated Deployable CIS          | <ul style="list-style-type: none"> <li>• NATO Signal Regiment Brunssum</li> <li>• 1st NATO Signal Battalion (NSB) Wesel</li> <li>• 2nd NSB Grazzanise</li> <li>• 3rd NSB Bydgoszcz</li> </ul>                                                                                                                                         | <ul style="list-style-type: none"> <li>• NATO CIS Group HQ</li> <li>• 1st NATO Signal Battalion (NSB) Wesel</li> <li>• 2nd NSB Grazzanise</li> <li>• 3rd NSB Bydgoszcz</li> </ul> |
| <b>Capability Development</b>         |                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                   |
|                                       | Joint Warfare Centre - JWC - Stavanger, NO                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                   |
|                                       | NATO Joint Force Training Centre - JFTC - Bydgoszcz, PL                                                                                                                                                                                                                                                                               |                                                                                                                                                                                   |
|                                       | Joint Analysis and Lessons Learned Centre – JALLC - Lisbon, PT                                                                                                                                                                                                                                                                        |                                                                                                                                                                                   |

In summary, there are seven locations that have either been deactivated during 2013 or reassigned for other purposes. The implementation projects did the impact analysis of these changes over the physical scope of their projects and project's changes are still under implementation.

### 3.4 SOFTWARE INTENSIVE PROJECTS TASK FORCE

In April 2015, The Software Intensive Projects (SIP) Task Force Final Report was published in one main document and one annex:

- Software Intensive Projects Task Force Final Report<sup>29</sup>
- Annex: Practical Application of Recommendations<sup>30</sup>

The Report places extensive emphasis on selected areas of shortfall and failure in the NSIP Acquisition Process applied to Software Intensive Projects, to challenge the overall sufficiency and efficiency of policy, procedures, and processes. The report conveys the impression that SIP Acquisition process improvement can be achieved primarily through **better cooperation and more dedicated effort among the involved organisations.**

The main document contains 6 overarching principles as part of strategic guidelines within the SIP Acquisition process improvement:

1. Deliver early and often
2. Incremental and Iterative Development and Testing
3. Risk Management
4. Rationalised Requirements
5. Flexible/Tailored Processes
6. Knowledgeable and Experienced Software Project Workforce

These principles are specified as a set of the recommended actions, that after the SC's agreement<sup>31</sup>, will be implemented collaboratively in the near future. The recommendations should not be implemented simultaneously and the implementation should follow a logical order. Below, the actions are listed according to the annex "Response to recommendations assigned to SCs"<sup>32</sup>.

1. Ensure there is a clearly identified senior requirements owner for each project.
2. Ensure formal change management of user requirements.
3. Adopt a common methodology for capturing and managing requirements.
4. Improve the handover of requirements across the lifecycle.
5. Review and control requirements baseline at every major milestone
6. Adopt a Cost as an Independent Variable (CAIV) approach to controlling requirements.
7. Ensure projects have a manageable scope.
8. Refine the Incremental approach to enable iterative development and delivery

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<sup>29</sup> AC/4-N(2014)0034: Software Intensive Projects Task Force Final Report, 31 October 2014

<sup>30</sup> AC/4-N(2014)0034-ADD1: SIP TF Final Report – Practical Application of Recommendations, 08 December 2014

<sup>31</sup> AC/4-N(2015)0009 (27 April 2015)

<sup>32</sup> AC/4-N(2015)0009 - ENCLOSURE 1: RESPONSE TO RECOMMENDATIONS ASSIGNED TO SCs

9. Establish the business case on a full lifecycle basis.
10. Improve stakeholder communications.
11. Ensure Capability Package development supports the incremental approach to SIPs.
12. Develop a SIP-skilled workforce.
13. Ensure risk is considered in the costs and schedules for SIPs.
14. Improve cost estimation for SIPs.
15. Rationalised Requirements
16. Flexible/Tailored Processes
17. Knowledgeable and Experienced Software Project Workforce

The SCs recommended that the Investment Committee's consideration of the Software Intensive Projects Task Force (SIPTF) Report and the resultant actions should be closely aligned, synchronised, and ultimately subsumed within the broader Military Committee/Resource Policy Planning Board sponsored effort now underway toward Improving Capability Delivery. In particular, the SCs wish to defer action on the SIPTF recommendation for the identification of a senior requirements owner, as this issue is being considered as part of that effort.

The NCIA, through the BI-SC AIS IO, is already working on some recommended actions, like maximize reuse of software components. By decomposing complex software systems into smaller, reusable components it is possible to reduce the developmental risk (through more manageable scope), reduce duplicated development (by reusing common capabilities), reduce operations and maintenance costs (by minimizing the diversity of systems to be maintained) and reduce the cost and complexity of operator training (through increasing a common look and feel)...” (see Ref. section 4.5).

### **3.5 EVOLUTION OF THE BI-SC AIS ARCHITECTURE**

As this plan will show, Bi-SC AIS capabilities will progressively evolve from a system based to a service based orientation, and will reflect the maturity levels and standards identified in the NML and the NISP to meet the requirements of Commanders.

The following figure depicts how Community of Interest (COI) service implementation will evolve over the period covered by this plan:

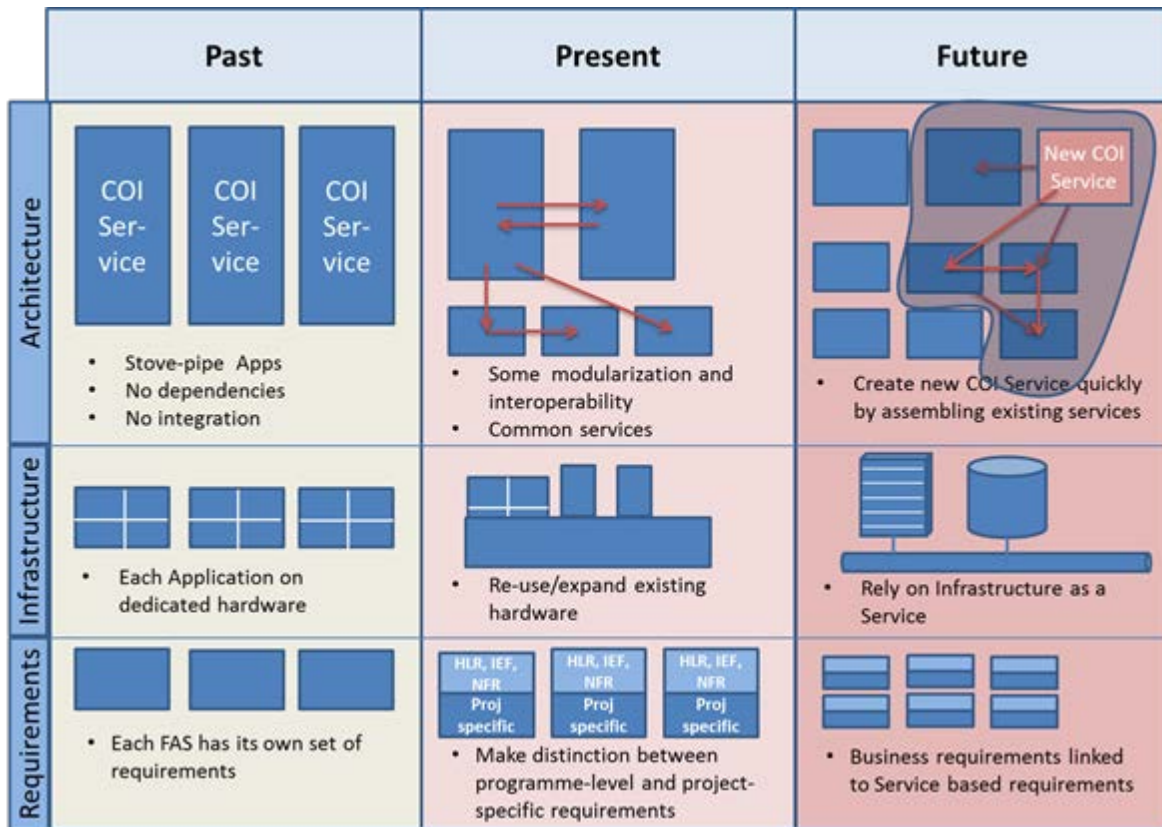


Figure 4 Evolution of Bi-SC AIS COI Service Implementation

As shown in this figure, in the past, COI services were built as stovepipes, with minimal integration or interdependencies. Each managed its entire set of requirements separately, and provided its own processing and storage infrastructure. Today, the COI services now in acquisition and development are being designed with modularization in mind, using common available services where possible. With the implementation of the Core GIS at major Bi-SC AIS sites in 2010 and 2011, for example, COI projects can now rely upon its capabilities rather than continue building their own. In addition, with the upgrade of most sites to a robust processing and storage infrastructure under Project 36—the NATO Secret local area network upgrades—COI service projects are using existing hardware or augmenting it as necessary, rather than acquiring unique equipment.

Beginning in 2005, requirements development and management for COI services projects has been directed to distinguish between Functional and Non-Functional Requirements (NFR). NFRs have been organized and evolved separately to enable re-use. With the establishment of the PMIC support, the Bi-SC AIS programme has now taken over the responsibility for managing and evolving a set of requirements common across multiple projects, including High-level requirements (HLR), Information Exchange Requirements (IER) and NFRs. This approach has already demonstrated its benefits in terms of reduced time to prepare project System Requirements Specifications and improved consistency and quality of delivered baselines.

Not all core services have been implemented, however. In particular, the capabilities referred to as Core Enterprise Services—the basic service infrastructure for a Services-Oriented Architecture (SOA)—will not be implemented any earlier than late 2016.

In the future, as more and more services and new components become available, new capabilities can be implemented by assembling and orchestrating the information flow across existing services, rather than by having to create wholly new applications. In addition, through design for virtualization, COI services will become less dependent upon the Information Infrastructure layer, enabling the migration from dedicated processing and storage to Infrastructure as a Service (IaaS). Finally, by linking a service-oriented implementation approach to a business process-oriented approach to requirements development, the Bi-SC AIS will be able to achieve the capability to federate processes—the FMN 2015-16 implementation milestone described above.

In Section 4, the specific implementation measures and guidance for PMs and TLs during the next two year period, that will contribute to the realization of this vision, are further detailed.

### **3.6 BI-SC AIS CAPABILITY PACKAGE OVERVIEW**

The Bi-SC AIS is supported by a number of Capability Packages (CPs) stating the Military Requirement for Core and Functional Services and describing the resources which are needed to implement and maintain them. The CPs contain more than one hundred projects that have been programmed to implement the Bi-SC AIS services.

The key BI-SC AIS CPs are listed hereunder:

#### **Core Services**

- CP 9C0150 Core Information Services for Command and Control

#### **Functional Services**

- CP 9C0107 Functional Services for C2 of Operations
- CP 0A0110 Functional Services for Intelligence Support
- CP 9C0103 Functional Services for Logistics C2
- CP 5A0053 Functional Services for Manpower and Personnel management

#### **Networking and Information Assurance Infrastructure**

- CP 0A0155 Electronic Information Security Services
- CP 0A0155 Addendum 1 INFOSEC Cyber Defence (NCIRC)

#### **Service Management Control**

- CP 9C102 NATO wide SMC

#### **Communication Network Services**

- CP 0A0104 - Core Communication Network Services Nato-Wide
- CP 9A0130 - Satellite Communication Transmission Services

The scope of the CPs within the Programme can be funding fully or partially: “Full” – all projects from a CP are part of Bi-SC AIS e.g. CP107, CP110, etc; “Partial” – some of the projects programmed in a CP are part of Bi-SC AIS.e.g CP201, CP1303, etc.

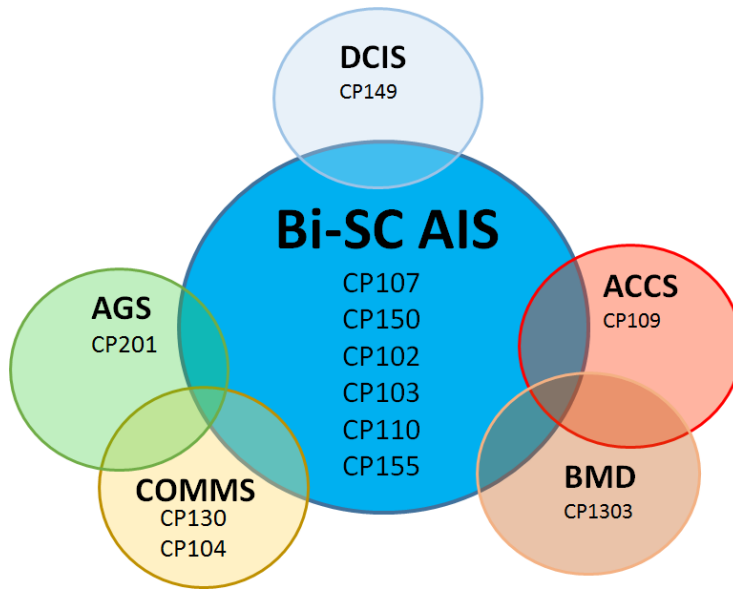


Figure 5 Bi-SC AIS Capabilities Packages

A table below depicts a list of the Bi-SC AIS-related CPs along with their current status (pre-submission/submission/approval/closed).

Table 4  
List of CPs funding the Bi-SC AIS programme

| CP Number | Status    | Title                                                             | Bi-SC AIS Scope |
|-----------|-----------|-------------------------------------------------------------------|-----------------|
| 0A0104    | Approved  | Core Communication Network Services NATO-wide                     | Partial         |
| 0A0104A01 | Completed | Extend Core Communication Network Services To Albania And Croatia | Partial         |
| 0A0110    | Approved  | Functional Services for Intelligence Support                      | Full            |
| 0A0110A01 | Approved  | Functional Services for Intelligence Support (SIGINT Coins)       | Full            |
| 0A0149    | Approved  | NATO Deployable C2 Assets                                         | Partial         |
| 0A0149A01 | Approved  | NRF Deployable CIS Capability                                     | Partial         |
| 0A0149R01 | Submitted | NRF Special Operations Component Command (SOCC) DCIS Capability   | Partial         |
| 0A0155    | Approved  | Electronic Information Security Services (INFOSEC)                | Partial         |
| 0A0155A01 | Approved  | Electronic Information Security Services                          | Full            |

| (INFOSEC) - Cyber Defence    |                |                                                                                               |                       |
|------------------------------|----------------|-----------------------------------------------------------------------------------------------|-----------------------|
| <b>0A1303</b>                | Approved       | Theatre Missile Defence (TMD)                                                                 | Partial               |
| <b>0A1303<br/>Revision 1</b> | Approved       | Provide Ballistic Missile Defence Capability                                                  | Partial               |
| <b>5A0061</b>                | Completed      | Feasibility Study on Ballistic Missile Defence                                                | Partial               |
| <b>5A0007</b>                | Approved       | Provide Information System (IS) in Support of the Ops Mission Area                            | Full                  |
| <b>5A0050/<br/>9B0020</b>    | Approved       | Provide Bi-SC Static Automated Information System (AIS) Core Capability                       | Full                  |
| <b>5A0053/<br/>9B0010</b>    | Approved       | Provide and Maintain Information System for Manpower & Personnel Management (Personnel FAS)   | Full                  |
| <b>5A0054/<br/>9B0011</b>    | Completed      | Provide Enhanced Dissemination of Shared Early Warning Information                            | Partial               |
| <b>5A0109</b>                | Approved       | Air Command and Control System (ACCS) Foundation Capability                                   | Partial               |
| <b>5A0109A03</b>             | Approved       | Air Command and Control System (ACCS)                                                         | Partial               |
| <b>5A0109A04</b>             | Pre-submission | Air Command and Control System (ACCS)                                                         | Partial               |
| <b>5A0050A01</b>             | Completed      | Extend BI-SC Static Automated Information System (AIS) Core Capability to 7 Nations           | Full                  |
| <b>5A0050A02</b>             | Approved       | Extend BI-SC Static Automated Information System (AIS) Core Capability to Albania and Croatia | Full                  |
| <b>5A0156</b>                | Approved       | Provide Deployable Non-CIS Assets for CJTF HQ                                                 | Partial <sup>33</sup> |
| <b>9A1101</b>                | Approved       | NATO Response Force (NRF) Assets and Support                                                  | Partial <sup>34</sup> |
| <b>9A1102</b>                | Approved       | NATO Response Force (NRF) Counter Improvised Explosive Device (C-IED)                         | Partial <sup>35</sup> |
| <b>9B0401</b>                | Approved       | Joint Training, Experimentation and Interoperability                                          | Partial               |
| <b>9B3013</b>                | Approved       | North Atlantic CCIS                                                                           | Full                  |

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<sup>33</sup> Includes a LOG FS project 5HQ27015

<sup>34</sup> Includes a LOG FS project 5HQ27110

<sup>35</sup> Includes OPS LOG Functional Service as part of project 5HQ03303

|           |                |                                                                    |         |
|-----------|----------------|--------------------------------------------------------------------|---------|
| 9C0103    | Approved       | Functional Services for Logistic C2                                | Full    |
| 9C0103A01 | Submitted      | Functional Services for Logistic C2 (LOG FS) – Evolution           | Full    |
| 9C0107    | Approved       | Functional Services for Command and Control of Operations (OPS FS) | Full    |
| 9C0150    | Approved       | Core Information Processing Services                               | Full    |
| 0A0201    | Approved       | Alliance Ground Surveillance (AGS)                                 | Partial |
| 9C0101    | Approved       | CP 9C0101 Move NATO CIS School Partial                             | Partial |
| 9C102     | Pre Submission | NATO wide SMC                                                      | Partial |

The following diagram depicts the mapping of the major CPs to the Services Framework and related projects:

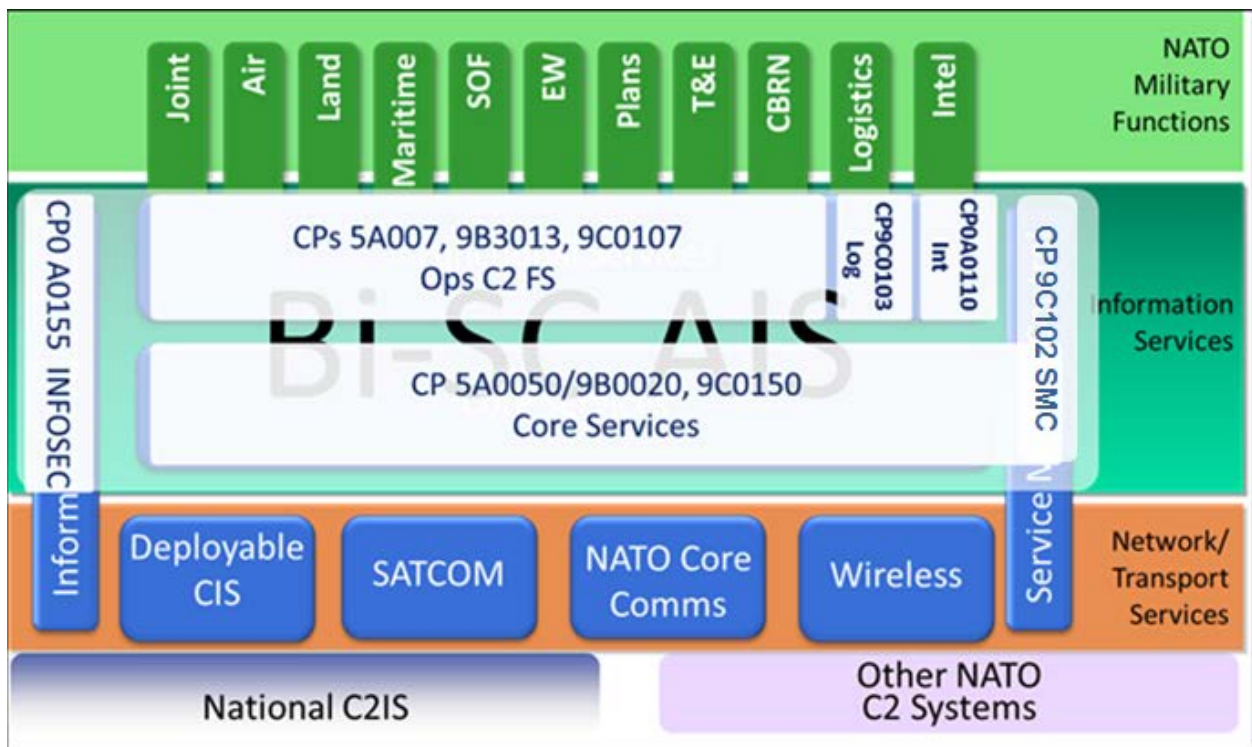


Figure 6 Mapping of the CP to the Services Framework

The most important CPs for Bi-SC AIS Programme is described in following sections.

### 3.6.1 CP 9C0107 "Functional Services for Command and Control of Operations"

CP 9C0107 "Functional Services for Command and Control of Operations" revises and subsumes Capability Packages 5A0007 and 9B3013. It will provide information processing services

for command and control, in support of all military functions except Intelligence (programmed under CP 0A0110) and Logistics (programmed under CP 9C0103).

CP 9C0107 has been developed to provide operational functional area services which will deliver NATO commanders with the required capabilities for the appropriate command and control function and execution of their operational authorities and responsibilities. This CP addresses a very broad scope of requirements. It will provide mission and component specific information services capabilities for support of the military function 01 Command and Control and will support indirectly military functions Joint, Land, Air, Maritime, and Special Operations, as well as Plans and Policy, CBRN Defence, Electronic Warfare, Education, Training, Exercises and Evaluations. This CP will give integrated information services across static, deployable, and deployed environments, and it will meet the operational information requirements of NATO commanders from strategic to component commander level.<sup>36</sup>

### 3.6.1.1 *Projects*

#### **Legacy projects from CP 5A0007**

- 5HQ00587 - Establish Operations FASS Baseline
- 5HQ00590 - Obtain and Integrate Joint Operations Sub-FASS – Phase 2
- 5HQ00592 - Obtain and Integrate Land Operations Sub-FASS – Phase 2
- 5HQ00593 - Obtain and Integrate Air Operations Sub-FASS – Phase 2

#### **Legacy projects from CP 9B3013**

- 9HQ90017 - Evolve and Enhance North Atlantic CCIS

#### **CP 9C0107 projects**

- 0IS03075 - Provide Air C2 Information Services (Air C2IS), Increment 2
- 0IS03076 - Provide Land C2 Information Services (LC2IS), Increment 2
- 0IS03077 - Provide Combined Joint Situational Awareness
- 0IS03078 - Provide FS for C2 of CBRN Defence
- 0IS03079 - Provide FS for C2 of Special Operations
- 0IS03080 - Provide FS for Environmental Support of Operations
- 0IS03081 - Provide FS for C2 of Maritime Operations
- 0IS03082 - Provide FS for C2 of Combined Joint Operations
- 0IS03083 - Provide FS for C2 of Electronic Warfare
- 0IS03084 - Update OPS FS baseline
- 0IS03085 - Provide FS for Education, Training, Exercises and Evaluation
- 0IS03086 - Provide FS for Operational Planning
- 0IS03087 - Provide OPS FS Programme Management Support
- 0IS03088 - Provide FS for Defence Planning

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<sup>36</sup> CP 9C0107 FUNCTIONAL SERVICES FOR COMMAND & CONTROL OF OPERATIONS (OPS FS)

### 3.6.2 CP 9C0150 Core Information Services for Command and Control

CP 9C0150 revises and subsumes Capability Package 5A0050/9B0020 “Provide Bi-SC AIS Core Capabilities.”<sup>37</sup> This CP has been approved in March 2014.

In January 2013 the NCI Agency released the Bi-SC Statement of Requirement for the Bi-SC AIS service employment in support of the SCs missions and activities envisioned in 2016<sup>38</sup>. This was complemented by an updated resource assessment of CP 150 by the NCI Agency<sup>39</sup>. The purpose of the documents were to assist the Staff in completing the CP 9C0150 Joint Staff Screening Report by providing detailed information on the services affected by the implementation of the Protected Business Network.

Core services provide the common foundation for all COI services, and standardized interfaces between COI services and the NATO General Communication System (NGCS), facilitating interoperability between the NATO C3 system and national C2 systems and between the NATO C3 system and the information systems of international and non-governmental organizations.

CP 9C0150 directly supports Military Function (MF) 01, Command and Control, as defined in the Bi-SC Guidance for Defence Planning, and all other Military Functions indirectly. More specifically, it addresses MF Component 01-02, Communications and Information Systems (CIS), and covers those COI Services that are common to all Bi-SC AIS users, Information Integration Services, Local Area Communication Services and Systems Management and Control Services. These services are collectively referred to as Core Services (CS).

#### 3.6.2.1 *Projects*

##### **Legacy projects from CP 5A0050/9B0020**

- 5IS03021 - Establish Bi-SC AIS Target Architectural Baseline
- 5IS03023 - Provide Information Exchange Services
- 5IS03024 - Extend ACE AIS Core Capability to MIS
- 5IS03025 – Implement Further Evolution of the Bi-SC AIS Core Capability
- 5IS03027 - Provide Bi-SC AIS Life Cycle Support Capabilities
- 5IS03028 - Document Management, Workflow and Indexing Services
- 5IS03029 - Geographic Services
- 5IS03030 - Meta Directory Services
- 5IS03031 - Information Portal
- 5IS03032 - Functional Evolution
- 5IS03033 - Preparation for FAS Integration

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<sup>37</sup> 5000 TSC MFX 0240/TT-7612/Ser:N0027 Bi-SC Submission of Capability Package 9C0150 “Core Information Services for Command and Control” - 17 Aug 2011

<sup>38</sup> 3050/SH/CCD CIS/CAR/335/13-301388: Bi-SC Statement of Requirement for Bi-SC AIS Service Employment in 2016

<sup>39</sup> 5000 TSC MFX 0240/TT-8964/Ser NR0004: Bi-SC AIS Service Employment in Support of the NATO Command Structure – Resource Update

- 5IS03034 - Bi-SC AIS Data Management Baseline
- 5IS03035 - Security Services
- 5IS03036 - Hardware and Software Upgrades

#### **CP 9C0150 projects**

- 0IS03090 - Provide Messaging Services
- 0IS03091 - Infrastructure as a Service and IT Consolidation<sup>40</sup>
- *0IS03092 - Software Upgrade and Hardware Refresh of Fielded Baseline*
- 0IS03093 - Provide Unified Communication and Collaboration Services
- 0IS03094 - Provide Web Enabling Services
- 0IS03095 - Provide Information Administration Services
- 0IS03096 - Provide Implementation Authority Programme Management and Integration Capability (PMIC)
- 0IS03097 - Provide Bi-SC Programme Management Capability
- 0IS03098 - Upgrade Geographical Information Services
- 0IS03099 - Upgrade Enterprise Directory Service
- 0IS03100 - Upgrade Information Portal Services
- *0IS03101 - Upgrade Bi-SC AIS Service Management and Control (SM&C) Capability*
- 0IS03102 - Provide Information Exchange Services

### **3.6.3 CP 0A0110 Intelligence Functional Services**

This Capability Package provides for the evolution of the Intelligence Functional Service (known as the Intel FAS) within the Bi-SC AIS. The Bi-SC AIS provides information system support to all aspects of Command and Control exercised in NATO Commands in static or deployed situations.

CP 0A0110 directly supports Military Functions (MF) 01, Command and Control (C2) and MF 03, Intelligence Support. It aims to provide all headquarters of the NATO Command Structure information system services supporting the specific business of the Intelligence Support Function as defined in the Bi-SC Guidance for Defence Planning.<sup>41</sup>

#### *3.6.3.1 Projects*

##### **CP 0A0110 projects**

- 0IS03060 – Acquire and maintain additional BICC (BICES Initial Core Capability) systems
- 0IS03062 – Provide additional SIGINT COINS systems for new NATO member nations and deployed HQs
- 0IS03063 – Develop Intelligence Functional Services – Spiral 1 – Initial Operational Capability

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<sup>40</sup> The 2 projects submitted with CP 9C0150 (*0IS03092, 0IS03101*) were by the NOR recommended for programming as a single activity under serial 2014/0IS03091.

<sup>41</sup> NATO-WIDE CAPABILITY PACKAGE 0A0110 - FUNCTIONAL SERVICES FOR INTELLIGENCE SUPPORT (NATO-WIDE CP 0A0110 - FUNCTIONAL SERVICES FOR INTELLIGENCE SUPPORT

- OIS03064 – Develop Intelligence Functional Services – Spiral 2

### **3.6.4 CP 9C0103 Logistics Functional Services**

This Capability Package provides for the evolution of the Logistics Functional Services (known as the LOG FS) within the Bi-SC AIS.

CP 9C0103 and CP 9C0103A01 directly supports Military Functions MF 01 - Command and Control (C2) and MF 09 - Logistics. It aims to provide all headquarters of the NATO Command Structure with information system services supporting the Logistics Functions as defined in the Bi-SC Guidance for Defence Planning.<sup>42</sup>

CP 9C0103 will subsume the Human Resource Management functional services from CP 5A0053 on the approval of CP 9C0103 A01.

#### *3.6.4.1 Projects*

##### **CP 9C0103 projects**

- OIS03042 – Consolidate existing systems to provide Initial Operation Capability (IOC)
- OIS03043 - Develop Logistics Functional Service (Spiral 1)
- OIS03044 - Develop Logistic Functional Services - Spiral 2 (ADD1)
- OIS03046 - Develop Logistic Functional Services - Spiral 3 (ADD2)

### **3.6.5 CP 5A0053 Personnel Functional Services**

This Capability Package provides for the evolution of the Personnel Functional Area Service (known as the PERS FAS) within the Bi Strategic Command Automated Information System (the Bi-SC AIS).

CP 5A0053/9B0010 directly supports Military Functions (MF) 01, Command and Control (C2) and MF 09, Logistics.<sup>43</sup>

#### *3.6.5.1 Projects*

- 5HQ03042 - Provide APMS

### **3.6.6 CP 0A0155 Electronic Information Security Services**

This Capability Package, including Addendum 1, provides effective, integrated and manageable Electronic Information Security (INFOSEC) services to ensure confidentiality, integrity and availability of NATO's information.

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<sup>42</sup> CAPABILITY PACKAGE (CP) 9C0103 FUNCTIONAL SERVICES FOR LOGISTICS C2 (CP 9C0103)

<sup>43</sup> CP 5A0053/9B0010 "PROVIDE AND MAINTAIN INFORMATION SYSTEM FOR MANPOWER AND PERSONNEL MANAGEMENT - PERSONNEL FUNCTIONAL AREA SERVICES (PERS FAS)"

CP 0A0155 and CP 0A0155A01 directly support Military Functions 01, C2 and MF 03, Intelligence Support, MF Component “Counter Intelligence and Security.

### 3.6.6.1 *Projects*

#### **CP 0A0155 projects**

- 0CM03039: Provide NATO On-Line Cryptographic Equipment
- 0IS03001 - Provide NATO Computer Incident Response Capability (NCIRC) Final Operational Capability (FOC) - Phase 2
- 0IS03002 - Provide NATO Computer Incident Response Capability (NCIRC) Final Operational Capability (FOC) - Cyber Defence Command and Control
- 0IS03003 - Provide NATO Computer Incident Response Capability (NCIRC) Final Operational Capability (FOC) - Cyber Defence Support
- 0IS03004 - Provide NATO Computer Incident Response Capability (NCIRC) and Intrusion Detection System (IDS), Final Operational Capability
- 0IS03005 - Provide NATO Computer Incident Response Capability (NCIRC) Final Operational Capability (FOC) - Cyber Defence Coordination and Support Centre
- 0IS03006 - Provide Bi-SC INFOSEC Program Management Office
- 0IS03067 - Provide NATO Electronic Key Management System (NEKMS)
- 0IS03069 - Provide NATO Secure Information Exchange Interfaces (NSII)
- 0IS03070 - Provide NATO INFOSEC Management (NIM)
- 0IS03071 - Provide NATO INFOSEC Support
- 0IS03072 - Provide NATO Public Key Infrastructure

### 3.6.7 **CP 9C0102 Service Management and Control (SM&C) Capability**

This CP will aim to achieve and maintain interoperability across the heterogeneous CIS systems and networks of the Alliance, its partners, international and non-governmental organisations, and commercial companies. The CP is currently under development.

This CP will directly support Military Function (MF) 01 - Command and Control (C2).

### 3.6.8 **CP 0A0104 - Core Communication Network Services Nato-Wide**

CP 0A0104 revises and subsumes CP 5A0004/9B5016, “Provide NATO-Wide Common User Communications and Message Handling Support for Command and Control”. It aims to implement Network Transmission Services, Gateways, Packet Transport, Baseline Architecture, Studio VTC and Information Access to provide communication services necessary to support the information exchange requirements of the Alliance by expanding and evolving the NGCS to accommodate new requirements and technical capabilities.

This CP directly supports MF 01 “Command and Control”.

### 3.6.8.1 *Projects*

#### **CP 0A0104 Projects**

- 0CM03023 - Provide Target Architecture Development & Integration Support
- 0CM03024 - Provide Circuit Switched Component
- 0CM03025 - Provide Packet Transport Component
- 0CM03026 - Provide Network-to-Network Gateways
- 0CM03027 - Provide Studio Video-Teleconferencing
- 0CM03028 - Provide Network Transmission Services & Bandwidth Management

- 0CM03029 - Provide Network and Service Management
- 0CM03030 - Provide Network Service Extension Beyond NATO
- 0CM03031 - Provide Public Information Access
- 5CM00580 - Provide Data Transfer & Message Handling System
- 5CM00581 - Provide Terminal Equipment
- 5CM00700 - Provide NATO Core Switches
- 5CM00711 - Provide Private Automatic Branch Exchanges (PABX)
- 5CM00712 - Provide Transmission Systems
- 5CM00713 - Provide Circuit Mode Gateways & Interfaces
- 5IS03024 - Extend the ACE AIS Core Capability to the MIS

### **3.6.9 CP 9A0130 - Satellite Communication Transmission Services**

This CP aims to provide Beyond Line-Off-Site high data rate, digital, secure communications covering all the SATCOM capability requirements to include space, ground and management segments.

CP 9A0130 directly supports MF 01 "Command and Control" and MFC 01-02, Communication and Information Systems (CIS).

#### *3.6.9.1 Projects*

##### **CP 9A0130 projects**

- 0CM03101: - Provide Survivable SATCOM Services
- 0CM03102: - Provide Protected SATCOM Services
- 0CM03103: - Provide Narrowband Tactical SATCOM Services
- 0CM03104: - Provide Assured SATCOM Services
- 0CM03105: - Provide Commercial SATCOM Services
- 0CM03106: - Augment and Sustain Static Ground Segment
- 0CM03107: - Augment and Sustain Transportable Ground Terminals
- 0CM03108: - Augment and Sustain Deployable Ground Terminals
- 0CM03109: - Augment and Sustain Man-portable and Mobile Ground Terminals
- 0CM03110: - Augment and Sustain Baseband Systems
- 0CM03111: - Augment and Sustain Link Protection Systems
- 0CM03112: - Augment and Sustain Management & Control Systems
- 0CM03113: - Upgrade and Maintain Support Facilities
- 0CM03114: - Provide SATCOM Integration Services
- 0CM03115: - Provide SATCOM TA

### **3.7 INTEGRATION WITH OTHER PROGRAMMES**

As the primary set of command, control and management information services for the NATO Command Structure, the Bi-SC AIS has interfaces and interdependencies with every other CIS-intensive programme in NATO, as well as with national and multi-national programmes (see figure 7)

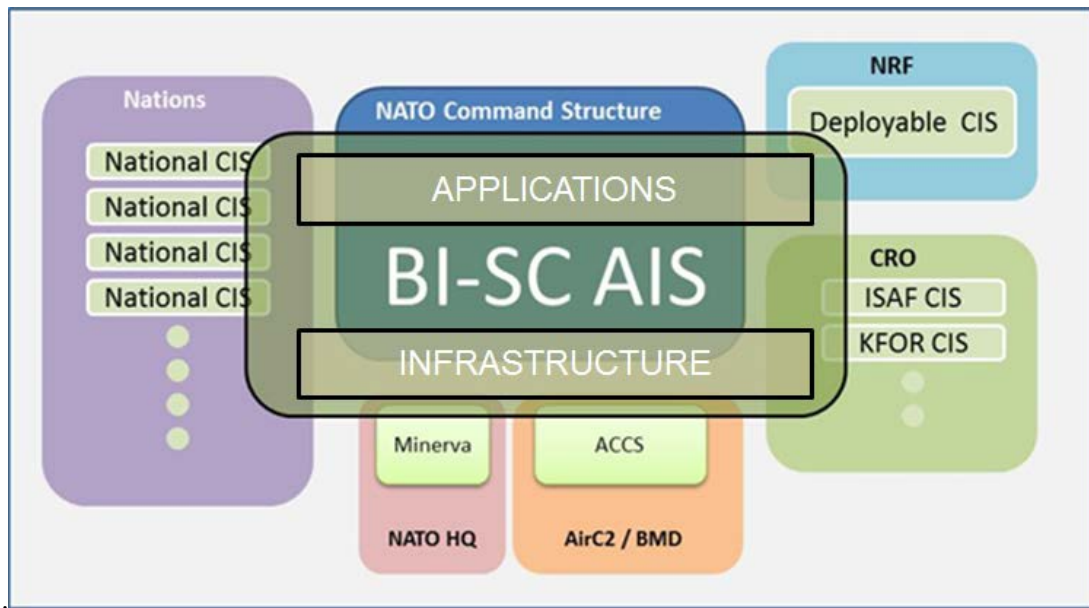


Figure 8 Bi-SC AIS Interfaces with other Programmes

This means that the programme must support the specification, implementation, verification, and control of these interfaces and interdependencies. It is to be noted that this integration with other programmes requires not only a point to point approach. It is to be highlighted the strong coordination the Air and the Missile Defence COI as it is demanded by the inter-programme scope shows by the figure below.

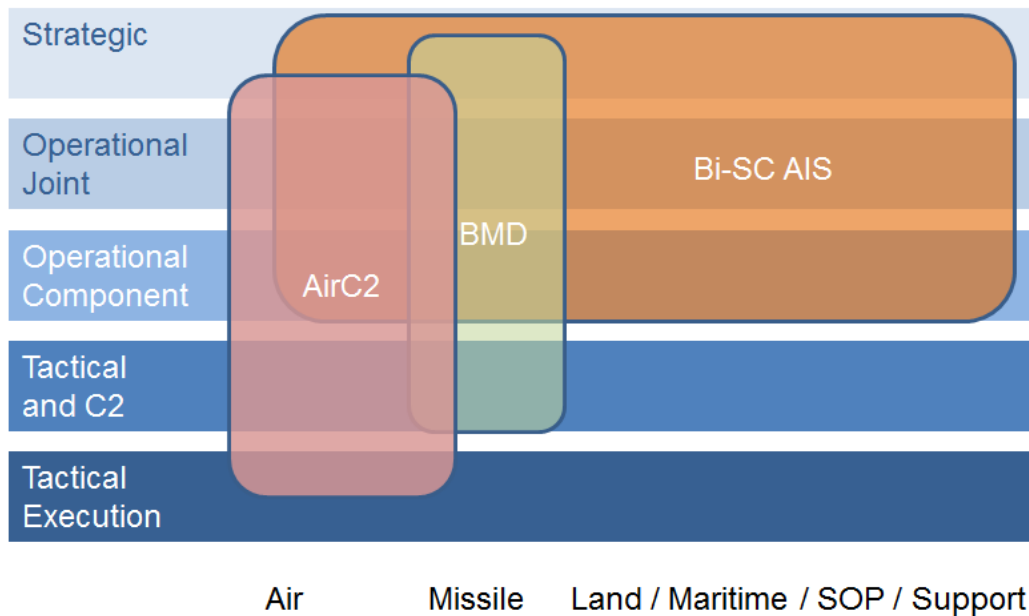


Figure 9 Current inter-programme scope

Over the period covered by this plan, the number and complexity of these interfaces and interdependencies will increase significantly. The management and integration support of the PMIC is essential to keep these factors from spiralling out of control.

The most significant interfaces and interdependencies between the Bi-SC AIS and other programmes are outlined in the following subsections.

**3.7.1 Air C2 System**

In the past, the ACCS and AirC2IS were being developed separately by different NATO agencies, with different governance structures, and were to be different AirC2 entities. The operational community’s desired end-state was the provision of a “Seamless AirC2 capability” for NATO<sup>44</sup>.

In the context of this Harmonization Report, the sub-group 1 collected together different existing roadmaps and schedules for ACCS, AirC2IS and ICC and formed roadmap graphics, one of which is shown below and depict the phased introduction of ACCS and AirC2IS over the coming 4 years. More details will be added in the coming months as follow-on work identifies how and which missing capabilities will be introduced and how IERs are to be met.

The figure below shows the notional integrated AirC2 roadmap based on the current Bi-SC AIS implementation schedule.

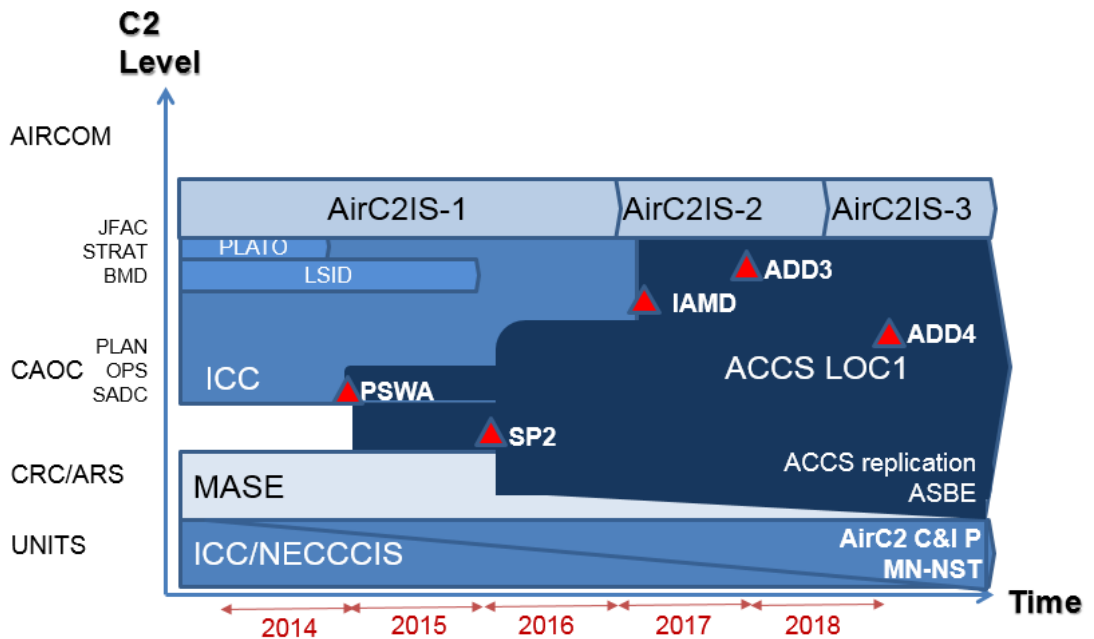


Figure 10 Notional integrated AirC2 roadmap<sup>45</sup>

<sup>44</sup> N CIA Air C2 System Harmonization Task Force Report, dated January 2013

<sup>45</sup> Source: AirC2IS Programme Roadmap (2015)

ACCS Software has been accepted in Dec 2014, and is currently being rolled out to the different sites. Interoperability with ACCS is critical to support the operational objectives of the BMD programme. With the on-going realignment of AirC2 arrangements, the Bi-SC AIS programme can expect to have to address changes in operational requirements that will affect the interfaces with ACCS.

### **3.7.2 Ballistic Missile Defence**

The Target Architecture 1 Capability (Baseline (T)BMD capability) is foreseen to be fielded by 2018. Concurrently, activities have started by the BMD Programme Office and Services to develop the initial architecture and requirements for BMD Increment 1 and BMD Increment 2. AirC2IS, NCOP and TOPFAS will implement features to support these requirements, and further enhancements, such as to INTEL FS, Education, Training, Exercise and Evaluation Functional Services (ETEE FS) and CBRN FS will also be launched. With the high priority of missile defence within the Alliance and ACO's ongoing need to support missile defence operations, requirements changes to these and other Bi-SC AIS capabilities can be anticipated. According to the current situation, the BMD Spiral 1 is forecasted by the end of 2018 and the Spiral 2 by beginning 2021.

Close coordination with the BMD Programme Office and Services, particularly for joint requirements and change management, will be critical.

BMD PO&S is working with the Strategic Commands on the integration of the requirements and the timelines of the different BMD increments and the Functional Services projects (CP 9C0107, and 0A0110).

The Bi SC AIS Programme, Service Line Chiefs and the BMD PO&S will work jointly on alignment of scope and resources (CP and projects) while taking into account that BMD is a high priority capability and the plan is being monitored between the BiSC AIS IO and the BMD PO&S (see BISC AIS / BMD Portal).

### **3.7.3 Deployable CIS (DCIS) and NRF Implementation (2015-2017)**

The scope of CP 0A0149 and the LINC/LINCE stand-alone projects includes the provision of Core Services as part of deployable CIS capabilities for the NATO Response Forces, but excludes the implementation of COI and COI Enabling Services.

DCIS capability evolution from the DCIS IOC in 2001 (currently out of service) to the today situation with the CP 0A0149 Rev 1 and its addendums 1, 3, and 4. The revision address current shortfalls and full NATO Level of Ambition (LOA): 2 Major Joint Operations (MJO); 6 Small Joint Operations (SJO); in 4 capability levels aligned with FMN principles.

With the approval on 23th January 2015 of MC0593 "Minimum Level of Command and Control Capabilities in support of Combined Joint NATO Led Operations", the gap of high level political guidance is addressed in two key areas: C2 Interoperability requirements and the interface between NATO CIS and National CIS as well as CoI Services. Finally, the revised CP0A0149 addresses the common funded portion required to support the LOA (communications and CES), that was an issue in the previous BAIP planning cycle.

A close dialogue between FS/COI groups and DCIS is needed to insure smooth and seamless introduction of FS/COI into the DCIS environment as well as coordination with FMN community. There are two key issues active at this moment: the evolution of the [DCIS Conops (SH/CCD/J6/SM/FCIS/394/15-305978 dated 29Jan15)] and the need for a renewed NS to MS Cross-Domain Information Exchange capability. The following figure illustrates the concepts and the building blocks of DCIS, including the Anchor Function in yellow and the CP149 REV scope in red.

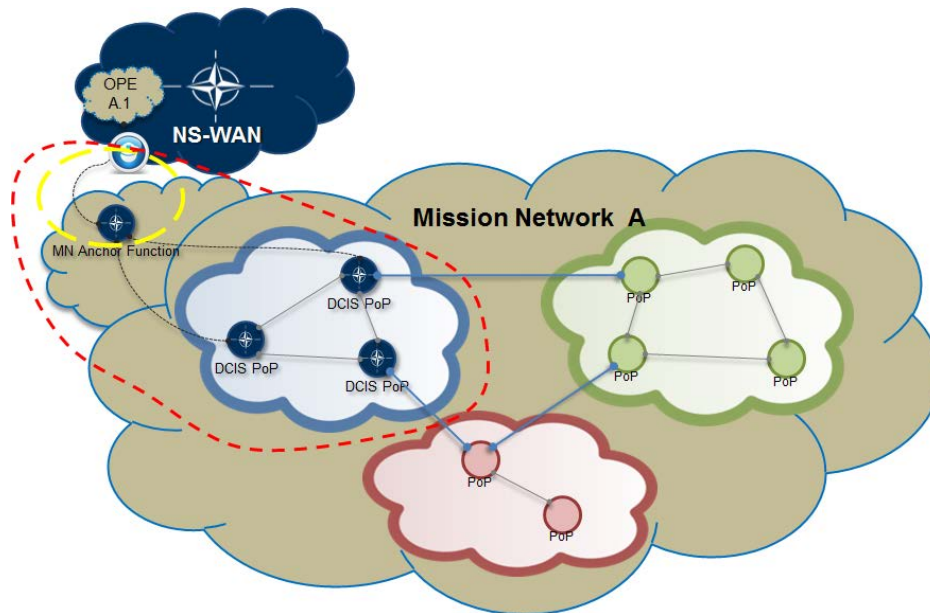


Fig. 11 FMN OPE and MEE and NATO DCIS contribution (CP149 Rev 1 scope)

During 2015 an Initial Mission Secret Mission Information Room (MIR) will be in place for NRF2015 and the MIR for NRF2016 is being built-up to support the required anchor function of the CONOPS; temporary installation of the CoI FS is needed in each MS-MIR, and the DCIS CoI FS support concept is to be developed further, and responsibilities and related manpower requirements to be worked out and implemented.

### 3.7.4 NATO General Communications Segment (NGCS)

According to C3 Taxonomy, communications services can be classified in three levels:

- Transmission services (physical transmission bearers, consisting of today's mix of fibre, leased lines, etc.)
- Transport services (logical pipes and virtual channels, which can be mapped to the available transmission bearers)
- Access services (traffic flows that are mapped to the Transport Services layer)

NGCS projects are structured according to this classification (see figure below)

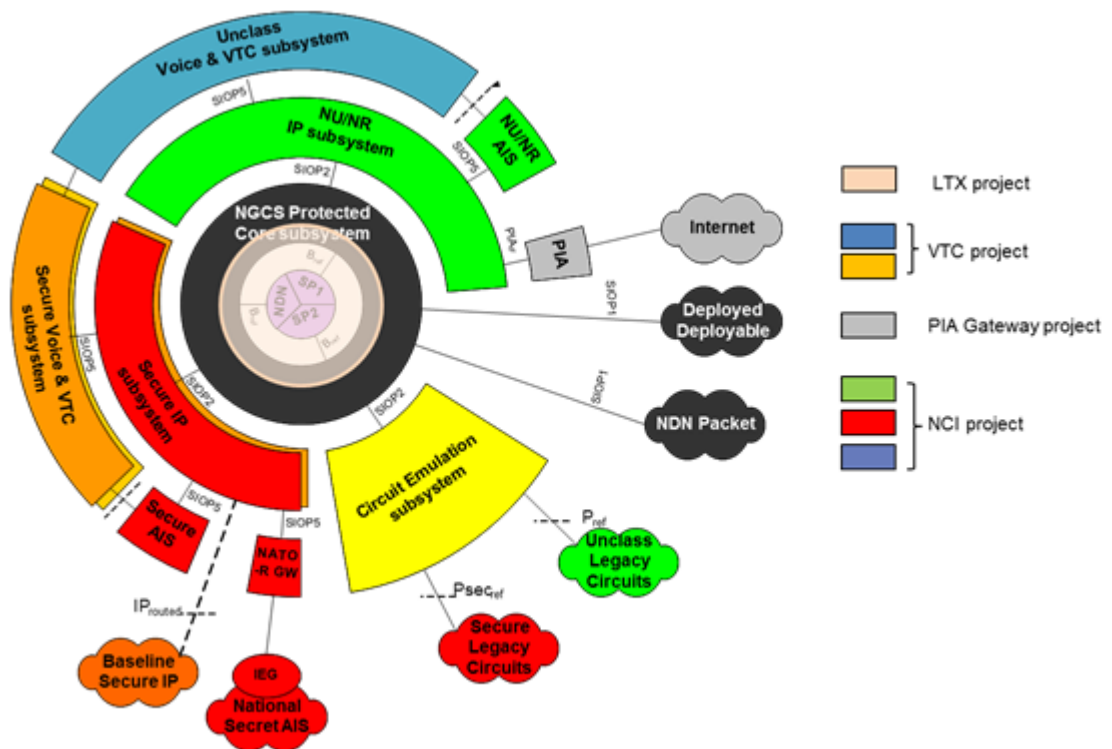


Fig. 12 NGCS project scope

LTX will cover the NGCS Transport Services based on Ethernet Transport Services delivered by transmission provider. This strategy will provide much better services (higher bandwidth, lower latency and jitter) at the same or lower costs than the legacy services resulting in an essential enabler for the consolidation of the Bi-SC AIS.

NCI will cover the NGCS Access Services based on Secure and Non-secure IP Access Services, carrying most of the Core Services and Functional Area Services of the Bi-SC AIS at NS and NU/NR security levels. Making use of the high capacity of transmission services NGCS will facilitate the concentration of processing and storage services for the Bi-SC AIS in a smaller number of locations, being a key enabler for the ITM project.

NGCS Multimedia Services will be part of the NCI Service Catalogue, but they are treated as separate projects for multimedia services covering secure voice (SVoS) and video and videoconference services (VTC). Integration with Bi-SC AIS projects related as UCC are highly important, in order to provide a seamless end to end user services.

In addition, the Public Information Access Gateway project (PIA) is in charge of controlling interoperability of the NU/NR IP domain with the public IP domain (Internet). The NGCS shall provide transport capabilities for Internet traffic exchanged between the PIA and the User Information System, and Bi-SC AIs will be able to use this capability.

There are no specific NGCS projects for Transmission Services as they are only relevant to cases where services rely on NATO organic infrastructure (e.g. SATCOM ground terminal, but SATCOM is considered part of the DCIS).

Apart from the pure communications services, NGCS will have to deal also with Information Assurance (COMSEC) Services that will provide IP Encryption (NCI IP Encryption, referred to as NINE and High-speed Backbone IP encryption, referred to as BBZ).

All these NGCS projects have to coexist with NGCS legacy systems (mainly related with switched circuits and legacy voice) that have to be removed as this legacy equipment will be phase-out.

### **3.7.5 New NATO Headquarters**

One of the major elements of the programme for building the new NATO Headquarters is the implementation of the Active Network Infrastructure (ANWI). Under the ANWI project, the NCI Agency is in the process of acquiring the networking, processing, storage, service management and security services for the new NATO HQ.

This project has the benefit of working with a “greenfield” facility—that is, a facility designed specifically to house the ANWI systems and not currently supporting running operations. This allows the ANWI project to incorporate numerous innovations, particularly in the area of Information Infrastructure Services, which will certainly be carried over into the Bi-SC AIS programme.

In addition, several projects within the existing NATO HQ—most notably the IT revitalisation and HQ Information Management (IM) projects—offer potential solutions that could be reused or adapted to address Bi-SC AIS requirements such as the Enterprise Business Network, Document Management, and Workflow services.

### **3.7.6 Alliance Ground Surveillance (AGS)**

AGS is a large and complex C4ISR programme, having strong interdependencies with various NATO communications and information systems (CIS).

NATO has agreed to provide a set of common-funded capabilities in support of AGS through Capability Package 0A0201. NCI Agency has been agreed as Host Nation for 10 projects providing Communications and Information Systems (CIS) capabilities and interoperability between AGS and existing NATO capabilities:

This support includes scope for the implementation of Bi-SC AIS capabilities at the Main Operating Base (MOB) as well as for the adaptation of Bi-SC AIS services to integrate AGS into the C2 arrangements within the NATO Command Structure.

There is a specific active project within Bi-SC AIS Programme named “Provide AGS CIS Integration Support”. The project is aimed at minimising risks and facilitating integration of multiple CIS components to ensure that AGS information exchange requirements are met. The project’s scope includes preparation and maintenance of the AGS NATO CIS Target Architecture (TA), and provision of additional human resources for the NCI Agency in its capacity of the Implementing Authority to manage and co-ordinate AGS CIS projects. The AGS Target Architecture (TA) publication was published in May 2014.

AGS TA will cover three specific areas: Communications, Core Enterprise Services, CoI Services and User Applications and will provide architectural guidance on how AGS should be integrated into NATO C3 Systems. AGS will be the producer and/or consumer for these services and some Bi-SC AIS provided services will enable the AGS mission.

- Joint ISR CoI Services
- Situational Awareness Services
- Environmental Services
- Tasking and Order Services
- Reporting Services
- Logistics Services
- Operational Planning Services

From the planning perspective, the AGS IOC Capability is expected in October 2017 and FOC in 4Q18..

While AGS, first NATO owned & operated JISR asset, is becoming a source of ISR information, it is essential to ensure that Bi-SC AIS becomes capable of consuming, or even receiving or storing AGS information products. Therefore,

Through the AGS TA, Bi-SC AIS Functional Services need to assess the extent to which:

- access to AGS information products is required by each application, in support of which COI, actors, operational processes and user-specific activities
- contribution of FAS information products to AGS processes is required.

Each Bi-SC AIS Functional Service needs to devise mechanisms for ingesting or delivering those products, using the Message Formats, Exchange Protocols identified and described in Annex C of the AGS TA, as reference.

The Bi-SC AIS Services need to determine if, where and how those mechanisms can be implemented, and factor that into the plans & requirements for their upcoming increments, and integrate them into Bi-SC AIS Roadmap.

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## 4. IMPLEMENTATION STRATEGY

### 4.1 INTRODUCTION

In previous versions of this implementation plan, this chapter included a view on how the road to the NNEC, or SOA, is to be travelled. Although still valid, more specific and directly implementable guidance has since been made available, as a result of the Software Intensive Taskforce recommendations, and through directives from NCIA's Service Strategy, as well as work from the BI-SC AIS Implementation Office. As a first step towards a more service oriented architecture and away from silo's, a componentized model has been selected. A number of components that can be used or re-used by multiple Functional Services has been identified, such as a C4ISR Visualization Component, and a MIP+ADatP3 gateway. The next paragraphs will describe this guidance in more detail.

### 4.2 SOFTWARE INTENSIVE PROJECTS WITHIN BI-SC AIS

The SIP Task Force has delivered a number of recommendations, and the Implementation Office is translating these recommendations into practical steps:

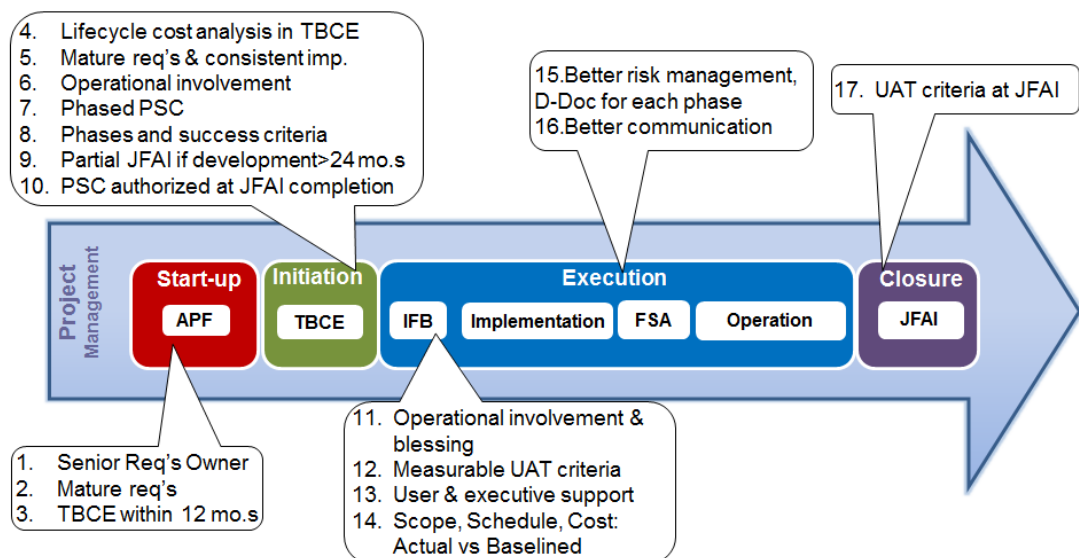


Figure 13 Practical Application of SIP Recommendations throughout NSIP process<sup>46</sup>

Specific activities in support of these recommendations include:

<sup>46</sup>AC/4-N(2014)0034-ADD1: Practical Application of Recommendations, 08 December 2014

- APF: Requirements study before submission
  - LC2IS Increment 2 Roadmap
- TBCE: Enhanced template and process
  - Quality Gates (at 30-60-90% completion of the TBCE)
  - Requirements & architecture traceability
  - Dependencies with other projects identified
    - Promoting standardisation & reuse
  - Cost estimations based on Function Points
- IFB: Support solution development
  - Programme level requirements
  - Business process documentation
  - Check points in schedules

For the common look-and-feel, an HMI style guide has been developed, with extensive examples and an interface prototype, which projects are expected to follow.

The SIP Task Force also recommended decomposing complex software systems into smaller, re-usable components. The Implementation office has developed an initial approach to development of components, which is currently being used in the Triton and LC2IS Incr. 2 projects, for development of a C4ISR Visualization and a Message Gateway component.

To further define and detail how the integration of the Functional Services under the DAS portfolio will be achieved, indicating how the SIP Task Force recommendations will be implemented, a “C4ISR Integration Roadmap” (CIRM) is under development. It can be seen as complementary to this Bi-SC AIS Implementation Plan (BAIP), and replaces (providing more detail) the contents from this chapter from previous versions of the BAIP. CIRM describes how the Application Services will be implemented through an integration of Technical Services. Dependency management will form an important part of the described approach.

### **4.3 ITM**

The ITM project will deliver, in waves, a centralized infrastructure as-a-service, typically implemented as virtualized machines. This means that “servers” can be defined and deployed as if they were a software package, and one physical server can host many logical ones. The advantages are many, from efficiency to flexibility and maintainability, but it also raises some requirements for the Functional Services: they need to be designed to run in a centralized way, as specified by the ITM project. The ITM Project will enable NCI Agency to provision IaaS services to applications simplifying both initial deployments and organic growth.

Furthermore, the ITM project has or will provide the budget for replacing the current infrastructure, as base-lined with the approval of the capability package in March 2014, but cannot and will not provide the budget for the implementation of future Functional Services (FS). The FS projects will themselves have to estimate the needed capacity, which will have to be purchased sole source

from the ITM provider/contractor. The specific details still need to be decided upon, and FS projects will have to include options in their contracts for hardware, to mitigate for delays in ITM.

The ITM project will centralize applications in the Data Centers, but this will lead to multiple copies of the same application running from this central location, where before the service was running in multiple sites. To benefit from the centralization, these duplicated services need to be consolidated where possible. The effort and costs for this consolidation are not in scope of the ITM project and needs to be accounted for in the subsequent development increments of applications.

The centralized infrastructure will also provide the possibility for centralized Service Management and Control (SMC), however, work needs to be done with FS teams to ensure SMC interfaces are included in the future.

In reference to the NCI and ITM Projects, they are working on a NCI mitigation Plan in order to align the schedule between ITM and NCI projects. The NCI Project contractor will implement ITM's first wave sites in the first place. An issue was raised, during the last BAIP WS, about the bandwidth limitation of NATO crypto equipment, a limit of ~300Mbps per device, so stacking is required. NCI Project will increase transmission capacity on per session basis, but the crypto will not be able to use all available capacity, with a practical limit of 300Mbps versus the maximum line capacity reaching up to 10Gbps shared between ON and PBN transmission.

#### **4.4 CORE ENTERPRISE SERVICES**

An essential part of the implementation strategy is dependent on the availability of a number of technical and middleware services, from the Core Enterprise Services domain. This dependency is not unconditional, i.e., if these CESs are not available, the Functional Services can still be developed, but they will have to fill the gap with services that they acquire or develop in the course of the FS project. This increases cost, complexity and future maintenance and (re-)integration costs. The projects and services involved are:

- NATO Messaging Service to replace the existing legacy AIFS/AIMS
- SOA and IdM platform
- Information Exchange Services (IEGs)
- Enterprise Document Management System (EDMS)
- Upgrade NATO Information Portal (NIP)

These projects plan to deliver towards the end of 2018, beginning of 2019, which means that most of the current FSs will have to deliver their first increments based on alternatives.

Programmatic and Architecture Coherency Management is key to ensure the “right CES platform” is there “at the right time”, and to ensure a smooth transition to CES provision. A Service catalogue, and Service Interface Profiles are indispensable means to support this.

At the same time, the FAS community shall get prepared and ready to (re)use CES, one of the ways is via preparation of Application Profiles for usage of CES.

#### 4.5 COMPONENTIZATION

The componentization approach has been chosen as a way towards more flexible, service oriented architectures, as explained above under para. 4.2. Many nations have successfully adopted this approach also, and it is supported by organizations like the Open Group.

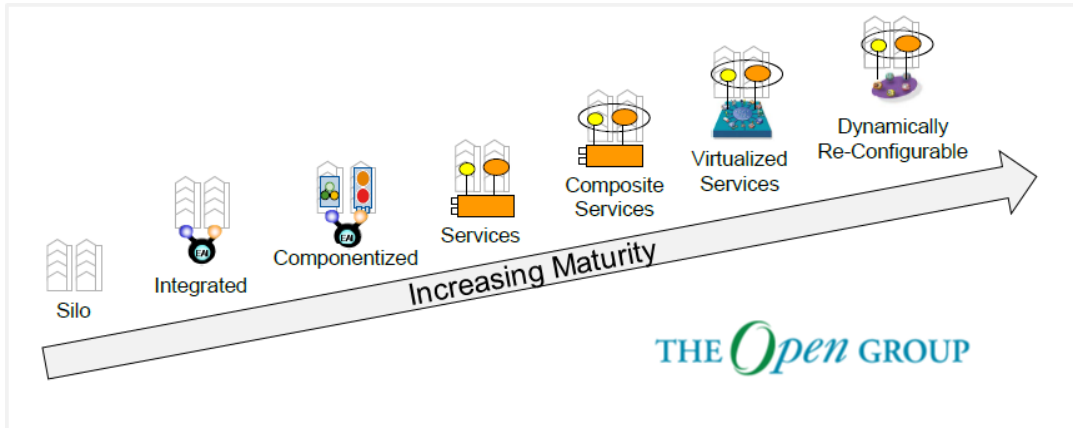


Figure 14 The Open Group Componentization Approach

The current situation is step 2, Integrated Systems exchanging information through managed interfaces.

It is the next step on the road to a more mature Information Systems Architecture. Integrated services are already deployed in the Bi-SC AIS: the list of available interfaces to consume information from each FAS as well as the interface control document is a well established asset in the acquisition process of the Agency.

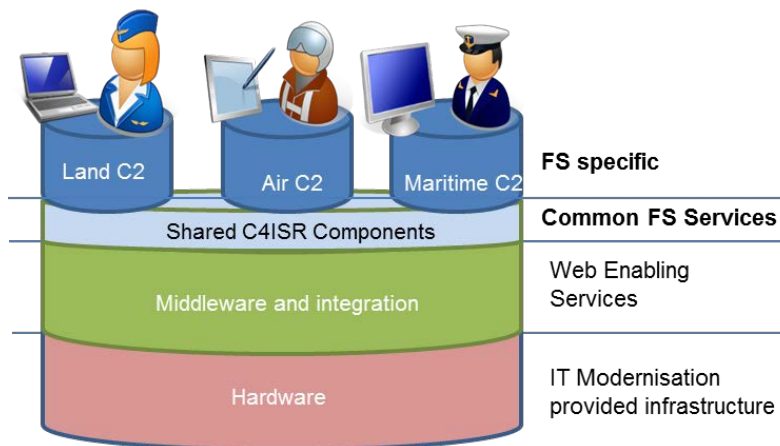


Figure 15 Functional Service Transformation through C4ISR Modernisation

The “Shared C4ISR Components” Layer will break down the C4ISR Applications into Components to be reused to construct each User Application. The next picture provides an overview of the ecosystem of reusable components that will be created.

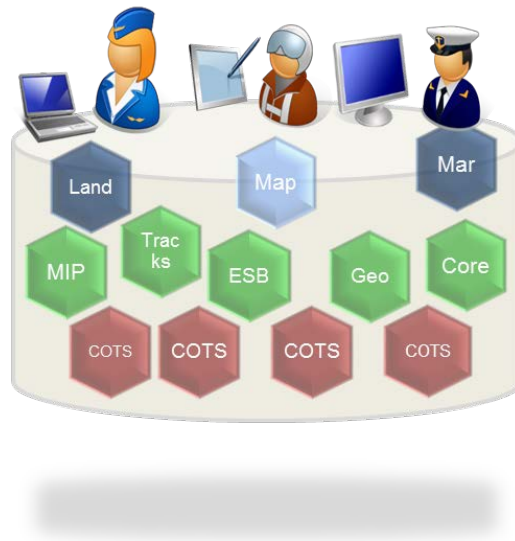


Figure 16 C4ISR Applications Modernisation

A more detailed description of this approach is provided in the C4ISR Integration Roadmap document that is currently under development.

#### 4.6 DCIS

As the section 3.8 describes, the Military Committee approved MC 0593 “Minimum level of Command and Control (C2) Service capabilities in Support of Combined Joint NATO Led Operations”. The NATO deployable CIS programme CP0A0149 (DCIS) is addressing the common funded portion required to support the LOA (comms and CES). DCIS has established a CONOPS, and the FSs that are to be used in the deployed environment are expected to be compatible with the architecture and infrastructure provided by DCIS.

This should and will influence solution architectures for the FSs that are currently being developed. The main extension compared to the previous approach is the ‘Mission Anchor Point’ on the static network: once a mission is started, all relevant pre-mission information is transferred into the MS Mission Anchor Point. Operational users from the static environment continue mission preparation in the MS environment, while the deployable nodes that will support the mission are

selected and prepared. Once the deployable nodes that support the deployable C2 are selected and prepared, all mission applications required for the deployable C2 Entity (JFT HQ and JSLG in the example) and the related databases will be installed on the deployable nodes, and while still in garrison, all preparation data will be synchronized to those nodes.

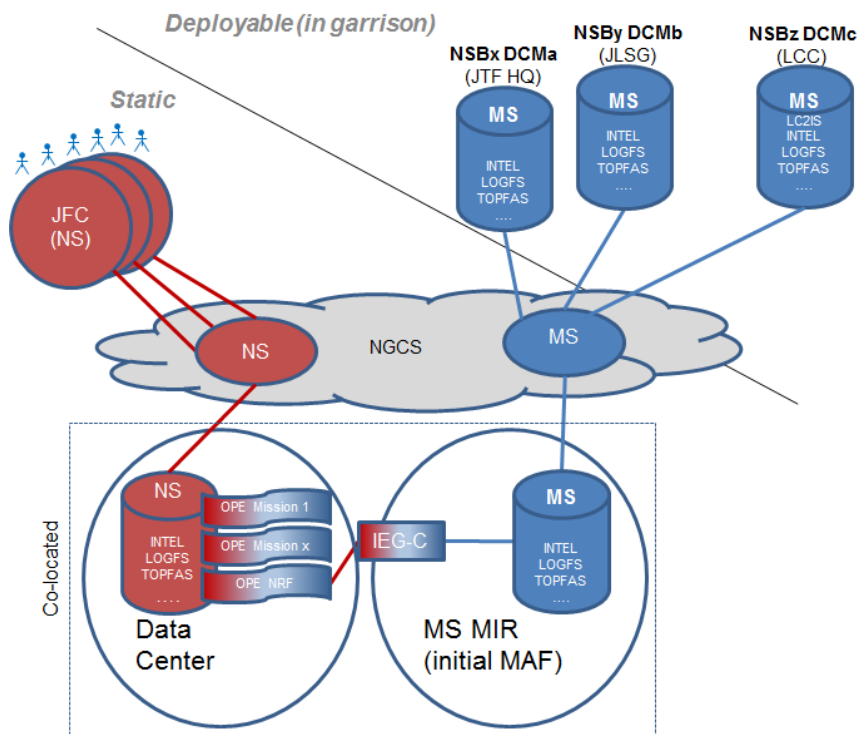


Figure 17 COI service setup NRF on standby

This concept create information replication requirements between the different building blocks of the DCIS and the Anchor Function; these requirements need to be analyzed by the CoI FS under implementation projects. Also, the moving information from the NATO Secret to Mission Secret security domains imply the need for an Information Exchange Gateway.

Up to now, there was an interim solution called the XML Guard (XLG), developed according to a set of specifications created under ACT's Programme of Work; the specifications have evolved into STANAGs (4774 and 4778) that are in process of approval. Apart from the Stanags, a new Directive has been approved for the use of Metadata and Labelling of Information that supersedes the previous version. It is envisioned that the IEG-C project is the key enabler for NS to MS data transfer, and will supersede the need for the XLG.

#### 4.7 ALIGNMENT TO ACT PROGRAMME OF WORK

The Transformation Programme of Work plays an important role in the definition of implementation projects. Through POW activities, ACT can ensure the viability and success of a project by:

- Confirming the maturity of the operational requirements and concepts
- and Assessing the extent and maturity of potential technical solutions.

Bi-SC AIS implementation projects start with their definition and programming as part of a Capability Package. Once the NAC has approved a CP, Host Nations can submit implementation proposals to the NATO Investment Committee through the mechanism of a Type B Cost Estimate (TBCE). As agreed between ACT and the NCI Agency in 2010, however, Bi-SC AIS projects are now initiated by ACT through formal Supplemental Information Document (SID)<sup>47</sup> supported by Logical Architecture Perspective Documents (LAPD). One of the useful elements of the project baseline document is the reference to relevant ACT POW outputs that the project team can use to help determine the operational requirements and assess the implementation options and technical solutions. Following receipt of an approved project baseline document, the NCI Agency submits its request for Advance Planning Funds to the IC and initiates the project by assigning a project manager.

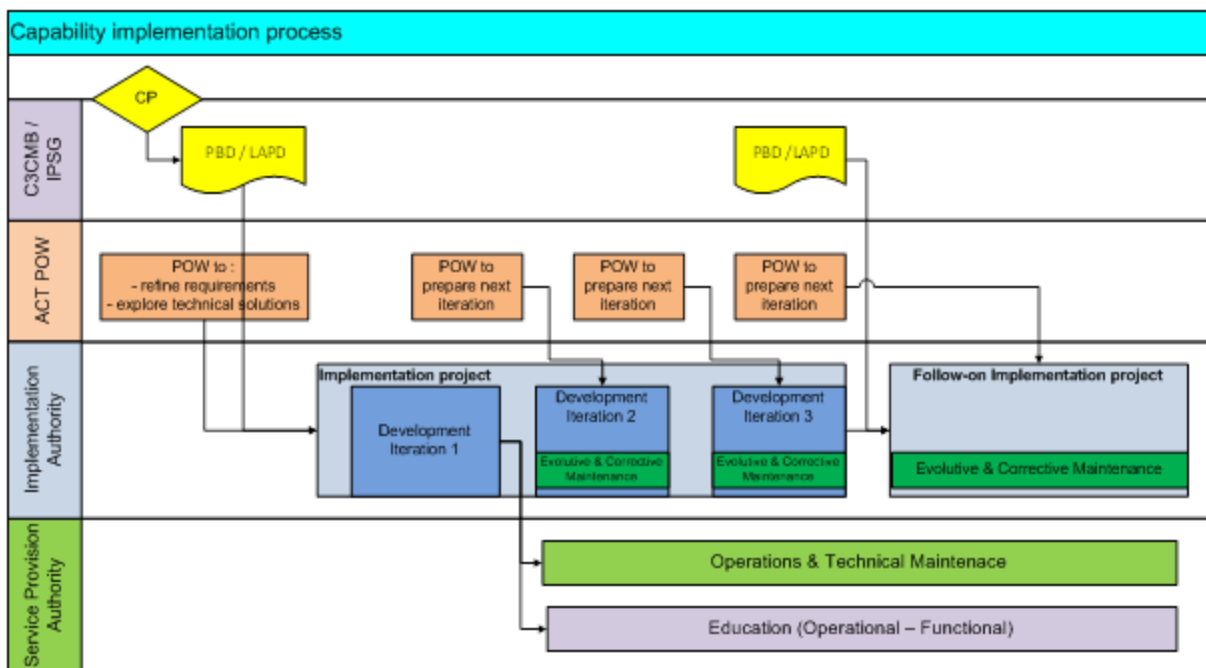


Figure 18 Transformation POW Links to Incremental Project Implementation

Project implementation can be done iteratively, in different phases and, within the phases, several iterations. As shown in the above figure, in parallel to the implementation, the ACT POW can refine the requirements for the next iteration. Linking POW concept development with this incremental approach promises to be of significant value in improving the ability of Bi-SC AIS projects to adapt to changes in operational needs without disrupting the development and delivery of production baselines. There is a further potential to speed the delivery of new increments by increasing the participation of project contractors in experimentation.

<sup>47</sup> Former Project Baseline Document (PBD)

## 4.8 RISKS AND ISSUES OF PROGRAMME IMPLEMENTATION STRATEGY

This chapter describes the main Programmatic risks and issues, related to the above Implementation Strategy, discussed during the last BAIP WS in Mons:

### 1. Bi-SC AIS Programme lack of governance

As distinct to BMD and ACCS Programmes which have Steering Committees appointed and can benefit from strong governance committed to deliver the programme outcome, the Bi-SC AIS is managed as a portfolio. Agency is making continuous effort to move from reporting type management to guiding and directing in a programmatic way. But without programmatic guidance from SCs and strong governance this effort can be only partially successful.

Two specific risks result from Bi-SC AIS Programme lack of governance:

#### 1.1. Stronger Bi-SC AIS governance authority required over projects crossing the Service Lines.

The risk can be seen as a derivative of Bi-SC AIS lack of governance. For projects crossing the Service Lines the coordination and integration mechanisms may not be yet well established. It is needed to address scope and technical alignment of inter-dependent projects run by different Service Lines and it can be a challenging task to do.

#### 1.2. Need for a clear programmatic guidance on integration management at the project level.

Before CP150 was approved, PMIC had been acting as an implementation office focused mainly on FS. With CP150 project going live a new risk was raised that programmatic guidance on integration management at the project level in face of increased need for integration of CES with the application projects will be insufficient. The Service Management and Control portion of the Programme require alignment with the centralized provisioning of IT services that is demanded by the Commands and that is currently being implemented by key NCIA projects run by the Core Enterprise Service (CES) Service Line (e.g. ITM) and the Service Management Control (SMC) Service Line (e.g. SMC TA).

### 2. Lack of a long term planning for both Functional and Core Enterprise Services.

C4ISR Application Capability and Bi-SC AIS Implementation Projects Roadmaps developed and maintained by PMIC illustrated an issue of a lack of a long term planning for both Functional Services (FS) and CES capabilities. Many capabilities have no programmed follow-on projects. In the case new CPs or CP ADD are not available by end of 2018, the risk is that no fund will be available for the follow-on projects beyond 2019. It was proposed to establish a SIP-TF follow-on meeting for SCs, NCIA and NOR in order to propose an agreed acquisition approach or CP and collaboratively work on a 10-year CP evolution view that could be transmitted into a roadmap. It was also concluded that only a synergy of efforts and close collaboration between the SCs, NCIA, NOR and C3 Board can help overcome the above mentioned issues and achieve the NATO Strategic Vision (*related to chapter 4.2 Software Intensive Projects within Bi-SC AIS*).

### 3. Requirements for deployable services not covered by capabilities.

Another issue highlighted was a lack of deployable requirements in most of the planned and executed Functional Services. The CP149 does not include funding for the deployable part of the Functional Services. This poses a risk that there will be a 5-7 years gap in this capability before a new CP is programmed, approved and a new capability implemented. Also CES do not include deployable solution in the current scope, as it is the case of SOA. As a result the web based technology may not be suitable for deployable architecture. This factor is a key enabler for the FMN concept implementation (*related to chapter 4.6 DCIS*).

**4. No funds for adaptation and integration.**

The budgets programmed in CPs, as it is the case of CP107, do not envision adaptation aspects. There is no project that can cover adaptation of FS projects to CES and ITM infrastructure. The budget programmed in CP107 covers only the functional improvements in services delivered by programmed projects. It poses a risk on Functional Services that they may not be able to take full advantage of the currently developed ITM and CES capabilities (*related to 4.4 Core Enterprise Services and 4.3 ITM*).

**5. Visibility of the implementation status of the Bi-SC AIS services.**

Stakeholders (ACT) expressed a need for a better visibility of the implementation status of the Bi-SC AIS services as it should be clearly defined where the Programme will be within the allocated budget and planned milestones, how the programme will handle the integration aspects and what operational capability will be delivered as a result of a design and implementation approach applied by the Agency (*related to 4.5 Componentization and 4.4 Core enterprise services*).

**6. Potential impact of the componentization approach on the IOC/FOC of the capabilities.**

Componentization is expected to bring a numerous of benefits resulting from the use already developed components by many systems. But at the same time it poses the risk of increased interdependencies and thus it challenges the NCIA ability as an integrator, and potentially increases the complexity of their implementation. Integration Roadmap displaying the components mapped with specific FSs will address the concern. A realistic and executable roadmap is required. The component approach was conceptually supported, but the SCs re-iterated that they wished to be part of the process, which should ensure effective programmatic control of the implementation (*related to 4.5 Componentization and 4.4 CES*).

**7. CPs do not envision the integration aspects between the projects programmed in different CPs.**

Therefore, the interoperability aspects in the current CP construct is very limited. For instance, the budget programmed in CP107 does not envision adaptation aspects. There is no project that would cover adaptation of FS projects to ITM infrastructure. The budget programmed in CP107 covers only the functional improvements in services delivered by programmed projects. Due to this fact, migration to data centers may result in multiple instances of virtual machines with the same application installed whereas adaptation could reduce the number instances. In order to address the issue, Agency advocates for the componentization approach as it seems affordable from O&M perspectives. However, this approach needs to be reflected in the CP planning. The SCs, NOR and NCIA need to be equally involved in this process as only a collaborative effort can make these changes to happen (*related to 4.4 CES*).

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## 5. BI-SC AIS IMPLEMENTATION ROADMAP (2015-2017)

### 5.1 INTRODUCTION

This section describes the Bi-SC AIS implementation roadmap for the timeframe between years 2015 and 2017. The roadmap is expressed in different views, with the details available under various annexes.

#### **Annex C: Roadmap Plan (2015-2017) (ref. chapter 5)**

The Roadmap illustrates how the AIS Services will be developed or completed in the three year interval.

#### **Annex D: Capability Implementation Schedule (ref. chapter 5)**

This annex is a dynamic planning tool maintained by the Programme. It consolidates information about capabilities, legacy systems and projects that implement services which provides corresponding capabilities including main milestones.

#### **Annex E: Service Dependencies Plan (ref Chapter 5) (2015-2017) (ref. chapter 5)**

The report provide a integrated view of the Bi-SC AIS per service, including increment scope and dependencies identified with other services (FSs and CES). This report was used for first time during the last BAIP WS in Mons.

#### **Annex F: Sites Deployment Plan (2015-2017) (ref. chapter 5)**

This annex identifies the implementation projects which will be deployed in each site, based on existing project schedules, during a specific period (2015-2017). The plan is aligned with the Capability Implementation Schedule of Bi-SC AIS Programme.

#### **Annex G: Sites Deployment Scope (2015-2017) (ref. chapter 5)**

This annex adds the following information to the previous plan: list of sites and projects indicating type of deployment (physical, remote) and the current status (planned, in progress, completed).

The C3 Taxonomy depicted on the figure below, was used to categorize projects in the chapter. The projects are grouped by service category that they will contribute.

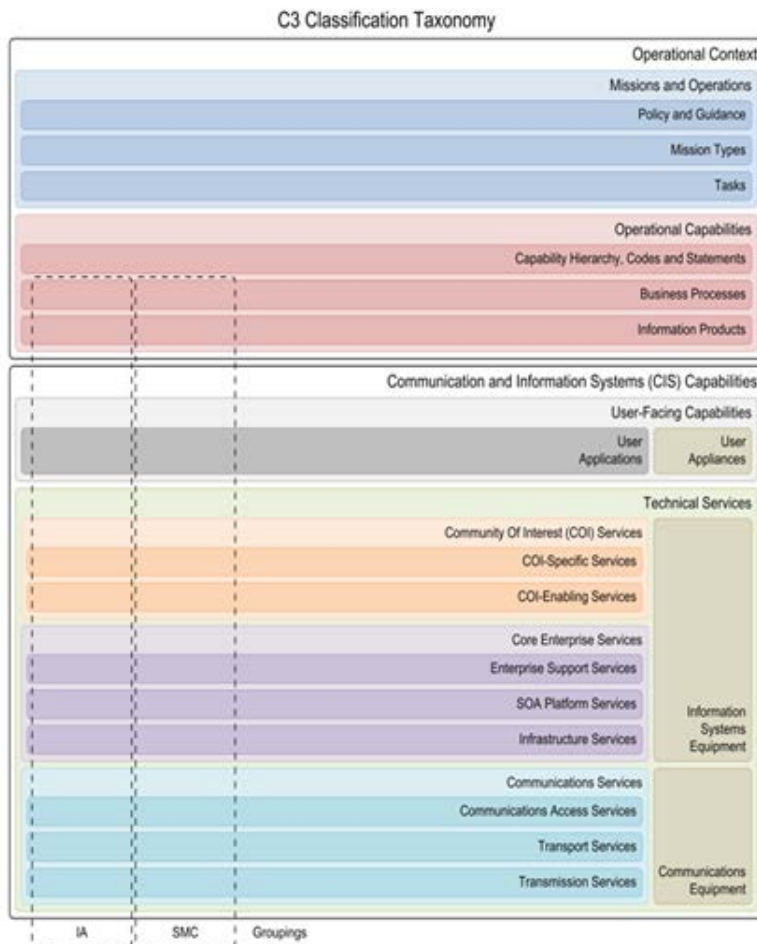


Figure 19 C3 Services Taxonomy

## 5.2 SERVICE IMPLEMENTATION PLAN

This section describes the planned contributions to the current service map for the period 2015-2017..

### 5.2.1 COI Services

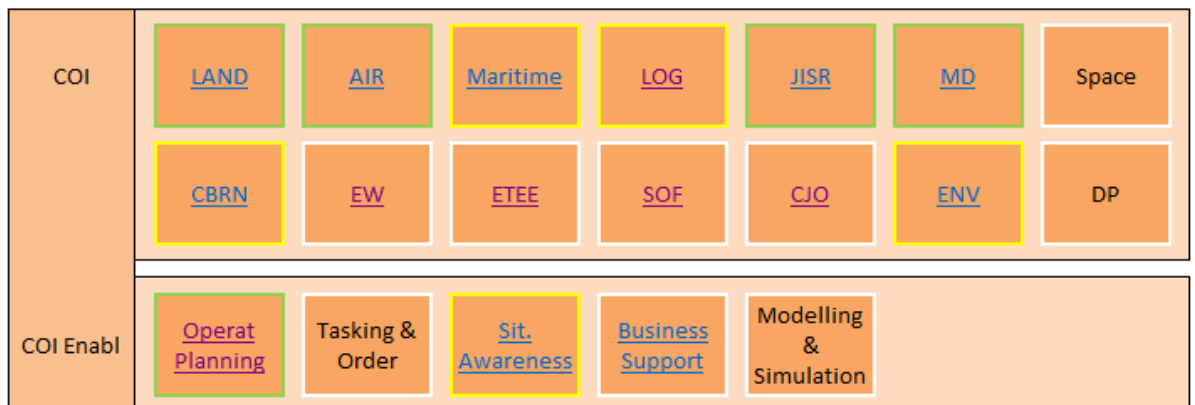


Figure 20 Active (Green), in development (Yellow), Planned (White) COI Services

### 5.2.1.1 COI Specific Services

The implementation of COI Specific Services will be one of the largest and most visible areas of Bi-SC AIS implementation activities during 2015-2017.

#### 5.2.1.1.1 C2 of Air Operations

The purpose of the Air C2IS project is to provide the NATO Air Operations community with an integrated, robust and flexible capability utilizing a set of services available throughout the Bi-Strategic Command (Bi-SC) Automated Information System (AIS) to support planning, coordination, allocation, tasking, monitoring, and analysis of joint air operations, including BMD operations. The main issue with this project relates to its interdependencies with the AirC2 and the BMD Programmes.

During 2015, the Air C2 services will still be offered through the **ICC** (Integrated Command and Control for Air Operations) and **PLATO** applications. These legacy services will be partially replaced by a single **AirC2IS** integrated capability, however the final date is dependant on the decisions to be taken in regards to the additional scope of TMD (BL5).

Currently, there are three increments planned for the C2 of Air operations capability:

**AirC2IS Increment 1** (5HQ00593) is under implementation. The pilot implementation (BL1) was executed in Ramstein and Brunssum in 2013. The project plans to deliver 3 more product baselines (BL2, BL3, BL4).

The BL2 embraces Information Portal and Air Operations Directive editor components is running in AC Ramstein and the Reference Site in The Hague since deployed in 1Q2014.

The BL3 focuses on the TMD functionality, reached the TRR milestone in April 2015, it is planned to be deployed to 9 sites in 4Q2015, whereas

The BL4 will contain Air Logistics and CONOPs manager components, the detailed design document was finished and the development work will start in May 2015. There is also an additional scope related to TMD (BL5), however it is not decided whether it will be included still in the Increment 1 or allocated in Increment 2.

**AirC2IS – Increment 2** is currently programmed in the CP 107, the Supplemental Information Document (SID) was received from ACT in June 2014, however the initiation of the Increment 2 project has been put on hold awaiting the outcome of the AIRC2 Inc1 development and validation. According to NCIA CONOPS, the project Implementation will be under the leadership of the AirC2 PO&S.

**AirC2IS – Increment 3** is also included in the CP 107, however, the results of increment 2 shall determine if a 3<sup>rd</sup> increment would be the way ahead or if a CP on Air C2 Services would be developed to cover all Air-related projects. This is to be determined in the future.

#### 5.2.1.1.2 C2 of Land Operations

The Land C2 services are being offered through the **LC2IS** application. This capability was fielded to an initial set of sites in 2008 and 2009, but further deployment was halted due to the NSIP financial crisis.

**LC2IS – Increment 1.1** is in the closure stage now. Although it was planned to implement the capability in ISAF, there was a significant delay in the authorised milestones resulting in unavailability of the service for the 2013 ISAF rotation. Because of this fact, the deployment to ISAF was cancelled. Simultaneously, the NCI Agency has received a formal requirement from SHAPE to deploy LC2IS Increment 1.1 at the designated NATO Command Structure sites. A two-stage implementation plan has been agreed between ACO and NCI Agency: first in AMN and Training (Supporting) Sites (JWC, JFTC and NCCIS), and secondly to the remainder of the NATO Command Structure (NCS). The scope change was authorized by the IC.

The project delivered a final release (release 2 Rev C) in January 2014. The final release was installed at the NCS Support Sites (phase 0), and at two NCS Sites (phase 1). Another four NCS Sites - JFCNP, LANDCOM, AIRCOM and MARCOM (phase 2) have been authorized in May 2014. The project finally achieved the Final System Acceptance (FSA) milestone in March 2015.

There are two increments programmed in the CP107 for the next five years.

**LC2IS Increment 2** - The SID for the increment 2 was received in 3Q 2013 however due to long lasting discussion between the Agency and ACT regarding the overambitious requirements in relation to insufficient funds to cover all requested scope, the project APF request has been finally submitted in November 2014 and approved by the IC in January 2015. The project team is now working on the TBCE document which is expected to be released in 3Q2015.

The LC2IS Increment 2 aims to enhance the land operations Rules of Engagement (ROE) management, Fragmentation Order (FRAGO) management, develop Land Track Information Services (LTIS), support land operations and targeting guidance processes, facilitate access to NATO and national Common Operating Pictures and provide interfaces to Friendly Force Tracking (FFT) systems. Its implementation is foreseen during 2017 – 2019 period.

**LC2IS Increment 3** is expected to be initiated in 4Q 2017.

#### 5.2.1.1.3 C2 of Maritime Operations

The Maritime C2 services are being offered through the MCCIS application, currently operational at CC MAR Naples, Northwood, and NATO HQs. It is used by many Nations as national maritime C2 system. The service is under O&M. The request for change of scope under the MCCIS Stabilisation project was submitted to the IC 1Q 2013 and approved in 2014 after the confirmation raised by one of the Nations was lifted. The new scope is being executed now and the FSA date is foreseen for May 2015. The MCCIS is currently facing obsolescence issues, but the O&M contract has to be extended because the next system (TRITON) is delayed.

The development of a replacement for the MCCIS application will be undertaken during the 2014-2019 planning period. This project is also known as TRITON (0IS03081), The Increment 1 of TRITON will be contracted 3Q 2016, its scope covers the replacement of MCCIS and Maritime Situational Awareness (MSA) and the integration with other FSs (e.g NCOP, EnvFS, Intel FS ). The TRITON scope will also include a C4ISR Visualization component, which is planned to become a reusable component for other upcoming C2 systems.

The TRITON Increment 1 IFB is currently being developed, a mature Maritime C2 capability is not expected to be available before 2019.

The remaining scope defined in the CP 107 embracing Mine Warfare and Amphibious Warfare capabilities will be included within future increments, under an addendum to CP 9C0107.

#### 5.2.1.1.4 Missile Defence

The CP Project Implementation Plan (PIP) was approved in January 2014 subject to confirmation by one nation. There are three different steps planned in order to achieve the BMD Capability:

- The TMD Capability 1 - Target Architecture (TA-1) is foreseen to be completely fielded by 2018, it is based on AirC2IS Increment 1, NCOP Increment 1 and TOPFAS Increment 1.1, on BMD Communications Gateways and ACCS TMD1 Inc1.1/1.2/1.3 (including the DDS).
- The BMD Increment 1 is currently scheduled to reach FSA in 2022.
- The BMD Increment 2 is currently scheduled to reach FSA in 2024.
- Both BMD Increments will define new requirements for AirC2IS, NCOP, TOPFAS, CBRN FS, INTEL FS and ETEE FS. The scope originally planned for ALTBMD TA-2 (FOC) has been absorbed into the BMD Increment 1.

Each step will be implemented through a number of Projects within the BMD Programme Office and Services and also through other interdependent Programmes (ACCS, BI-SC AIS, and Communications)..

#### 5.2.1.1.5 Joint Intelligence, Surveillance and Reconnaissance (JISR)

Several operational applications currently provide an initial JISR capability:

- NITB (NATO Intelligence Toolbox)
- JOIS (Joint Operations Intelligence Information System)
- HMART (Humint Management and Reporting Tool)
- SIGINT (Signal Intelligence)
- Database Applications (SDA)

Most of these legacy services will be consolidated on a single Intel FS integrated capability. The Intel FS Increment 1 project (OIS03063) is under contract and finished the Critical Design Review milestone in February 2015 and the Test Readiness Review milestone is scheduled for June 2015. The project suffers a significant delay due to the contractor performance during the design stage. Not all requirements from the authorized scope will be delivered, but the correspondent budget will be used and other requirements will be satisfied. Intel FS increment 1 scope covers the replacement of JOIS and NITB. According to the current plan, an initial JISR capability is expected in 4Q16.

In parallel, Intel FS – Increment 2 is currently planned for initiation in 2Q 2015, with FSA delivery in 2Q 2020. This increment is expected to address the replacement of SDA. Other application now in use in ISAF—HMART for the Human Intelligence (HUMINT) support is also planned to be included in this Increment. The planned scope for Increment 2 also includes the interoperability with ACCS, LC2IS, ICC, MCCIS, TOPFAS, AGS, AirC2IS and NCOP. The performance during Increment 1 have raised a concern about future acquisition method. No decision is made today but it is clear that re-competing would have an impact on the current schedule for Increment 2. BMD Increment 1 will be also covered by INTEL FS Increment 2.

**Intel FS – Increment 3** is not currently programmed. This scope needs to be addressed through an addendum to CP 0A0110.

The implementation of a standing capability corresponding to the ISAF/CSD (Coalition Shared Database) needs to be agreed and identified as scope for either a Core Enterprise Service or a COI Enabling Service and programmed under an appropriate project in an addendum to either CP 9C0107 or CP 9C0150.

#### 5.2.1.1.6 Environmental Support to Operations

The current system, NAMIS, is expected to be replaced by VISME being currently developed. The VISME project is funded via a CUR and provides essentially meteorological data. The Environmental FS Increment 1 project will extend the existing meteorological distribution, analysis and production services. It will replace a diverse set of stove-piped and/or obsolescent C2 capabilities with a set that leverages and provides better integrations with supporting and consuming Bi-SC AIS services.

The PBD for ENV FS Increment 1 was issued in August 2012. The TBCE is in final coordination and is expected to be submitted in July 2015. The delay of Environmental FS TBCE development has been caused by several reasons such as additional requirements for Electromagnetic propagation analysis, finally dropped after discussion with the ACT and unclear integration with Core GIS Inc2/3 concerning hydrology, climatology. The delay has impacted the scope of dependant projects such as CBRN or NCOP Inc 2, decision to use VISME instead of ENV FS was taken.

The ENV FS Increment 1 does not include all the HMETOC requirements, but it will address the HMETOC deficiency for Maritime FS. HMETOC project was the predecessor of ENV FS, but has been cancelled in 2011.

#### 5.2.1.1.7 Chemical, Biological, Radiological & Nuclear (CBRN)

NATO is currently using several COTS and GOTS analysis software applications for its current CBRN (Chemical, Biological, Radiological, and Nuclear) defence capability. The current operational applications in this area are the NBCA (Nuclear/Biological/Chemical Analysis) and the HPAC (Hazard Prediction & Assessment Capability) tools. The new CBRN project was initiated in April 2012. The Type B Cost Estimate for this project was submitted for approval in August 2013, but authorized in April 2014. The TBCE delay was caused by the necessity to clarify some requirements with the Commands. Current CBRN IFB is being developed aiming in its release in July 2015.

CBRN FS will involve a large number of information exchange interfaces: it has a dependency with Environmental FS as the CBRN service requires meteorological data; has been

changed to use VISME due to significant delay of Environmental FS project. CBRN FS will also exchange information with BMD to manage the consequences of interception; NCOP and MEDICS (a part of the LOG FS), INTEL FS and TOFAS. As such, this project is a good candidate for a SOA approach and it is being developed as such by the NCI Agency.

There are no further increments programmed in the CP 9C0107, this may require an addendum to the CP. The POW project shall be established to define requirements for CBRN Increment 2. The BMD will build over and above the current CBRN FS Inc 1 capability.

#### 5.2.1.1.8 Education, Training, Exercises and Evaluation (ETEE)

The project for Education Training Exercise and Evaluation (ETEE) FS has been programmed in CP 9C107. This project will implement capabilities to support development of training scenarios, simulation of operational situations and information flows, and recording and analysis of exercise and training events..

ETEE Increment 1 project has been initiated in August 2013 by a receipt of the ACT PBD and the TBCE has been recently submitted, with expected authorization in July 2015. The scope of this increment embraces a consolidation/industrialization of currently-used prototypes related to specific applications:

- Collective training and exercise
- ETEE management
- Education and Individual training
- Evaluation.

Simulations had been excluded from the Increment 1 scope. They will be incorporated into the future increments.

No follow-on increments are programmed in CP 9C0107, however the POW is being by ACT to establish requirements baseline for ETEE Fs Increment 2. The Addendum to the CP 9C0107 is expected to be submitted in 3Q 2016

#### 5.2.1.1.9 Logistics FS

Under the ambition of the NATO reform, the NCI Agency and the NSPA have agreed to coordinate their efforts in order to deliver more effective logistics capabilities for NATO.

The Logistics covers a number of functional areas: Supply; Services including the provision of human resources; Maintenance and Repair; Movement and Transportation; Medical Support; Infrastructure (construction and repair of facilities, Contracting, and Budget and Finance).

Several operational applications and databases currently provide a prototype set of Logistics Functional Services capabilities:

- LOGFAS database (LogBase )
- Allied Deployment and Movement System (ADAMS)
- Coalition Reception Staging and Onward Movement (CORSOM)
- Effective Visible Execution (EVE)

- Logistics Data Manager (LDM)
- Logistics Reporting (LOGREP)
- NATO Depot and Support System (NDSS)
- Centralised NATO Automated Financial System (CNAFS)
- FinS

These capabilities have been proposed to be consolidated into a single project known as Log FS programmed within CP 9C0103.

The LOG FS Consolidation Part 1 (FinS) phase 2. a part of project 0IS03042 that received urgent funding in order to replace the Centralised NATO Automated Financial System (CNAFS), implement, customise and provide postproduction support for the accepted Bi-SC AIS Financial Services (FinS) baseline in support of NATO financial authorities. This project is nearing the end, the FSA was initially planned for April 2014 and the delivery has been completed for ACO (except E3A), ACT, IMS and the NCI Agency. However due to inclusion of additional scope regarding the installation at E3A Component in Geilenkirchen, the FSA milestone is now expected at the end of 2015. Follow-on enhancements to FinS are currently scoped under the LOG FS Consolidation Part 2 project. There should be at least support to adapt the Oracle Financials software to changing NATO needs.

The LOG FS Consolidation Part 2 (0IS03042) and LOG FS Development (0IS03043) projects are being executed in parallel as single project. This project has a very broad scope and therefore carries a higher risk due to the high complexity and coordination needs. It will require intense programme management support, because there will likely be multiple implementation streams to address the diverse requirements, which span mobility and transportation, inventory management, medical logistics, and finance. The scope of the project covers consolidation of existing logistic systems and modules in order to overcome interoperability issues and to create a solid baseline for further expansion of their functionalities. This is the first acquisition taking into account the lessons learned from other complex software projects. The request for authorisation to release the Invitation for Bid for this project was released in December 2012, but the contract was finally awarded after a long delay in February 2015.

This is the first project to be implemented in coordination with the IT Modernization, it has been stated in the IFB to ensure coherency. It assumes usage of the ITM data centers and provision of the remote access for the users. The project FSA is scheduled on 4Q 2017

The LOG FS Evolution projects 0IS03044 and 0IS03046 are programmed in Addendum 1 to CP 9C0103. The Addendum will bring additional capabilities in the areas of Medical, Operational Logistics Chain Management, Logistics Collaborative Planning. ACT is working on the SID for this project. The IERs are being developed as part of the POW. The CP Addendum JSSR is being prepared and the SID release is expected in 4Q 2015.

#### 5.2.1.1.10 Human Resource Management Services (HRM)

The APMS Phase 2 project (5HQ03042) is in execution reached an IOC during February 2013. The IOC capability supports rapid generation and manning of Crisis Establishment (CEs) for both Combined Joint Task Forces (CJTF) and NRF operations and exercises

The APMS Phase 2 FOC project is currently under implementation and the current FOC date is foreseen in Oct 2016. The follow-on implementation of personnel management capabilities are currently planned for inclusion under Project 01S0344 in CP 9C0103 Add1. However, the transition from APMS to this future project, however, is unclear and will need to be refined during the Initiation stage of Project 01S0344.

#### 5.2.1.1.11 FS for C2 of Combined Joint Operations (CJO)

The FS for C2 of Combined Joint Operations project has been scoped to replace the existing capabilities:

- Networked Interoperable Real-time Information Services (NIRIS)
- Joint Targeting System (JTS)
- Civil-Military Co-operation (CIMIC)
- Coalition Information Operations Cell (CIOC)

The CJ Ops FS Increment-1 project scope has been limited to provide Joint Targeting capabilities, replacing the existing JTS FAST capability, and to provide integration with existing core and functional services. The TBCE for Increment 1 is being finalized its submission is foreseen for June with authorization in September 2015.

As no further increments are programmed under CP 9C0107, thus any further work will have to be included in an addendum to the CP. The remaining capabilities will need to be reconsidered for allocation against future increments of this project or through future Core Services projects. ACT proposes to transfer the remaining scope of Increment 1 to other projects, which need to be identified, so it does not delay this TBCE any further.

- NIRIS industrialisation - a proposal was made to have a POW work done to support the clarification of the requirements,
- CIMIC and PSYOPS don't require anything special and could be met through other projects.

#### 5.2.1.1.12 Defence Planning Capability

The PBD has been issued in November 2012. The NCI Agency noted that this project as defined in the SID requires more than the scope included in CP 9C0107 and therefore suggests to start developing the scope for the next increment to be programmed in a CP addendum. The NCI Agency intends to follow the scope of the project as reflected in the CP 9C0107 Package Implementation Plan and noted that actual delivery of software would have to be deferred to Increment 2 of this project. ACT informed NCIA that the project no longer meets the current requirements and that ACT would develop an addendum to CP 9C0107 which will address the new and changed requirements. Therefore no further action will be taken to the previously received PBD. This project is on hold until the new SID is released.

#### 5.2.1.1.13 Provide FS SOF Increment 1

The SOF FS requirements as captured under the CP Project Data Sheets have not reached a level of maturity sufficient to initiate the project. So far, ACT has been working on identifying a

suitable user community. Production and submission of the SID was on hold until this issue is resolved (potentially through the inclusion of a work package) in ACT's POW or via user workshops. SID is expected to be released by ACT in 3Q 2016.

#### 5.2.1.1.14 Provide FS for C2 of Electronic Warfare Increment 1

The Electronic Warfare FS project will provide integrated tools for EW threat assessment, response planning, and coordination of force deployment, operational reporting, and queuing to other functional services.

The current Increment 1 scope is restricted to replace the existing NEDB capability. The TBCE was authorized in February 2015. The EW Increment 1 (NEDB-NG) is planned to be contracted by 3Q 2016.

The EW Increment 2 scope will cover EW Command & Control Tools, however is is not programmed in CP 107.

#### 5.2.1.2 *COI Enabling Services*

##### 5.2.1.2.1 Operational Planning

Basic services of the Operational Planning COI are offered by TOPFAS (Tool for Operational Planning) application. The **TOPFAS Increment 1.1** project, which included support for TMD IOC, correction of Increment 1.0 deficiencies and functional enhancements achieved the FOC in July 2014.

The 2st stage authorization for **TOPFAS Increment 2** was granted in December 2014. The current schedule calls for Increment 2 to be contracted in May 2015 as sole source to the TOPFAS Increment 1.1 Contractor. The project scope includes support for Operations Planning, Campaign Assessment, System Analysis, Force Generation, NATO Crisis Response System, ORBAT Management, NRF Readiness Reporting and OCC. It will also integrate available COI Enterprise and Enabling Services and interoperability with other COI-Specific Services.

No other TOPFAS increment is programmed in CP 9C0107 - programme and scope needs to be agreed and programmed under an addendum to CP 9C0107. A POW project should be established to capture those requirements. BMD Programme Office and Services has been working on requirements to be subsequently included in TOPFAS.

##### 5.2.1.2.2 Situation Awareness

The Current Nato Common Operational Picture increment 1 IOC is to replace the existing Joint Common Operational Picture (JCOP) service and the FOC capability will support TMD IOC, support Recognized Joint Picture (RJP), HQ and NCS scope. NCOP version 1.0 was activated in Q1 2014 at pilot sites: Joint Forces Command Brunssum (JFCBS) and Maritime Command (MARCOM) and SHAPE Comprehensive Crisis and Operations Management Centre (CCOMC) and is being used

by the Community. The NCOP IOC declared in April 2014. NCOP version 1.1 is in the testing phase and the FSA milestone is scheduled for July 2015.

The NCOP aims to support and enhance the situational awareness of strategic commanders, operational commanders and Military Advisors to NATO. The function is to display, in the broadest sense, the current picture of the maritime, air and land situation to support the command and control decision making process. The main COP capability provides the relevant information (fusing fires, ISR, logistics, manoeuvre information across the entire battle space, etc.) into a single shared display enabling leadership decision-making processes.

This capability can be categorized as:

- **Management:** includes the COP organization and structure; the authoritative sources for COP content; the historical content and users contributions.
- **Integration:** covers the diversity of sources and information products; near-real time, dynamic, date set and geo.
- **Dissemination:** provide a web client and portal; shared live across operational commands; and integration of COP into other C2 systems.

Currently, there are almost 30 interfaces identified and part of them has already been implemented. As an example, there are some interfaces with legacy systems (MCCIS, JOIIS, NITB, LOGREP, JTS, NIRIS, etc.) and with new COI services (AirC2IS, LC2IS, TOPFAS, etc.).

There are two more increments programmed under CP 9C107: The SID for **NCOP Increment 2** was released by ACT in December 2014, the APF Request authorization is expected in May 2015. The Increment 2 will integrate and display additional information in the form of managed "recognised pictures" provided by other systems such as LOG FS, INTEL FS, CBRN, N-JTS. BMD Increment 1 requirements will be introduced at a later stage during implementation of NCOP Increment 2, using the opportunity of an intermediate delivery. The CAW is planned by 1Q 2017 and FSA by 3Q19. **NCOP Increment 3** SID is planned for release in 2018.

Potential harmonization of TIMS visualisation component between LC2IS, NCOP and INTEL FS for increment 2."

#### 5.2.1.2.3 Ops FS Baseline

The Ops FS Baseline project aims to support the process of rationalising C2 capabilities already fielded or those under implementation. It aims also to support the management requirements under implementation to maximize service reuse and rationalisation of data across Communities of Interest and support defined Operational needs. It will also develop business processes as part of the requirements capture process. This project is considered crucial to the migration of the Bi-SC AIS COI capabilities to a true service-oriented approach, and was considered as key to the definition and implementation of CP 9C0107.

The main project contract was signed in September 2013. IOC is forecasted for 2Q 2014 with the achievement of a number of KPI (success factors, tested and agreed). FSA is planned for 1Q 2016.

The Ops FS Baseline project is envisioned to provide specialized support to business requirements development and analysis.

This support is intended to create a “big picture” view of how operational processes map to capabilities that exist or are already in development, allowing services to be reused and the need to implement new services to be minimized. This project is critical because NCI Agency is currently developing and delivering a significant set of functional services that need to be coordinated, analysed, and reused in a coherent manner.

The scope of this project is to establish a standing team of business analysts and enterprise architects at SHAPE that can perform both bottom-up and top-down assessments of new COI service requirements and changes in scope to existing projects. This support is projected to create a comprehensive view of how operational processes map to capabilities that exist or are already in development, allowing services to be reused and minimizing the need to implement new services.

This project will also support the FMN implementation process, by mapping FMN mission threads to the services being delivered through the Bi-SC AIS and other activities.

As requested by the PBD, this project is expected to leverage the technical architecture capabilities established by the Bi-SC AIS programme with the support of PMIC.

**5.2.2 Core Enterprise Services**

Core Enterprise Services (CES) provide generic, domain independent, technical functionality that enables or facilitates the operation and use of Information Technology (IT) resources, independent of issues concerning communications, Information Assurance (IA), and Service Management and Control (SMC). In this case the IT resources refer to: data; networked IT-equipment (i.e. hardware, such as servers, workstations, printers, routers and switches); as well as software. The Core Enterprise Services also comprise common-user applications such as e-mail and office automation, as well as the Core Web Enabling Services of a Service Oriented Architecture (SOA), such as Discovery, Repository and Mediation.

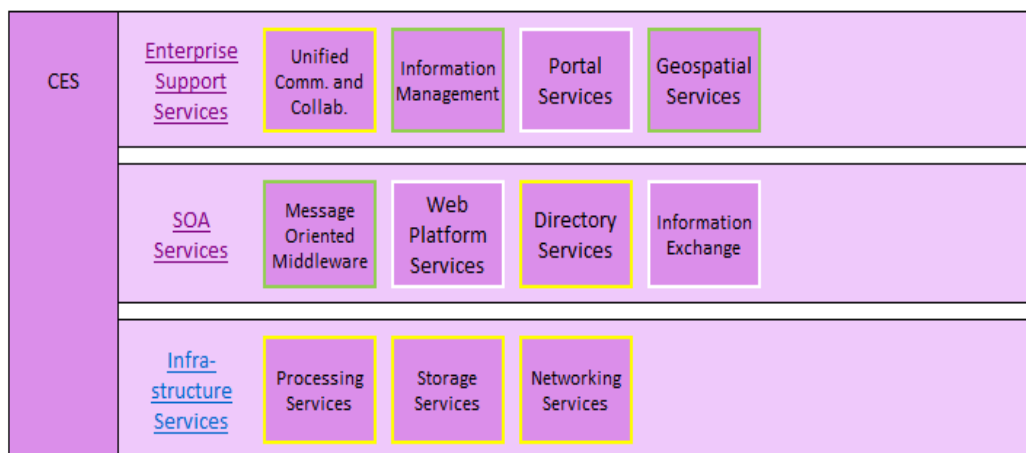


Figure 21 Active (Green), in development (Yellow), Planned (White) COI Services

While numerous documents such as the Core Enterprise Services Framework focus solely on the SOA capabilities, it is important to note that the requirement for the traditional Core Services will remain in existence through the period covered by this plan—and beyond.

### 5.2.2.1 *Enterprise support Services*

#### 5.2.2.1.1 Unified Communication and Collaboration

Project OIS03093 under CP 9C0150 is currently in the TBCE development stage and the TBCE submission is expected in 3Q 2015. The scope currently proposed for this project is to integrate and standardize existing communication and collaboration services, and proliferate them NATO-wide.

The project is intended to provide COTS-based instant messaging (text chat), presence information; integration of voicemail and SMS; and preparation for the implementation of client software necessary to integrate voice over IP (VoIP), voice over secure IP, and VTC over IP services that are being provided through other projects to support the command and control of all military functions.

Furthermore, the project intends to provide support for mobile users of the NATO Restricted network. COTS products will be tailored where necessary to meet the specific requirements of the various communities of interest.

The UCC project has a possible dependency to the **IEG Case C project** to enable information exchange between the static and deployable domains.

#### 5.2.2.1.2 Information Management Services

This has been a challenging area for the Bi-SC AIS programme. Although both the Document Handling System (DHS) and Tasker Tracker Enterprise (TTE) projects have implemented baselines within the Static Commands and the Portal experience has been enhanced by the ISAF and AMN experience, there have been many difficulties with old technology that did not support an enterprise configuration management, and , all complicated by the hiatus in funding authorisations due to the NSIP financial crisis and the lack of standardization of IM/KM processes. The IM/KM projects team through the CP50/20 in the last 3 years has achieved a consolidation of the current baseline; one DHS version from the previous three, one TTE version from the previous four, one portal and two search based on two different technologies. The DHS Proliferation project reached FSA in February 2014. The Joint Final Acceptance Inspection report was submitted in July 2014.

The project to proliferate the upgraded TTE is still being executed due to the increased Demand and the proven success with the Customers. With SH/CCD J6/SM FCIS/312/14-307519 ACO requested to install TTE on 7 additional sites (FSA 1Q 2016). TTE is a highly customized collaboration workspace application developed for the SCs, and it is expected that TTE will ultimately sided with a true central workflow capability based on a COTS workflow application for standard service requests that are not “taskers”. **Enterprise Document Management System (EDMS)** Project (OIS03095) under CP 9C0150 is foreseen as an evolution of DHS and TTE capabilities. It will embrace the Workflow, Document Management and Enterprise Search services and will align the solution with NATO HQ Enterprise Information Management project.

The EDMS project will consist of 2 Spirals, The first Spiral (named **Spiral 0**) is aimed at replacing as a matter of urgency the existing DHS/TTE capabilities (based on MOSS 2007) and will

be essentially based on the forthcoming NATO Information Portal (NIP), for the delivery of the initial Document Handling capability (*Documents Landing Zone*), and on the availability of an advanced Tasker Tracker Tool (TT+) developed by the NATO Special Forces, for the provision of the initial Tasker and Collaborative Workspace capability (*Taskers Landing Zone*). Both NIP and TT+ are based on SharePoint 2013. Such replacement maximizes the reuse of existing capabilities and minimizes the risks associated with the End of Life of MOSS 2007 platform and the need for massive training and cultural change

The second Spiral (named Spiral 1 : IKM Tool evolution) is aimed to finalize and deliver the workflow and document sharing functionalities as well as all the applications and services defined in the SID. In details, three additional services will be instantiated: Linguistic Services (in addition to those already provided by NIP), Reporting Services and Analytic Services (in addition to the out of the box SharePoint / SQL functionalities), together with the functionality of a cross security domain information flow between ON and PBN.

The EDMS TBCE is in development with the submission foreseen in July 2015, contract award for Spiral 0 2Q 2016 and project completion in 3Q 2017, whereas the Spiral 1 is scheduled to be contracted in 4Q 2016 and completed in 4Q 2018.

There are two projects serials in the scope of the Information Portal area; one is the **NATO Information Portal (NIP) Increment 1** that is in execution now and its completion is scheduled on 3Q 2016

The NIP project aims: to standardize a portal framework preventing the proliferation of self-made portals; leverage an Enterprise Federated Search; standardize SharePoint baseline within the Bi-SC AIS; facilitate information sharing and Enterprise collaboration.

Several technical concerns have been raised regarding the NIP, changes to architecture (Distributed with load balancing vs. Centralized with Hot Standby failover) are being proposed. The NIP project has dependencies IDM, ANWI and DHS/TTE which will have a substantial impact on the project plan. the FS applications integration portion is not included in the scope of NIP Increment 1.

**The Increment 2 of NIP** project is programmed under project 0IS030100 in CP 9C0150. It will provide the extension of Portal capabilities to the NATO Restricted (NR) network, establish “portal-to-order” capability, address integration with Information Management, Identity Management and Collaboration services, and finally eliminate the need for individual FS portals. The Supplementary Information Document for this project was issued by ACT in July 2014, however the work on the TBCE document hasn't started yet. Current schedule aims at the 1<sup>st</sup> stage authorization in 2Q 2016, contract award 2Q 2017 and project completion in 2Q 2019.

#### 5.2.2.1.3 Geospatial Services

Core GIS, core component of the Bi-Strategic Command Automated Information Systems (Bi-SC AIS) programme, aims to provide the ability to efficiently use the spatial (location-based) information through the static and missions-specific command and force structures, along all

the phases of the NATO crisis management process (situational awareness, planning, execution) to support the achievement of the information superiority and the mission effect.

An initial capability is available through the **Core GIS Increment 2** project, which was completed in June 2012. An additional scope along with the correction of several deficiencies will be addressed under the next increment.

**Core GIS Increment 3**, project OIS03098 of CP 9C0150, will complement and enhance existing functionalities of the system in the client, services, security and interoperability areas, and implement the capability in new organisational elements elected as eligible and on the NATO DCIS. The TBCE document was released in March 2015. The CAW is expected in June 2016 and the project completion in 2Q 2018.

The **4th Increment 4** to the Core GIS is also included in CP 9C0150 and should implement an upgrade of the software baseline and incorporate common geospatial service within FS.

There is clear dependency of the Core GIS Increment 3 and 4 on the ITM for hosting requirements.

#### 5.2.2.2 *SOA Platform Services*

##### 5.2.2.2.1 Message Oriented Middleware Services

The NATO Messaging System (NMS) Increment 2 Phase 1 project (5CM00580) of CP 0A0104 was initiated several years ago and never delivered the full capability. The NCIA request for change of technical scope to test an alternative solution was not agreed by the IC and the contract is in the process of being terminated.

Currently the capability is still being provided by legacy applications ACE Information Flow/Messaging System (AIFS/AIMS).

A new NATO Messaging Service project programmed in the CP 9C0150 serial OIS03090 As a result of the termination of the NMS project, project OIS03090 in CP 9C0150 will recapture all relevant requirements and deliver the missing capability. The New NATO Messaging Service (New-NMS) project will provide the tools and services consisting of a software application, message processing, management features and gateway services that will allow Staff Officers to exchange formal messages within NATO and NATO nations as part of the formal C3 activities.

The project aims to replace the current legacy capability, without changing the current interface to the National ACP 127 gateways to ensure continuity of service. It will provide: a single user interface for message drafting and receiving; automatic distribution of incoming and outgoing messages to local addressees; Address List Expansion component to expand address lists in a message; message archiving; SMC tools.

The SID for the NMS project was issued by ACT bundled together with the UCC project in July 2014, the TBCE document is in coordination now, to be released in May 2015. The current schedule foresees the Contract Award in 3Q 2016 and the project completion by 3Q 2018.

5.2.2.2.2 Web Platform Services

Although a considerable effort was invested in studies of Core Web Enabling Services (CES)—there are currently no such services running in the operational baseline of the Bi-SC AIS or being developed under any active project. An initial set of CES was implemented in ISAF as part of the AMN IOC and is being enhanced significantly as part of the AMN Integration Core (I-Core) work package under the AMN 2011 project.

The project OIS03094 submitted the TBCE document to the NOR in October 2014, it was tabled on the WGNTTE twice in November and January where some clarifications from the Agency were requested and the 1<sup>st</sup> Stage authorization is expected in June 2015. It was decided to issue a single TBCE for the SOA and IdM Platform that combines projects OIS03094 (Provide Web Enabling Services) and OIS03099 (Upgrade NATO Enterprise Directory Services). This approach will allow Functional Services and other systems/projects to benefit from a uniform service oriented functional platform supported by Enterprise-wide identity management services, as depicted on figure below. New timeline has been agreed that reflects the delay resulting from the discussion with the WGNTTE., contract award is foreseen for 4Q 2016 and FOC for 2Q 2019.

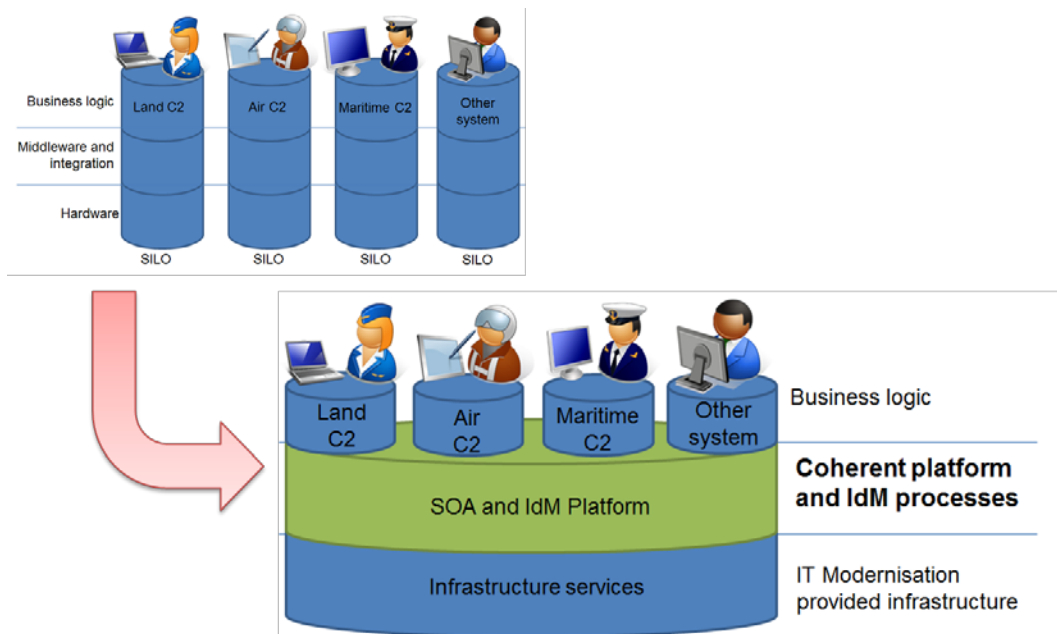


Figure 22 SOA and IdM Platform Concept

The figure below shows the latest proposed scope for the “Provide Web Enabling Services” project. It aims at providing initial: Core data management capabilities, Service discovery, Information assurance, Messaging, Mediation, Orchestration and choreography, Metadata repository, Information access, and Information discovery services.

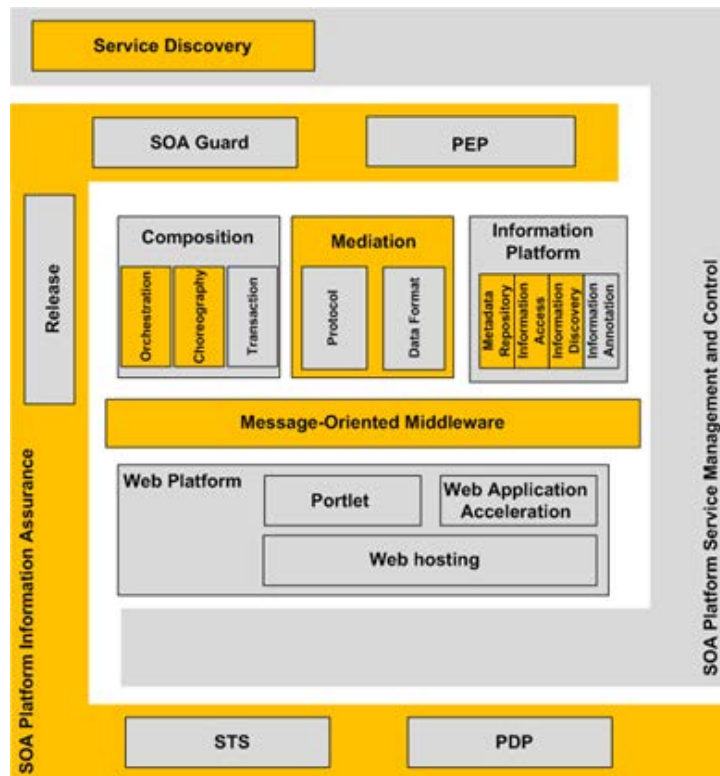


Figure 23 Core Enterprise Services provided through legacy applications

The SOA platform will take into account lessons learned from AMN I-Core

The AMN I-Core is being built upon the basis of the Microsoft BizTalk suite proposed for the AirC2IS system and the work under the AMN 2011 project is being done by the same contractor.

The **Web enabling services most requested by other projects** are shown below (in red). This was based on an analysis of: SRS of NCOP, IntelFS, LogFS, AirC2IS; AMN I-Core Requirements and results from C2 Integration and feasibility studies and collaboration with various projects like: MAJIIC, MEDICS, and NITB.

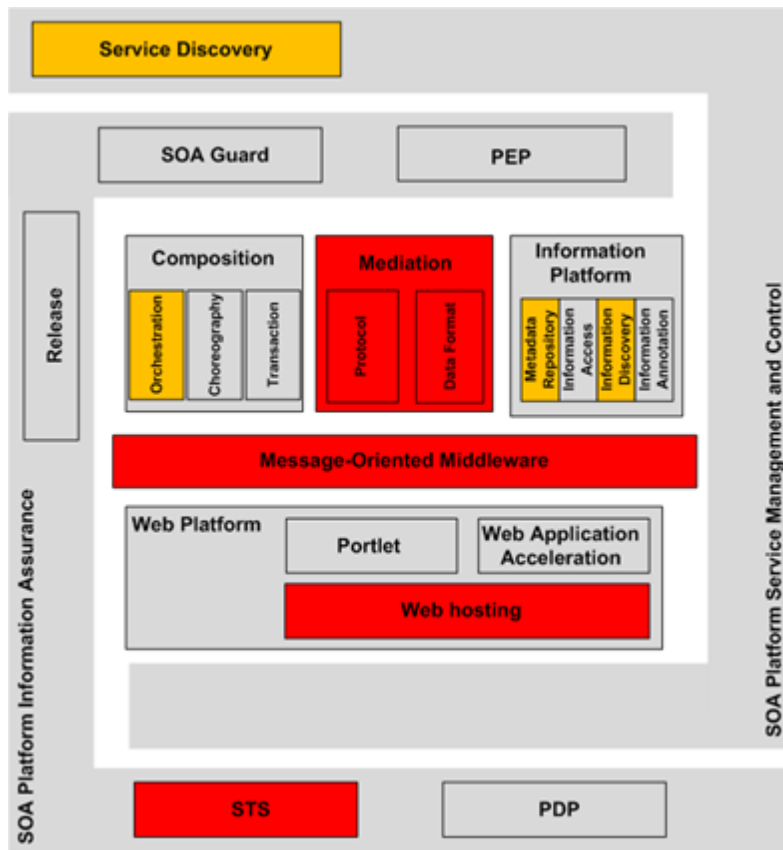


Figure 24 Web enabling services requested by other projects

5.2.2.2.3 Directory Services

The project NATO **Enterprise Directory Service Phase 2** (5IS03030) (NEDS) is under execution and is expected to reach completion in October 2015.

The current scope of the project is to provide a coherent meta-directory capability for the NS domain. The directory data sources it is currently planned to support are the Bi-SC AIS Active Directory (AD), the NATO HQ NS AD, APMS and the NATO Messaging System (NMS). The NS Video Teleconferencing (VTC) directory and that of the VOSIP secure voice system will be planned as additional sources when those projects reach their design stages. The NCI Agency will propose to align the physical scope of NEDS with that of NPKI. The current NEDS project has not, however, been authorized to support all NPKI requirements and the NCI Agency estimates its intention to request additional scope to the next increment of NEDS project to address these requirements.

While the focus of NEDS is on synchronization and integration of directory data among NATO organizations, a related element under the NATO Messaging System (the Alliance Replication Hub (ARH)) also aims to address directory information exchange with nations within the context of formal messaging.

NEDS has not been authorised for implementation as part of the NRF DCIS scope. Although this would be required to support deployment of NPKI in a deployed environment, the concept of operations and support is not clear yet

CP 9C0150 comprises project 0IS03099 enabling an evolution of the **NEDS project**. The scope of this project embraces integration with NMS and IEGs, including Identity Management and enabling interoperability with national and other NATO “authoritative identity data sources.” The decision has been made to combine this project with the project 0IS03094 Provide Web Enabling Services into one project called SOA and Identity Management. See the chapter Web Platform Services above for the details.

#### 5.2.2.3 *Information Platform Services*

The Information Exchange Gateways (IEG) which are intended to support the interface and interoperability between two networks at various security levels, have proved extremely difficult to implement, due to underestimation of the complexity and difficulty of inserting gateways in the middle of long-standing and poorly-understood networks. The need for this capability remains and the NCI Agency faced the challenge of achieving a viable, supportable and affordable solution.

The NCI Agency brought the IEG Scenario A (NATO Secret to NATO Secret in national enclaves scoped under project 5IS03023 (CP 5A0050/9B0020) to a stop due to insurmountable challenges faced during the execution stage. The JFAI request was submitted in 2010.

The remaining scope of IEG under CP 5A0050/9B0020 as well as new requirements have been addressed under CP 9C150, project 0IS03102.

##### 5.2.2.3.1 IEG Case B

The IEG Scenario B project (NATO Secret to National Secret) transferred to serial 0IS03102 is currently on hold. Nations are not ready to harmonize their own environment behind an IEG (even though some nations have gotten connection to AMN via an IEG-like capability). Until there is a consensus on the implementation approach, the Agency’s view is that this project cannot be implemented successfully. The MMR is confirmed and the project could move forward as soon as an implementation strategy supported by corresponding national projects is put in place.

##### 5.2.2.3.2 IEG Scenario C

The purpose of this project is to support the migration of the NRF DCIS from its current architecture, to support both NS and MS. The project baseline document for IEG Scenario C (NATO Secret to Mission Secret) has been submitted by ACT in January 2012 the APF was finally approved in July 2013 after long delay due to CP150 long lasting authorization. The scope was re-confirmed by ACO after PBD release. TBCE was submitted Dec 2014. Current schedule aims at the contract award in 3Q 2016 and project completion in 2Q 2018.

The project would support the implementation of the FMN concept, which would operate as one single MS domain in theatre. By placing the IEG C in a small number of static hubs, the NRF can be provided with greater flexibility while benefitting from the reduced cost of operation through consolidation. It was agreed that limiting systems and services requiring a highly skilled support staff to a small number of locations and leveraging network connectivity to support distributed users is an optimal approach.

#### 5.2.2.3.3 IEG Scenario D

The scope of the IEG Case D is to enable NATO, NATO-Nations, troop-contributing Non-NATO-Nations and IO/NGO to exchange information in the static headquarters as well as in theatres. This information exchange will be enabled in a mediated and secure manner over all networks being used, while guaranteeing the security constraints/concerns put in place. The project initiation by SID release is expected in June 2015. It is assumed that the IEG Scenario D will be built on the Scenario C solution.

### 5.2.3 Infrastructure Services

Of all Bi-SC AIS capabilities, its Infrastructure Services (IS) have traditionally been the most decentralized and independently-implemented segment. To achieve the O&M savings expected as a benefit of the NATO Agency Reform initiative, however, there will be a need to establish, by 2015, a highly standardized set of Infrastructure Services at the core of the Bi-SC AIS.

This loosely defined area mainly provides the technical functionality offering processing and storage services.

Most headquarters upgrade projects from CP 50/20 have been completed, but a roadmap for implementation of new infrastructure upgrades under CP 9C0150 has not yet been agreed. It will be a part of the scope done to be executed under Project OIS03092 under CP 9C0150. It is expected that the results and recommendations from the IT Modernization project will be of great influence on scoping and planning of other projects in CP9C0150.

#### 5.2.3.1.1 IT Modernization project

The ITM project will transform the way IT services are provided to users across the NATO enterprise, including the NATO Command Structure (NCS), the NATO Headquarters (NHQ), elements of the NATO Force Structure and NATO agencies. This will be achieved by modernizing, consolidating, and centralising the infrastructure and service management, and by pooling and abstracting resources. In turn, this will allow an enterprise perspective to be taken, and services to be delivered according to standard and measurable service level agreements, offering a higher quality, more flexible, resilient, and secure set of services at significantly lower costs to the user community. The IT Modernization will also extend operational agility and flexibility, increase mobility and flexible working, while reducing manpower required maintaining and providing services, hence, reducing costs.

The ITM organizational scope corresponds with the NATO HQ, the NATO Command Structure, and NATO Agencies (see figure below). ITM will cover: Back-end services, Front-end for NCS and Front-end for operational users. This project will not cover Front-end for others.

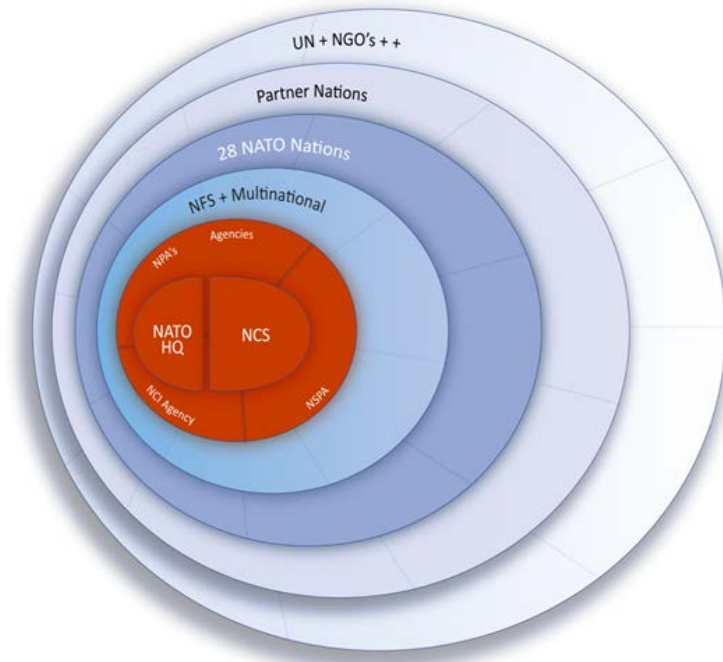


Figure 25 ITM - Organisational Scope (in red)

The ITM Implementation is organized based on four increments known as “Waves”, with each wave addressing a different set of sites. Sites have been allocated to waves based on the urgency of their need for infrastructure refresh. Work at the DCs will continue throughout the 4 waves such that they are continuously expanded as more services and customers are centralised. The figure below shows the ITM Implementation Plan including forecasted scope and timeline.

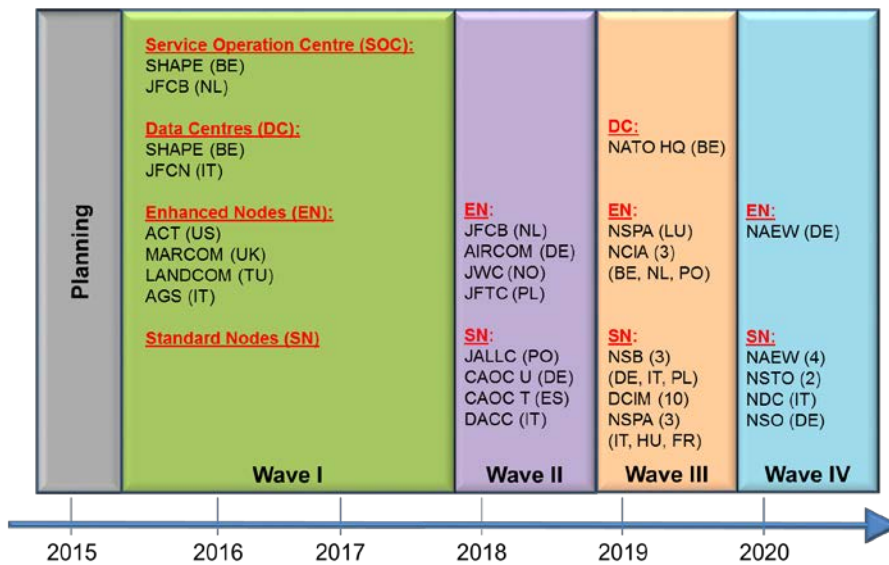


Figure 26 ITM - Implementation Plan

The IT Modernization project embraces three projects of CP 9C0150 and one under CP 0A0201 AGS:

The Project 0IS03091 “Infrastructure as a Service and IT Consolidation” is aimed to provide processing and storage capability, the Project 0IS03092 “Software Upgrade and Hardware refresh of Fielded Baseline” encompassing end-user devices, Project 0IS030101 “Bi-SC AIS Service Management and Control (SMC) Capability”, Project 0IS030191 “providing end-to-end SMC and AGS” will extend AIS to Sigonella (AGS). However, in recognition of the relationship between them, the 3 projects submitted with CP 9C0150 were by the NOR recommended for programming as a single activity under serial 2014/0IS03091.

It shall increase the IT services availability, enhance business continuity and disaster recovery, and enhance the information security posture. The IT Modernization will also extend operational agility and flexibility, increase mobility and flexible working, while reducing manpower required for maintaining and providing services, hence, reducing costs. Operational users should be prepared to operate and support the new infrastructure, therefore training should be considered.

The ITM projects

The ITM project is subdivided into five (5) Work Packages (WP) that are separately contracted and executed in parallel.

Work Package 1 - Systems Integrator and Implementation of Back-end Services covers the four (4) ITM services, namely:

- Implement IaaS (Integrator Role) This will provide the ITM detailed design, and full implementation. This includes the integration of all areas: the back-end infrastructure, client provisioning, SMC tools and equipment, and IA services.. It also includes the migration (data and applications) to the Datacentres and migration from the current distributed Service Desks to the new centralised Service Desk. The migration effort will be guided by the concepts of consolidation, and centralisation.
- Service Management and Control (SMC) tools and equipment. - Establishment of Service Operations Centre(s) - This WP will provide the tools required to support the Service Desk functionality, and equipment required by the Service Operations Centres to monitor and control the services and provide expertise. This WP will also provide temporary Contractor Service Desk Staff to cover the transitory period, until NCI Agency Staff are in a position to take over. This will be limited to a 6 month period from the achievement of system acceptance for Wave I sites.
- Implement Client provisioning services - This work package will provide and implement the back-end client provisioning components, including the LAN and switching components, and install the client devices to be procured under WP2 and provided to this work package as Purchaser Furnished Equipment (PFE).
- Enterprise Core Services.

Work Packages 2 to 6 comprise of five additional and separately awarded contracts covering the following:

Work Package 2 -Establish a Framework Contract for the Client Devices - This work package will put in place the contract vehicle for the NCI Agency to furnish client devices for all networks.

Work Package 3 – Not assigned

Work Package 4 – Expansion of NHQ Datacentre for the Enterprise - The New NATO HQ site will include a Datacentre capability, furnished via the ANWI Project, in the 2016 timeframe. This site will need to be augmented with additional capacity to enable the site to support the NATO Enterprise scope. This will be accomplished in an incremental fashion, growing the capacity as sites are transitioned under ITM.

Work Package 5 – Provide Consultancy Support to NCI Agency - This work package will provide a Contractor support to provide skills and experience in establishing IaaS, Datacentres, and in enterprise consolidation.

Work Package 6 – Modification to the NCIRC FOC infrastructure - The current NCIRC FOC design and implementation needs to be modified to address the proposed ITM architecture. With the introduction of datacentres and the centralisation of applications and data, the NCIRC sensor placement will require modification to scope with the change in data and information streams.

The IFB for the for ITM Wave 1 (Work Package 1) project was released on 29 April 2015, and the Contract Award is expected by the end of 2Q 2016. Concerning the WP5 (Consultancy Support for ITM) the contract award is foreseen in June 2015.

The delays in implementing ITM have resulted in a requirement for a series of measures to mitigate the risks of continuing to operate obsolete equipment. This risk has been addressed by authorization of an urgent ITM mitigation project. It embraces mitigation works at all command locations within the scope of the ITM project to replace the essential infrastructure in order to continue to provide services at an acceptable level.

The IT Modernisation will make provisions for two networks on different security levels: the Operational Network (NS) in support of war fighting processes, processes requiring higher level assurance, military and political communications; and Protected Business Network (NR) supporting majority of administrative business processes, appropriate operational processes, and processes requiring interaction over the Internet.

The project will provide the back end infrastructure for Data Centers (DC) and Nodes. It will leverage for the work done for the Active Network Infrastructure (ANWI) project for the new NATO HQ. Under project, hardware will be provisioned from a single source, under one SLA, and implemented in a modular fashion so that it can be migrated to a central site. Experience with a so-called 'Cloud-in-box' solution in Lago Patria and the infrastructure delivered for that headquarters will also contribute to this project. As a principle, even when hardware is physically distributed, it may be logically centralized in terms of capacity management and configuration control.

To enable centralized management of resources and applications, the service management requirements need to be managed at the programme level also, and have to be harmonized across the functional services to provide a composite picture.

One issue that will need to be addressed as part of IT Modernization is the migration of legacy applications. A best practice recommended by industry and government organizations that have undergone IT consolidation efforts is to make an inventory of all applications and make a formal decision to phase out or replace applications whose support arrangements or infrastructure requirements conflict with the consolidated approach, e.g. applications with a requirement for a specific OS/hardware bundle. The Application Migration Strategy will be developed on a case-by-case basis for each application through collection of information from users and testing migration scenarios.

Security policy needs to be addressed in the first phases of the project. It needs to be part of the design, but also the security accreditation process should be centralized, so that no more local idiosyncrasies will continue to complicate the implementation and SMC of infrastructure services.

The ITM project will require some modifications to the NCIRC FOC infrastructure to enable proper cyber defence of the centralized infrastructure. There is also the dependency with the communication infrastructure delivered under the Leased Transmission Services (LTX) project and key capabilities planned under the NATO Communications Infrastructure.

The ITM project will also provide the following:

- Extend the Bi-SC AIS baseline to support multiple mission networking capabilities at the static command facilities of the NCS
- Upgrade the hardware and software of all LANs at all AIS nodes when necessary due to obsolescence of either hardware or core software and to support new or upgraded functional services as they are fielded
- Adapt the baseline at commands affected by the restructuring of the NCS.

#### **5.2.4 Information Assurance Services**

The IA (Information Assurance) domain provides measures to protect information processed, stored or transmitted in communication, information or other electronic systems in respect to confidentiality, integrity, availability, non-repudiation and authentication.

This cross-layer group overlaps with all other service layers and should therefore be seen as a logical grouping of critical components that jointly implement the tenets of NATO's Information Assurance policies.

Implementation of Bi-SC AIS information assurance capabilities was made a high priority with the cyber defence goals set at the Lisbon Summit, and the NCI Agency has accelerated its work in this area to compensate for delays encountered during the 2009-2010 NSIP financial crisis.

##### *5.2.4.1 NATO Computer Incident Response Capability FOC*

This capability was specifically identified at the Lisbon Summit and has been reinforced at the 2012 Chicago Summit. The FOC capability has been one of the highest priorities for the Bi-SC AIS and it is now under implementation. It will continue being one of the first priorities during the next years.

From the planning stand point, NCIRC project (0IS03001/2/3/4/5) includes five increments. NCIRC increment 1 aims to provide centralized infrastructure and refresh the NCIRC Technical Cell to operate on NU/NR and NS/MS levels. NCIRC Increment 2 will provide a set of sensors to detect incidents and provide information to the core NCIRC management system. Both increments are executed together and their FSA was achieved in May 2014. The TBCE for 10 additional sites was submitted in 4Q 2014 and approved by the IC on 19 May 2015. It is expected to be contracted in July 2015 and completed in October 2015.

NCIRC Increment 3 will provide the Cyber Defense Decision Support System (CDDSS). The capability aims to ensure the commanders and users have a better understanding of what is going on in the network, enhance risk assessment (what type of incident is taking place) and risk management (analyzing the impact of the occurring problem and the way it should be handled). Current problems with achieving the Spiral 0 FSA, delays the start of the Spiral 1. CDDSS development was put on-hold until IC decision on JFAI Report covering Spiral-0 deficiencies and proposed mitigations. NCIRC Increment 4 provides the Cyber Defence Threat Assessment Cell (CTAC). It aims to collect, assess and distribute data about CD threats. The CTAC service activation took place on 28th Feb 2014. The FSA was achieved in May 2014.

NCIRC Increment 5 is an alternate capability to the NCIRC Technical Center (TC). The budget is programmed, but the project hasn't been authorized by IC yet. SCs have been requested to provide operational requirements for this capability. The project depends on the completion of Increments 1 and 2 as well as the release of the associated SOR by the SCs. Initial timeframe was foreseen at the end of 2014, but the . Bi-SC SOR approval by the IC is still pending.

NCIRC FOC Adaptations is required for new projects bringing change:

- Public Internet Access Gateway (part of the 10-Additional sites scope)
- NATO Communications Infrastructure (NCI)
- IT Modernisation
- ANWI-New NATO HQ
- DCIS-NRF
- AGS

As a conclusion of these concerns, NCI Agency and ACT agreed to Identify a project under the next Addendum to CP 0A155 to adapt Host Based Intrusion Detection to align with project 91 and support an IaaS (virtualized) environment. They also agreed on the scope for Addendum 2 as a whole, to include further evolution of NCIRC, NATO PKI, identity management, and object/data security mechanisms.

#### 5.2.4.2 *Public Key Infrastructure (NPKI)*

The NATO Enterprise PKI project (E-NPKI) proposes to implement a consistent Public Key Infrastructure for PB, ON and MN networks.

The need to implement Strong Authentication—for which PKI is the most viable solution—was identified as part of the Cyber Defence goals at the Lisbon Summit and is included in the Cyber Defence Action Plan. A revised request for TBCE authorization was submitted to the IC. The authorization was originally expected in October 2012 but it was finally accepted in July 2014, due to issues related to the NATO enterprise-wide approach proposed by the NCI Agency. Current schedule forecasts the IFB release in July 2015, contract award in 2Q 2016 and project completion 1Q 2019.

E-NPKI rely on the NATO Enterprise Directory Service (NEDS) to act a certificate repository. The physical scope for the NEDS and NPKI projects has to be aligned. NEDS deployment was only authorised for the static portion of the NS and it is also required on all the networks (PB, ON and MN) within the E-NPKI Scope..

E-NPKI is planned for use with DCIS. There are Registration Authorities (RA's) planned for all DCM's. NCI Agency Cyber Security Service Line (CS SL) is the operating authority. The CS SL will be upgrading current Interim NPKI to Enterprise NPKI, ensuring the NPKI support from now to 2024.

There is no follow-on project planned. Appropriate steps need to be taken to provide an addendum to CP 0A155 to cover follow-on projects for NPKI capability (e.g. for continued integration

with running applications). Implementation of NPKI is only a first step towards an integrated identity and enterprise access management capability that includes physical access control.

### 5.2.5 Service Management and Control Services

The Service Management & Control (SMC ) domain provides capabilities to coherently manage components in a federated service-enabled information technology infrastructure. Service Management & Control processes and tools enable service providers to provide the desired quality of service as specified by the customer.

The SMC Service line responsibilities are summarized in three main areas<sup>48</sup>:

- SMC SL is the owner of the people, processes and tools pertaining to: Service Support Management, Service Delivery Management and Continual Service Improvement components for Service Delivery
- Orchestrates Service Lines across the NCI Agency to achieve Service Delivery customer expectations within the terms and conditions of a given SLA
- Covers both NCI Agency provided and outsourced services.

This cross-layer group overlaps with all other service layers and should therefore be seen as a logical grouping of critical components that jointly provide the tools to manage and control a distributed and federated service-oriented enterprise. Consequently, the majority of SMC capabilities for the Bi-SC AIS are embedded in the scope of its individual projects. In light of the increasing need to support end-to-end service management, however, the NCI Agency proposed, and the SCs agreed, to initiate a project to ensure that projects had the proper guidance to implement SMC capabilities that could enable consistent service management across multiple applications, infrastructures, networks, and domains.

The SMC roadmap between 2015-2020 will cover a number of SMC toolset and Project integration. The figure below shows the planning overview:

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<sup>48</sup> BAIP V8 WS slides: Service Management & Control Service Line (March 2015)

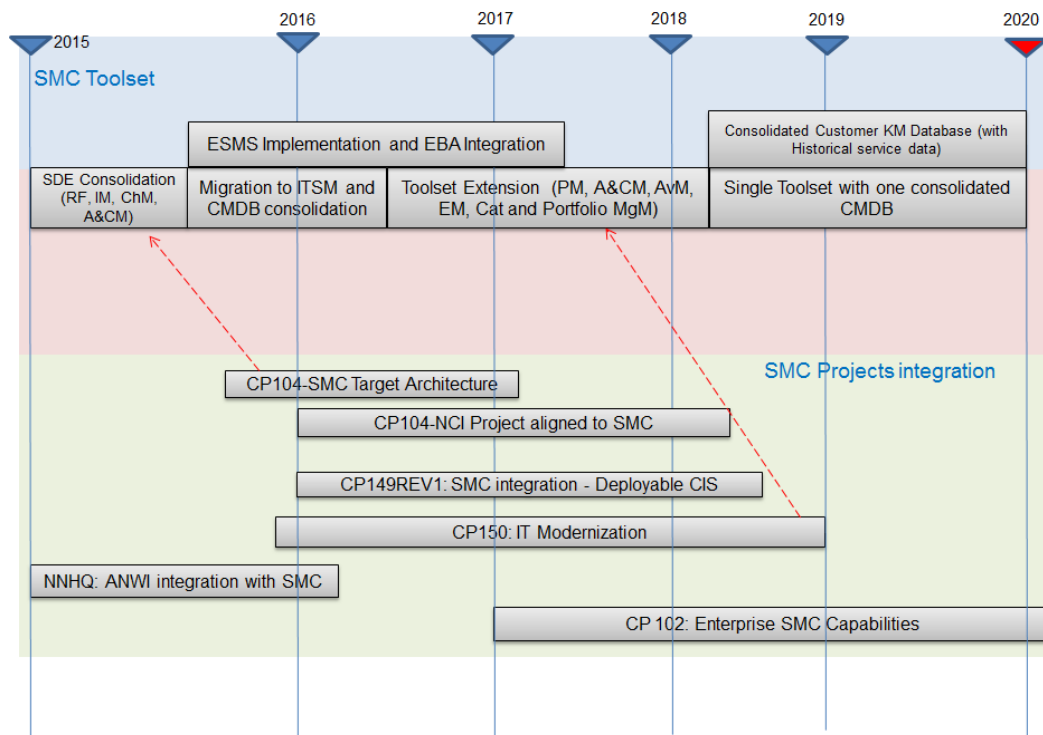


Figure 27 Service Management Control SMC Roadmap

5.2.5.1 Service Management and Control Target Architecture (OCM03029)

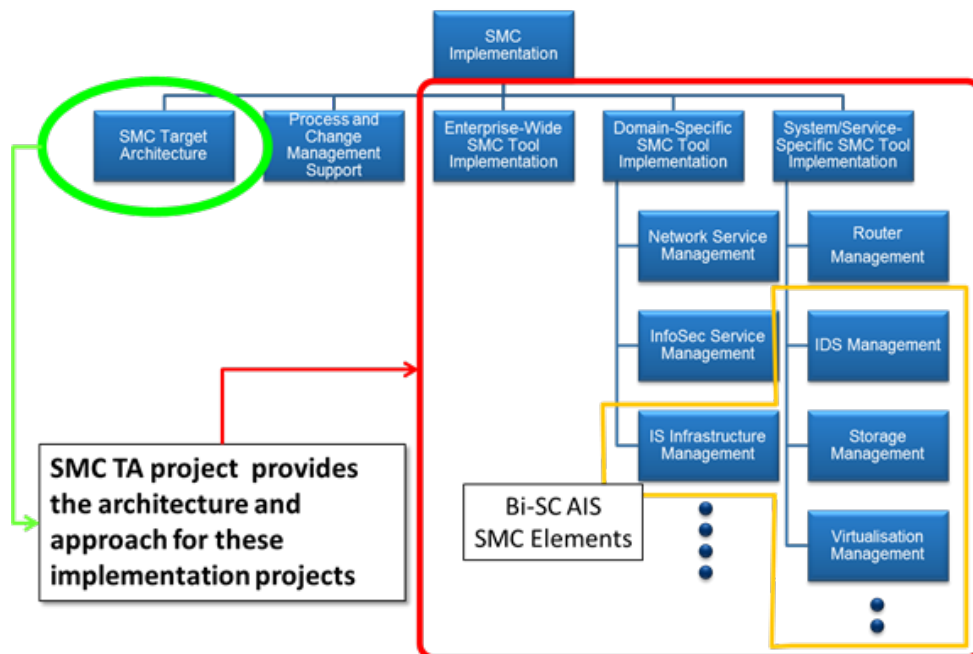


Figure 28 Architecture of Service Management & Control Capabilities

All CIS capability implementation projects come with dedicated service management and control capabilities. However, the problem for the Bi-SC AIS and other NATO-wide and deployable

C3 capabilities is that each of these SMC capabilities tends to be designed as an island. This undermines the goal of achieving an end-to-end SMC capability and leads to delays in restoring service, inefficiencies in isolating problems, and tremendous cost running.

The four Bi-SC AIS Management Authorities agreed in January 2009 that there was a need for an SMC Target Architecture to define how individual service, system and domain-level SMC capabilities should be integrated to realize this end-to-end capability. The purpose of this project is to develop an enterprise-level target architecture and roadmap for implementation of end-to-end SMC and then to oversee its implementation in the 2014-2016 timeframe. The project also includes a near-term effort to integrate existing SMC capabilities to improve service management in ISAF.

The project does not cover NATO HQ, where there is a similar SMC consolidation project underway. NATO HQ will implement a series of SM&C tools in the next few months. The SMC IPSG will be briefed on the NATO HQ SMC implementation efforts.

The SOW of this project is under review and a stakeholder workshop took place in March. Contract award for the project is expected in December 2015.

#### 5.2.5.2 *Upgrade Bi-SC AIS Service Management and Control (SM&C) Capability (OIS03101)*

This project is included in the IT modernization project and will provide a coherent end-to-end Service Management & Control (SM&C).

### **5.2.6 Communication Services**

Although the Communication services are not in scope of the BISC AIs Programme, there is a strong dependency between both Programmes. Particularly two projects from the Communication services area has significant impact on the BISC AIS projects, these are NCI and LTX.

#### 5.2.6.1.1 NATO Communication Infrastructure (NCI) project<sup>49</sup>

The project OCM03025 from the CP 0A0104 is meant to provide IP networking capability to upgrade the NGCS from a hybrid of TDM and packet switched infrastructure to a fully converged IP Infrastructure. The project will implement the following subsystems defined in the NGCS TA:

- The NGCS Protected Core subsystem;
- The NU/NR IP subsystem;
- The Secure IP subsystem;
- Unclassified VoIP (35 PABX replacements)

NCI will provide wide area communications between, NATO Command Structure, NATO Agencies, satellite communications anchor stations, NATO points of presence in member nations. The 2<sup>nd</sup> stage authorization request for this project was submitted in March 2015, expected to be approved in June 2015. Current schedule aims at the contract award milestone in 3Q 2016 and the

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<sup>49</sup> Included within the present document due to the ITM and NCI dependency

project completion in 2Q 2019. As NCI is providing the foundation for the IT-Modernization project, the coordination of these two large and complex projects is crucial.

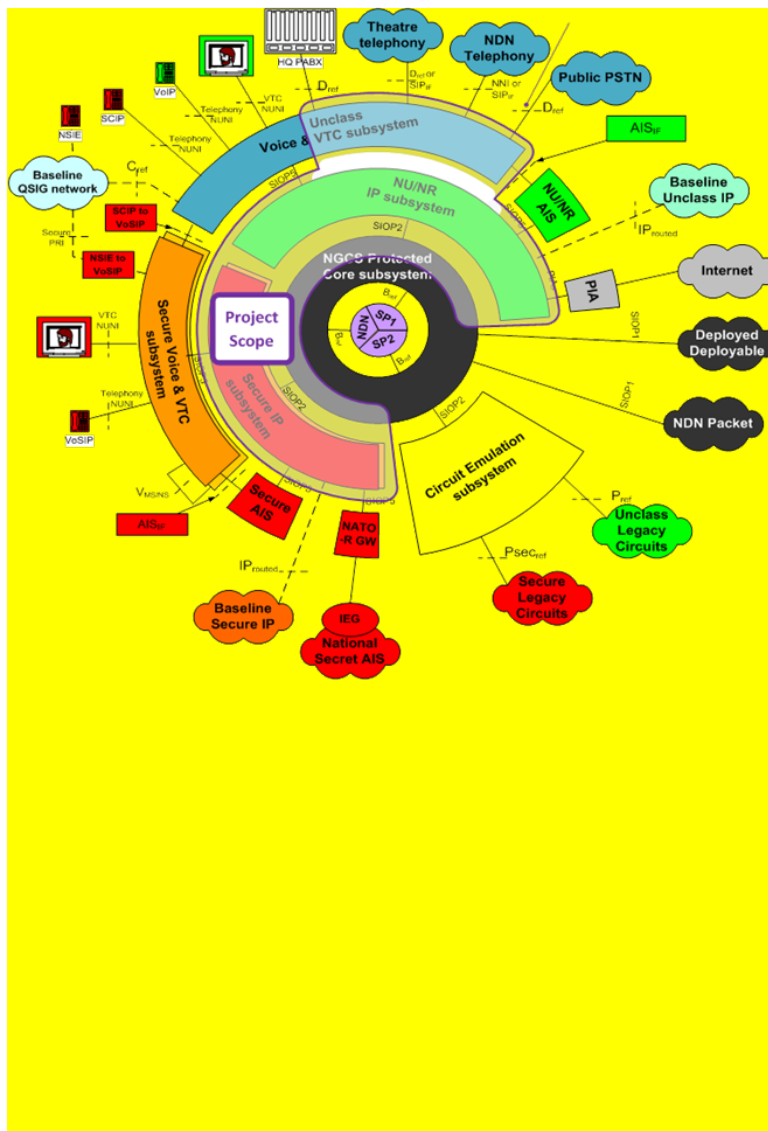


Figure 29 NCI Project scope

5.2.6.1.2 LTX project<sup>50</sup>

LTX project is meant to provide ethernet transport services between NATO locations enabling flexible and more efficient allocation of bandwidth. The contract assumes the ethernet transport to be managed by the contractor with NATO Edge Devices (NEDs) owned and managed by NATO. There will be three types of nodes:

- Core nodes with 2x10Gb/s connections; 99.99% availability

<sup>50</sup> Included within the present document due to the ITM and LTX dependency

- Distribution nodes with double connection to either a core node and/or a distribution node (1Gb/s or 100 Mb/s); 99.9% availability
- Access nodes (100 / 50 / 10 Mb/s) with single connection; 99.9% availability

This architecture was coordinated with the IT Modernization project team.

#### 5.2.6.1.3 Public Internet Access Gateways (PIA)

The “PIA” project (OCM03031/5IS03024) will consolidate existing Internet access gateways within the SCs down to three or four and bring all NATO UNCLASSIFIED LANs into a single domain. It is a first of a kind project as it includes contractor operations (outsourcing) based upon a set of Service Level Agreements.

The Contract for PIA GW was signed on 10th June 2013. Project completion (FSA) is envisioned for June 2015.

#### 5.2.6.1.4 NATO-wide Secure Voice services

There is also a NATO-wide Secure Voice project (SVOIP) within CP 0A0104 that will implement Secure Voice services (SVoS) throughout the NATO Command Structure.

Currently NATO still operates the obsolete Narrowband Secure Voice (NBSV) devices (STU-IIB) to provide Secure Voice Services. The Key Distribution Centre (KDC) for NBSV was initially planned to cease operations by the end of 2013. Although its closure has been extended to the 2Q2015, there is an urgent need to implement Secure Voice Services based on modern technologies as soon as possible to avoid a loss of capability.

According to Secure Voice Minimum Military Requirements (MMR) and Secure Voice Strategy, the Secure Voice Services (SVoS) project established a hybrid solution consisting of Voice over Secure IP (VoSIP), and Secure Voice over IP (SVoIP) based on the Secure Communication Interoperability Protocol (SCIP). The VoSIP solution was designed as an interim measure to ensure the availability of a secure voice capability, during the period between the KDC closure and the availability of the fully functional SCIP solution

The Investment Committee authorised APF for the project Provide Packet Transport Component – NATO-Wide Secure Voice Services and authorized a merged First Stage and Authority to Issue the Bids for the static Voice over Secure Internet Protocol (VoSIP) capability subproject. The mobile portion NATO-Wide Mobile Secure Voice Services (MSVoS) was decoupled from the original project and will be implemented independently.

The current schedule aims the Contract Award on July 2015.

### 5.3 BI-SC-AIS PLANNING ARTIFACTS

#### AIS Roadmap 2015-2017- ANNEX C

The AIS Roadmap provides a holistic timeline view of the Bi-SC AIS services grouped by Service Lines. It also indicated projects major milestones and events related with service development and deployment. The report can be found on the BISC AIS Programme Portal under the URL link: [https://biscais.ncia.nato.int/dashboard/SitePages/AIS\\_Roadmap.aspx](https://biscais.ncia.nato.int/dashboard/SitePages/AIS_Roadmap.aspx)

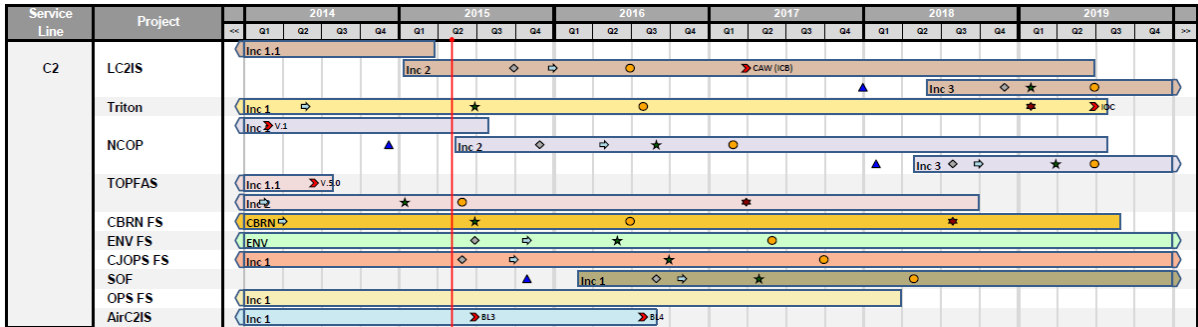


Figure 30 an Extract of the Roadmap

### Capabilities Implementation Schedule – ANNEX D

The Bi-SC AIS Capabilities Implementation Schedule is a planning tool maintained by the Programme that consolidate information about capabilities, existing systems and projects that implements systems which provides corresponding capabilities . The report can be found on the Bi-SC AIS Programme Portal under the URL link:

[https://biscais.ncia.nato.int/dashboard/SitePages/Capabilities\\_Implementation\\_Schedule.aspx](https://biscais.ncia.nato.int/dashboard/SitePages/Capabilities_Implementation_Schedule.aspx)

| Command and control (C2) |            |           |          | 2014                                 |  |  |  | 2015                   |    |    |    | 2016 |      |    |    | 2017 |    |    |    |    |    |    |     |
|--------------------------|------------|-----------|----------|--------------------------------------|--|--|--|------------------------|----|----|----|------|------|----|----|------|----|----|----|----|----|----|-----|
| SL                       | Status     | IMIS      | Serial   | Project Short Name                   |  |  |  | Q1                     | Q2 | Q3 | Q4 | Q1   | Q2   | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4  |
| COI Services             |            |           |          |                                      |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            |           |          | Land COI Services                    |  |  |  | Capability Maturity -> |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
|                          | Programmed |           |          | to be removed                        |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP008151 | 5HQ00592 | LC2IS Inc 1.1                        |  |  |  |                        |    |    |    | FSA  |      |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP010280 | 01503076 | LC2IS Inc 2                          |  |  |  |                        |    |    |    |      | TBCE |    |    |      |    |    |    |    |    |    |     |
| C2                       | Programmed | NSPTMP44  | 01503076 | LC2IS Inc 3                          |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    | PBD |
| C2                       |            |           |          | AIR COI Services                     |  |  |  | Capability Maturity -> |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            | Legacy    |          | ICC                                  |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            | Legacy    |          | PLATO (ICC@ACC)                      |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP007772 | 01503073 | AirC2IS Inc 1                        |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| AirC2 PO Service         | Active     | NSPTMP12  | 01503075 | AirC2IS Inc 2                        |  |  |  |                        |    |    |    | PBD  |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            |           |          | Maritime COI Services                |  |  |  | Capability Maturity -> |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            | Legacy    |          | MCCIS                                |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP000830 | 5HQ00017 | MCCIS Stabilisation and Enhancements |  |  |  |                        |    |    |    |      | FSA  |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP007062 | 01503061 | TRITON                               |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    | CAW |
| C2                       |            |           |          | CBRN COI Services                    |  |  |  | Capability Maturity -> |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       |            | Legacy    |          | NBCA/HPAC                            |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    |     |
| C2                       | Active     | NSP008753 | 01503078 | CBRN FS                              |  |  |  |                        |    |    |    |      |      |    |    |      |    |    |    |    |    |    | CAW |

Figure 31 an Extract of the Capabilities Implementation Schedule

Implementation projects that are active or planned for the time window 2015-2017 are included in this Capabilities Implementation Schedule. The projects are indicated by Serial number and name and grouped by the Capabilities they implements. Project planning information is presented o as lines with the following colour codes:

|   |                                     |
|---|-------------------------------------|
| i | Initial or immature                 |
| m | Intermediate                        |
| m | Mature capability                   |
| P | Project in pre-contract award phase |
| P | Project in development              |

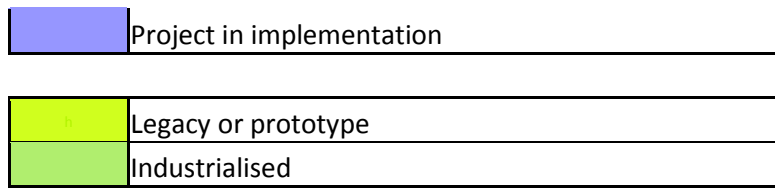


Figure 32 Project Colour Codes

Projects contain major milestones such as:

- PBD/SID – Project Baseline Document granted to Implementation Authority
- TBCE – Type B Cost Estimate is submitted to NOR
- CAW – Contract awarded to a selected bidder
- IOC – Interim Operational Capability – System
- FOC – Final Operational Capability - System is implemented, completed acceptance tests and has been handed over to the Operational Authority (ACO)

The capability colour code is related with its capability implementation status. This plan defines the maturity level of a capability in terms of what exists in the way of a capability that can be used by customers:

- No capability exists
- A Legacy or prototype/temporary capability exists: the capability is fulfilled with a temporary solution such as an operational prototype
- Basic: an initial capability exists, sufficient to be considered an Initial Operational Capability (IOC) fulfilled by the first increment
- Mature capability: a robust capability exists, sufficient to be considered a Full Operational Capability (FOC) when the last planned increment is delivered.

**Service Dependencies Plan – ANNEX E**

The report provide an integrated view of the Bi-SC AIS per service, including increment scope and dependencies identified with other services (FSs and CES).

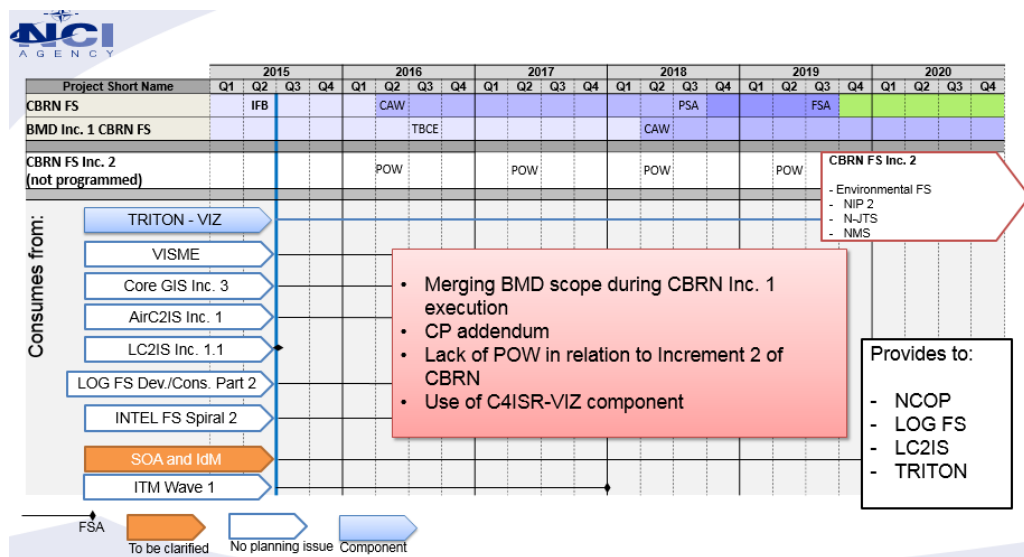


Figure 33 Service Dependencies

**Sites Deployment Plan - ANNEX F**

The Programme Deployment Plan gives a schedule overview of specific implementation activities within Bi-SC AIS for 2015 and 2017. It is included in the Annex I.

The table includes list of NATO locations as of today with the key information regarding the the ativities to be performed on these sites related to BI-SC AIS projects deployments. It provides details regarding location, project, expected deployment start date and deployment type (full installation, client only, remote access).

Programme Deployment Plan is a living document updated on regular basis. For some projects that are still before contract award stage, the details of implementation are generic. The report can be found on the Bi-SC AIS Programme Portal under the URL link:

[https://biscais.ncia.nato.int/dashboard/SitePages/Sites\\_Deployment.aspx](https://biscais.ncia.nato.int/dashboard/SitePages/Sites_Deployment.aspx)

| JFC Brunssum |                          | Start Date | Deployment        |
|--------------|--------------------------|------------|-------------------|
| 0IS03063     | NSP000353:INTEL FS Inc 1 | 4Q 2015    | Pilot             |
| 5IS03030     | NSP000885:NEDS           | 3Q 2015    | Full Installation |
| 5IS03031     | NSP000886:NIP            |            | Full Installation |
| 0IS03072     | NSP000921:NPKI           |            | Full Installation |
| 0IS03081     | NSP007062:TRITON         |            | Full Installation |
| 5HQ00593     | NSP007772:AirC2IS Inc 1  | 1Q 2015    | Full Installation |

Figure 34 an extract of the Site Deployment Plan

**5.3.1 Sites Deployment Scope (2015-2017) - ANNEX G**

This annex adds the following information to the previous plan: list of sites and projects indicating type of deployment (physical, remote) and the current status (planned, in progress, completed). The report can be found on the Bi-SC AIS Programme Portal under the URL link:

<https://biscais.ncia.nato.int/dashboard/SitePages/Sites%20Deployment%20Scope.aspx>

|                                       | AirCOM Ramstein and CAOC Uedem CIS | Poggio Renatico DAOCC CIS | CAOC Torrejon IOC | TOPFAS Incement 1.1 | INTEL FS Increment 1 | Core GIS Increment 2 |
|---------------------------------------|------------------------------------|---------------------------|-------------------|---------------------|----------------------|----------------------|
| 2nd NATO Signal Battalion Lago Patria |                                    |                           |                   |                     |                      |                      |
| ACO                                   |                                    |                           |                   |                     |                      |                      |
| AFC Heidelberg                        |                                    |                           |                   |                     |                      |                      |
| AFC Madrid                            |                                    |                           |                   |                     |                      | Physical             |
| AIRCOM Ramstein                       | Physical                           |                           |                   | Physical            | Physical             | Physical             |
| CAOC Torrejon                         |                                    |                           | Physical          |                     | Physical             |                      |

Figure 35 an extract of the Site Deployment Scope

Status:

|  |                            |
|--|----------------------------|
|  | - planned installation     |
|  | - installation completed   |
|  | - installation in progress |

## 6. PROGRAMME MANAGEMENT

A fundamental principle of good governance in public sector organisations is the maintenance of a clear separation between those who define requirements and those who implement them<sup>51</sup>. This section describes the current Bi-SC AIS programme management from the perspective of the Implementation Authority.

These arrangements are being adapted during 2014 to have them aligned with the NCI Agency's new structure and processes.

### 6.1 PROGRAMME GOVERNANCE CONTEXT WITHIN NCI AGENCY

The NCI Agency was established in July 2012 by merging the NC3A, NACMA, BMD, CIS support elements from NATO HQ, and NCSA (except deployable CIS). The NCI Agency operates as a coherent whole across all functional areas, with central staff providing policy, support and guidance to those personnel delivering capability and services directly to the customers. The NCI Agency acts as one team, ensuring seamless service delivery.

In accordance with the NCI Agency CONOPS 2014<sup>52</sup>, the NCI Agency organizational design was approved by the ASB in November 2013 and has been implemented with the entities indicated in the figure below:

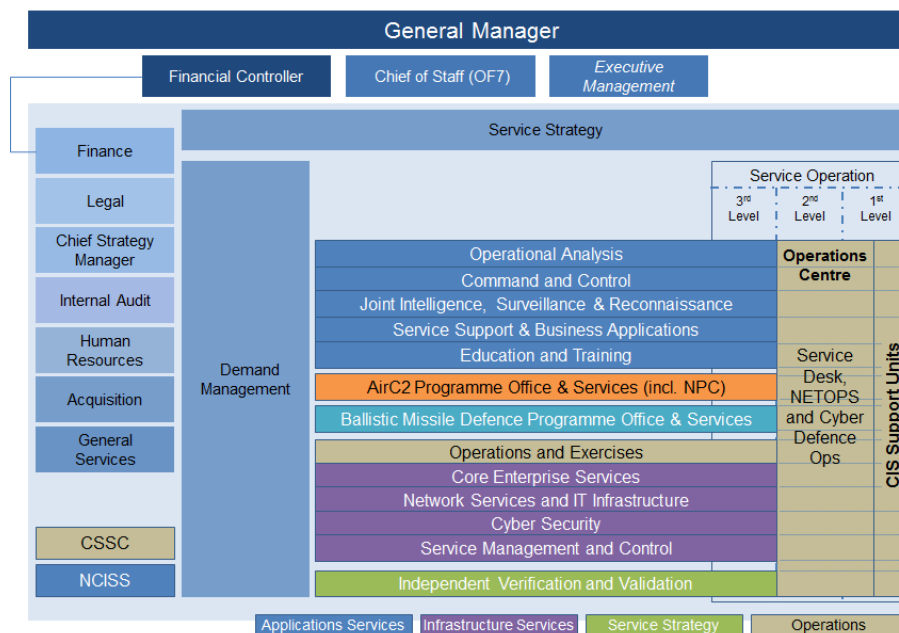


Figure 36 NCI Agency Organizational Design

<sup>51</sup> [DSG(2010)0014 Balancing Requirements and Resources - Need to Separate Requirement Setting from Implementation in the C4ISR Area, dated 14 Jan 2010.]

<sup>52</sup> [NCI Agency NCIARECCEN-4-18229, 2014]: NCIA CONOPS 2014.

The major elements of this structure considering the implementation planning perspective, are:

### **Demand Management**

Demand Management (DM) comprises the processes under Customer Relationship Management (CRM). During implementation of new services, DM represents customers for oversight of delivery against scope, funding, time and quality.

### **Service Strategy**

Service Strategy (SStrat) has Agency-wide accountability: SStrat is Design Authority and responsible for, technical coherence across all Agency elements, technical standards, Independent Testing and Validation Strategy, architectural control and Agency technical innovation.

### **Infrastructure and Application Service Lines (SL)**

Reporting to either the Director of Application Services (DAS), the Director of Infrastructure Services (DIS), each SL Chief is responsible, within his/her functional area, for:

- the lifecycle provision of CIS services and execution of assigned projects in their areas of responsibility, ensuring that the work of project managers, service managers and CSU commanders is coordinated
- the satisfactory delivery of assigned projects in time, cost, quality, and scope as executed by their Project Managers
- ensuring that all HW and SW purchased in support of Projects or SLAs delivering under their SL are in compliance with architecture requirements of the Director of Service Strategy (DSStrat).
- development of roadmaps for the future strategy for services in their SL (coordinated and approved by SStrat).
- controlling and/or monitoring the usage of all resources within their SL.
- and promoting a continual service improvement.

In order to ensure the coherent implementation of projects within a grouping of related projects, such as the Bi-SC-AIS or a group of infrastructure projects, two implementation offices will be established to ensure an overlay of programmatic management techniques. The Bi-SC AIS Implementation Office is one of them, reporting to DAS, under IC-funding, to provide programmatic management according to MSP for Bi-SC AIS projects.

### **Programme Offices and Services (PO&Ss)**

The Directors of the AirC2 and BMD PO&S are accountable for the delivery of their assigned Programmes. Directors of Programme Offices are accountable for the lifecycle provision of CIS services and execution of assigned projects in their area of responsibility, with the same criteria established for SLs under the Directors of Infrastructure and Application Services.

The Director of the **Ballistic Missile Defence (BMD) Programme Office and Services** is accountable for the execution, management and implementation of the BMD PO&Sprogramme.

The Director of **the Air Command and Control (AirC2) Programme Office** and Services is accountable for the execution, management and implementation of the AirC2 programme as well as other Air C2 capabilities and services, including ICC AirC2, AirC2IS (except implementation of increment 1). Following the implementation of the NCI Agency Organizational Structure in 2014, the AirC2 PO&S includes the former NATO Programming Centre (NPC).

### **Operations Centre**

The Operations (Ops) Centre comprises the Agency's Centralised Service Desk, Network Control Centre (NCC) and VTC Control Centre. It works closely with the Cyber Defence Operations Centre, which will be collocated with the NCC in the new Agency building in Mons post 2018. The Ops Centre Chief is responsible for meeting the service level requirements of the Centralised SLA as they apply to Incident, Event, Problem and Access management, and Service Request fulfilment, for which the Director of Infrastructure Services is accountable. **CIS Support Units (CSUs)**

The CSUs have no governance authority on Bi-SC AIS, but they are one of the main players in the field, interfacing customers. The CSUs are accountable for delivering the installation, operation, maintenance, protection, cyber security and support of CIS systems which are mainly part of the Bi-SC-AIS projects to provide services within the AOR and as defined in SLAs and other agreements.

### **NCI Agency Internal Governance**

Referring to NCI Agency Internal Governance, there are a number of boards and accountabilities in place that can be used to implement the strategy as the definition of end state governance is being completed. Much of the governance can be accomplished in the short term by the new Services Life Cycle Management Board (SLMB) with appropriate approval either by the Chief of Staff (COS) or the GM (General Manager) for some issues.

As outcome of all that the above, the resulting strategic documents will give the context required to review the Bi-SC AIS Programme's Governance.

As described in the previous section, SStrat has accountability for Agency-wide coherence. The Service Lifecycle Management Board (SLMB) is an internal facing board chaired by the Director of Service Strategy (DSSStrat) with permanent representation from all Directors and attendance by other staff members as required in order to conduct its business.

Four new Boards aimed at resolving issues at the working level and chaired at the A5 level, report to the SLMB. Each board is entitled to make decisions when there is unanimous consent by voting members:

- Service Performance Management Board
- Internal Architecture and Design Review Board
- Project Boards (Multiple instances)
- Service Change Control Approval Board

## 6.2 BI-SC AIS PROGRAMME GOVERNANCE

Given the complex set of stakeholders, policies, and resourcing arrangements within which the scope of the Bi-SC AIS projects must be implemented, the Programme governance involves an equally complex set of committees, boards, working groups, panels and other bodies involving NATO and national organizations. The principal governance stakeholders and bodies are described in this section.

According with NCI Agency CONOPS 2014 v2.0 all Directorates and Programme Offices are subject to the same Agency processes, external governance and management controls.

### 6.2.1.1 NCI Agency Supervisory Board (ASB)<sup>53</sup>

The Agency Supervisory Board (ASB) is the governing body of the NCIO responsible for general policy decisions, developing directives to enable NCIO to carry out its mission and controlling their implementation. The NCI Organisation Charter establishes the NCI Agency and outlines its roles and responsibilities, and is intended to be adapted as Nations agree to the formal scope and governance arrangements for programmes managed by the NCI Agency.

### 6.2.1.2 NATO Resource Community

Although the work of the Bi-SC AIS implementation office is principally in support of the NATO Security Investment Programme (NSIP), its activities are governed and affected by the entire NATO resource community.

- NATO Investment Programme (NSIP)
- NATO Resource Policy and Planning Board (RPPB)
- Investment Committee (IC)
- NATO Office of Resources (NOR)

#### **NATO Security Investment Programme (NSIP)**

This programme provides the funds for the development, construction and implementation of facilities that are required by the Strategic Commands to complete their missions, but that are not provided by the member nations.

The NSIP is financed by the Defence Budgets of each member country and is controlled by the Investment Committee. Projects are implemented either by individual host countries or by different NATO agencies and strategic commands, according to their area of expertise.

#### **NATO Resource Policy and Planning Board (RPPB)**

The NATO Resource Policy and Planning Board (RPPB) is a subsidiary body of the North Atlantic Council. The Board has a lead policy and planning role in all NATO military common funded resource areas. The RPPB addresses issues related to the eligibility of programmes for

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<sup>53</sup> C-M(2012)0049 ANNEX 1, Charter of the NATO Communications and Information Organization (NCIO), dated 14 June 2012.

common funding and expects the programme's plans to be in line with the Mid- and Long-term financial and resource plans presented to the nations by the Strategic Commands and NATO organizations.

In consonance with the direction of the Defence Ministers from their February 2010 meeting, the RPPB is increasingly concerned about the link between investment and operations and maintenance (O&M) costs. The need to identify the Total Cost of Ownership (TCO) of Bi-SC AIS capabilities and to provide a convincing business case is now a standing requirement for the Type B Cost Estimates for new projects and for requests for major changes of scope.

#### **Investment Committee (IC)**

The Investment Committee (IC) is responsible, within the guidance and direction on resource issues provided by the RPPB, for the NATO Security & Investment Programme (NSIP). The IC comprises all 28 nations, and representatives of the Strategic Command and Agencies. The IC authorises project proposals brought to it by the NATO International Staff. There are voting and non voting members, and not all 28 Nations vote on all programmes.

The Implementation Management Procedure for NSIP projects was updated in July 2011. The new procedure requires Host Nations to provide more timely notification of changes in project milestones and expenditure forecasts, and supporting these new reporting requirements will be a task for the Implementation Office in 2014.

#### **NATO Office of Resources (NOR)**

The NATO Office of Resources (NOR) brings together all international staff working on NATO military common-funded issues to support the delivery of common-funded capabilities and to strengthen resource management across the Alliance.

The NOR provides integrated staff advice and support to the Secretary General, NATO Resource Committees (Resource Policy and Planning Board (RPPB), the Budget Committee (BC) and the Investment Committee (IC)), other IS Divisions and the NATO bodies on the planning, allocation, and utilization of military common funding for the command structure, operations and missions, and strategic capabilities.

The NOR is a key stakeholder in the process of planning Bi-SC AIS projects, as they can provide valuable advice on resource policies and on the expectations of nations toward resourcing, implementation, and procurement options developed in the programming and initiation stage of projects.

#### **6.2.1.3 NATO C3 Board (NC3B)**

The NATO Consultation, Command and Control Board (NC3B) is the senior multinational body acting on behalf of and responsible for advising the North Atlantic Council (NAC) and Defence Planning Committee (DPC) on all C3 policy matters including the interoperability of

NATO and national C3 systems, and for advising the Conference of National Armaments Directors on C3 cooperation programmes.<sup>54</sup>

#### **NATO Headquarters C3 Staff (NHQC3S)**

The NHQC3S supports the NC3B in the development, coordination and communication of NATO C3 policies. Given its ability to liaise between CIS policy and implementation activities, its participation in the C3CMB, PMG and IPSGs is a critical enabler for these governance mechanisms.

##### *6.2.1.4 NATO Bi-SC AIS Programme Steering Bodies*

To complement the C3, resource, military and other governance bodies on which nations are represented, a structure of governance bodies has been set up to coordinate Bi-SC AIS plans, raise issues, and steer programme implementation among the principal NATO stakeholders.

#### **Programme Management Group (PMG)**

The Programme Management Group has five members:

- ACT and ACO act as co-chairs, representing the Transformation and Operational Authorities
- NCI Agency
- NATO Office of Resources (NOR) representative
- NATO HQ C3 Staff representative

The PMG oversees the five established Integrated Project Steering Groups (IPSGs):

- IPSG CES (Core Enterprise Services), covering information services
- IPSG CIS Security including Cyber Defence
- IPSG Comms, covering network and transmission services
- IPSG DCIS, covering deployable CIS capabilities
- IPSG SMC, covering service management and control

The PMG addresses issues that cannot be resolved within IPSGs and provides direction for dealing with matters that cut across IPSGs. Recent examples include the decision to establish a single consolidated Programme Management Office supporting the SCs and the decision to initiate a project for an enterprise-level end-to-end Service Management and Control Target Architecture.

#### **Integrated Projects Steering Group (IPSG)**

The IPSG is a part of the C3 Governance substructure and reports to the Bi-SC Programme Management Group (PMG).

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54 Charter for the NATO C3 Organization, C-M(2005)0036 dated 27 April 2005 , NATO Handbook, Part III "NATO's civilian and military structures", Chapter 12 "Key to the principal NATO committees and policy bodies" , NATO Handbook.

The IPSG, co-chaired by HQ ACT C2DS and SHAPE J6, addresses issues raised by the individual authorities and actions assigned by the C3 CMB in its role as Programme Steering Group.

The IPSG is specifically responsible for

- Providing overall strategic guidance for the projects, resource prioritisation, requirements' clarification and operational guidance,
- Reviewing Project start-up, exceptions and closure
- Exercising Programme Management oversight across the full life cycle
- Coordinating all major plans and schedules, and all deviations from them, as required,
- Coordinating risk management,
- Ensuring that quality assurance is in place,
- Providing advice and direction to the Project Manager(s),
- Escalating unresolved issues, conflicts or matters impacting on other projects or programmes to the PMG,
- Communicating information about the projects to the stakeholders

The IPSG CES is the primary steering group for coordination and preparation of the BAIP.

#### **Integrated Project Management Teams (IPMTs)**

The lowest level of the programme governance structure is the Integrated Project Management Team established for each implementation project. Chaired by the responsible NCI Agency Project Manager, the IPMT includes representatives from each of the affected offices in the Transformation, Operations, and Service Provisioning authorities. Often, as in the case of COI service projects, representatives include both the CIS staff and the affected functional staffs.

The purpose of the IPMT is to ensure the effective coordination of project planning and execution. It is responsible for change management within the project's approved scope and for identifying, resolving or escalating issues affecting the project.

The major roles of an **Integrated Project Management Team (IPMT)** are to:

- Manage project progress against cost and time
- Propose scope changes to the contract(s)
- Serve as the project's Configuration Control Board
- Act as a forum for requirements and change management
- Perform Risk management assessment
- Agree service and project interfaces

- Act as a Co-ordination group to other NATO or national bodies within the project scope.

### 6.3 BI-SC AIS PROGRAMME MANAGEMENT

As the CONOPS 2014 refers, the Bi-SC AIS projects group requires an implementation office to ensure the coherent services implementation between different service lines that together achieve outcomes and realise the Bi-SC AIS programme vision.

The overall management responsibilities for Bi-SC AIS implementation projects are assigned to the Bi-SC AIS implementation Office.

#### 6.3.1 Bi-SC AIS Implementation Office

Within the **Bi-SC AIS Implementation Office (IO)**, the following roles and functions are defined:

**Programme Manager.** The Bi-SC AIS Programme Manager is responsible for facilitating coherent, effective and integrated Bi-SC information services fulfilling the Minimum Military Requirements in a timely manner.

He is responsible to lead the following activities:

- Managing dependencies between projects
- Responsibility for ensuring that programme activities comply with NATO and NCI Agency policies, guidelines, and processes
- Coordinating with other Management Authorities. Coordinating with related programmes
- Provide day-to-day programme management
- Plan and monitor programme implementation with the support of the PMIC

**PMIC** is the centre and information hub of the programme. All information, communication, monitoring and control activities for the programme are coordinated through the PMIC, operating as a programme and project support office (PPSO). As described in The Programme and Project Management Support Office Handbook,<sup>55</sup> a PMO or programme and project support office provides an organisation with the means to:

Maintain, update, and extend the scope of the programme and project **support infrastructure**;

- Support the **planning** of the programme and projects;
- Support the **monitoring and control** of the programme and projects;

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<sup>55</sup> Marsh, D. The Project and Programme Support Office Handbook: Foundation v. 1, 2000,

- Ensure the programme and projects have the required **technical and business integrity**;
- Provide a **repository** for the experience and knowledge gained; and
- **Audit** the use of the programme and project support infrastructure.

### 6.3.2 Programme Management and Integration Capability (PMIC) Services

This section describes the functions of the PMIC in support of the Bi-SC AIS programme.

#### 6.3.2.1 PMIC Programme Management Support Capabilities

PMIC is a combination of management support—functions like risk management and integrated scheduling — and technical support. We need both types of support because both aspects are involved in most of the issues that must be dealt with. PMIC provides the NCI Agency with the resources and tools it needs to be effective in carrying out its responsibilities as the Implementation Authority for the Bi-SC AIS programme. PMIC is managing and supporting different areas for the general Programme Management.

The Bi-SC AIS Programme was not created through a systematic process in line with any formal programme management methodology. Consequently, most of the elements of the programme's definition must be developed retroactively through reference to NATO political and military guidance. One of PMIC's main goals is to establish a solid Programme definition to enable effective governance through the Programme Brief establishment aligned with the programme's strategic context.

The Bi-SC AIS plan— provides a common implementation view of the Bi-SC AIS and serves as a management tool by explaining how projects are scoped, scheduled, and delivered. Together with the Project Dossiers, this plan collects summary information from all identified projects, whether planned or active.

Identifying and managing dependencies among projects and on activities outside the programme are especially relevant as a key function of programme management.

As the Bi-SC AIS evolves into a service-oriented architecture, many changes come in the form of new capabilities being delivered by individual projects.

The primary programme goals from the change perspective are to ensure that:

Programme and project changes affecting the programme level are identified and evaluated. An impact analysis is then provided to the Programme Implementation Board and assigned for resolution.

Programme changes impacting the project's scope, schedule or quality will go through the change management process

In contrast to plan-based progress management, risk (proactive) and issue (reactive) management addresses unplanned events to be encountered during projects execution in scope of the programme. Both processes are carried out in parallel on the programme- and project-level.

The Risk Management function will allow transfer of identified risks / issues to the Bi-SC AIS Programme level (Bi-SC AIS Risk / Issue Management Team), to the individual projects as well as vertically to other Management Authorities. The IA Risk Register and Issue Register have been created and are being maintained.

The Programme Master Schedule (PMS) is a one-page, overall schedule that summarizes the programme effort. The PMS consolidates all projects within the Bi-SC AIS programme aggregated to the level of major milestones. It contains current information regarding achieved milestones and forecasts of projects.

The details of the **Programme Roadmap** can be found in Annex C.

From a technical perspective, Configuration Management is focused on managing Programme and Project assets. Within this context, assets are identified as Configuration Items (CIs), stored or referenced in Configuration Management Repositories within PMIC's tools (DOORS, POTR and RFP).

The Configuration Management Plan describes the CM organization and practices applied consistently and uniformly throughout the life cycle for configuration items (CIs) that are developed or maintained by the Bi SC AIS programme.

The Programme Communication Plan provides the information on how the Programme is communicating to the different stakeholders. The Bi-SC AIS Portal (<https://biscais.ncia.nato.int/default.aspx>) is the main channel of Programme Communication to stakeholders. Information such as Project Status, Schedule overview, risks or issues is available and accessible on the NU Domain.

#### 6.3.2.2 *PMIC Integration Support Capabilities*

The lack of integration among Bi-SC AIS capabilities was the primary concern that led the nations to push the NCI Agency to develop the PMIC concept. Because the resources for implementation of Bi-SC AIS capabilities are authorised and controlled at the project level, programme-level integration is more challenging than it would be in a situation where the programme manager had the ability to control and direct resources at a programme level.

PMIC is designed to work within existing policies and procedures. To ensure projects deliver capabilities that can be integrated easily and with a high level of assurance, PMIC's integration support capabilities address integration across the full project life cycle.

The Architecture Management capabilities of PMIC are designed to align Bi-SC AIS service implementation with the overarching guidance of the NNEC vision, tenets and principles and the architecture framework managed by the NC3B and executed by ACT through its production of Reference Architectures and C3 Service Taxonomy.

PMIC aims to do this by establishing a programme service implementation model (consisting of architectural descriptions in a tool, so they are reusable and maintainable), as well as by organizing communication and supporting governance processes around services and architecture. This should help to achieve a consistent implementation of the service architecture.

The architecture repository contains the models to enable planning of service implementation and service re use, and to track dependencies between services, projects, information products, requirements and applications.

The main concern of PMIC Requirements Management area is programme requirements.

Programme Requirements can be derived from an operative (business) requirement, an Information Exchange Requirements (IER) and Non Functional Requirements (NFR).

The Bi-SC AIS Integration Testbed operates as the one-stop shop for testing against the Bi-SC AIS implementation baseline. By hosting all of the information services and systems that comprise the Bi-SC AIS, the Integration Testbed can:

- Provide Purchaser-furnished equipment and test data to project contractors during development, integration, and acceptance testing
- Provide support to National and other NATO test events on an as-available basis
- Maintain configuration-controlled baselines of all Bi-SC AIS deliverables and components
- Maintain the Programme Test Plan

The Programme Test Plan identifies all the development and test support requirements of Bi-SC AIS projects. At the start of each new project, the Programme Test Manager uses the **ASIA** and the Programme Roadmap to identify the services it will require during its development and test cycles. The plan is updated through project initiation and authorisation. Then, when the contract is awarded, the Testbed is ready with all the necessary services and data, ensuring the project can stay on schedule.

Whenever a project delivers a new service baseline, a record copy is kept in Programme Configuration Management to ensure that it will be available whenever another project needs it.


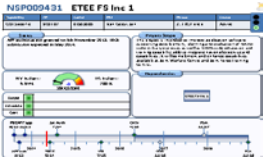

The programme-level quality management is based on the NSIP projects life-cycle procedures, while having all Management Authorities involved to make sure that – starting from strategic concept level, through capabilities, high-level requirements to function level – appropriate structure of projects, their products and related acceptance criteria are set to enable delivery of Bi-SC AIS programme benefits in line with acknowledged expectations.

The PMIC IV&V function is a systemic way for the programme to put Quality Assurance for Projects in place. It provides all verification and validation services required to support Bi-SC AIS projects.

The PMIC Transition Management function is waiting that the new Agency has finalised its new structure to put in place the new processes that need to be implemented for the transition between the implementation and support activities. The former processes are on-going and are related to but different from the Joint Final Acceptance Inspection. It was agreed to use a standard handover checklist that identifies activities and deliverables at every stage of a project that are required to enable the handover.

**6.3.3 Bi-SC AIS Artifacts for Monitoring And Control**

Finally, this section highlights the major artifacts used to monitor and control the status of projects and services in order to facilitate a proactive governance within the Bi-SC AIS Implementation Office (see table below).

|                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Annex H: Programme Phase Overview</b></p> <p><a href="https://biscais.ncia.nato.int/AS/Pages/AS_Phase_Overview.aspx">https://biscais.ncia.nato.int/AS/Pages/AS_Phase_Overview.aspx</a></p>                                                     |                                                                                                                                                                                                                                   |
|                                                                                                                                                                     | <p>This report provides information on the status of the active and programmed projects depicting their stage in the NSIP project lifecycle.</p>                                                                                  |
| <p><b>Annex I: Projects Dossier</b></p> <p><a href="https://biscais.ncia.nato.int/library/Reports/Project%20Dossier/Project_Slide_NSP009431.pdf">https://biscais.ncia.nato.int/library/Reports/Project%20Dossier/Project_Slide_NSP009431.pdf</a></p> |                                                                                                                                                                                                                                   |
|                                                                                                                                                                    | <p>This annex provides summary information of all identified projects, whether programmed or currently active within the Bi-SC AIS Programme. It also details the relevant information of individual implementation projects.</p> |
| <p><b>Annex J: Projects Progress Status</b></p> <p><a href="https://biscais.ncia.nato.int/AS/Pages/AS_Projects_Status.aspx">https://biscais.ncia.nato.int/AS/Pages/AS_Projects_Status.aspx</a></p>                                                   |                                                                                                                                                                                                                                   |
|                                                                                                                                                                   | <p>The annex includes table-based information on the expected and accomplished milestones within the Bi-SC AIS Projects Dossier</p>                                                                                               |

## APPENDIX A

These annexes can be also found in the portal [Bi-SC AIS Implementation Version 7](#) as pdf format.

- **Annex A: Capability Packages List (ref. Chapter 3)**
- **Annex B: Capability Package Presentation (CP-projects) (ref. Chapter 3)**
- **Annex C: Roadmap Plan (2015-2017) (ref. Chapter 5)**
- **Annex D: Capability Implementation Schedule (ref. Chapter 5)**
- **Annex E: Service Dependencies Plan (2015-2017) (ref. Chapter 5)**
- **Annex F: Sites Deployment Plan (2015-2017) (ref. Chapter 5)**
- **Annex G: Sites Deployment Scope (2015-2017) (ref. Chapter 5)**
- **Annex H: Programme phase Overview (ref. Chapter 6)**
- **Annex I: Projects Dossier (ref. Chapter 6)**
- **Annex J: Projects Progress Status (ref. Chapter 6)**

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## REFERENCES

1. NCIA Directive 1, *NCI Agency Executive and Supporting Structures*, Rev.1, dated 3 May 2013
2. NCI Agency NCIARECCEN-4-18229, 2014: CONOPS 2014, dated 20 December 2013
3. 5000 TSC FRX 0030/TT-8532/Ser:NU0047, *A summary of the 2012 BI-SC Capability development priorities*, dated 26 October 2012
4. C-M(2012)0096, *Military Committee (MC) advice on the Future Mission Network (FMN) Concept*, dated 30 November 2012
5. Chicago Summit Declaration : [http://www.nato.int/cps/en/SID-2639914C-153B6347/natolive/official\\_texts\\_87593.htm?selectedLocale=en](http://www.nato.int/cps/en/SID-2639914C-153B6347/natolive/official_texts_87593.htm?selectedLocale=en)
6. NATO Secretary General outlines Smart Defense proposals:  
<http://natosource.tumblr.com/post/18622754681/nato-secretary-general-outlines-smart-defence-proposals>
7. AC/337-N(2014)0030-REV2, *NCIA 2013 Annual Report – Revised Executive Summary*, dated 26 May 2014
8. TR-2012/NCA008822/01, *NATO IT Modernization Study Deliverable P1.1 Baseline*, dated 16 August 2012
9. 5000 FCX 0030/TT-8717/Ser: NR0065, *Future Mission Network Concept*, dated 17 October 2012
10. Tidepedia - Federated Mission Networking (FMN) Portal:  
[http://tide.act.nato.int/tidepedia/index.php?title=Future\\_Mission\\_Network\\_\(FMN\)\\_Portal](http://tide.act.nato.int/tidepedia/index.php?title=Future_Mission_Network_(FMN)_Portal)
11. Tidepedia – Future Mission Network (FMN) Concept:  
[http://tide.act.nato.int/tidepedia/index.php?title=Future\\_Mission\\_Network\\_\(FMN\)\\_Concept](http://tide.act.nato.int/tidepedia/index.php?title=Future_Mission_Network_(FMN)_Concept)
12. Tidepedia – On 29 January 2015, the NATO Federated Mission Networking Implementation Plan (NFIP) V 4.0 was approved by the North Atlantic Council (NAC) [Ref. C-M(2015)0003-AS1, dated 30 Jan 2015]
13. 5000/TSC-FCX-0010/TT/8870/Ser:NU0862, *NATO Federated Mission Networking Implementation Plan- Volume I. FMN Implementation Overview*, dated 17 December 2013
14. Press Release (2012) 064, *Summit Declaration on Defence Capabilities: Toward NATO Forces 2020*, dated 20 May 2012.
15. TR-2013/MNT009246/01, *Feasibility Study on Multinational NATO Software Tools (MN NST FS)*, dated November 2013
16. 5000 TSC MFX 0240/TT-7612/Ser:N0027, *Bi-SC Submission of Capability Package 9C0150 “Core Information Services for Command and Control”*, dated 17 Aug 2011

17. 3050/SH/CCD CIS/CAR/335/13-301388, *Bi-SC Statement of Requirement for Bi-SC AIS Service Employment in 2016*, dated 11 February 2013
18. 5000 TSC MFX 0240/TT-8964/Ser NR0004, *Bi-SC AIS Service Employment in Support of the NATO Command Structure – Resource Update*, dated 1 February 2013
19. *NCIA Air C2 System Harmonization Task Force Report*, dated January 2013
20. DSG(2010)0014, *Balancing Requirements and Resources - Need to Separate Requirement Setting from Implementation in the C4ISR Area*, dated 14 Jan 2010.
21. C-M(2012)0049 ANNEX 1, Charter of the NATO Communications and Information Organization (NCIO), dated 14 June 2012.
22. Charter for the NATO C3 Organization, C-M(2005)0036 dated 27 April 2005 , NATO Handbook, Part III "[NATO's civilian and military structures](#)", Chapter 12 "Key to the principal NATO committees and policy bodies" .
23. Marsh, D., *The Project and Programme Support Office Handbook: Foundation v. 1*, 2000
24. NCIARECCEN-4-26092 Release Management
25. NCIARECCEN-4-26093 Deployment Management
26. NCIARECCEN-4-32346 Change Directive
27. The Wales Summit Declaration:  
[http://www.nato.int/cps/ic/natohq/official\\_texts\\_112964.htm](http://www.nato.int/cps/ic/natohq/official_texts_112964.htm)
28. <https://intranet.nr.ncia/articles/Pages/150430-ITMod-IFB.aspx>
29. <https://intranet.nr.ncia/articles/Pages/140506-NATO%20FMN.aspx>
30. <https://intranet.nr.ncia/articles/Pages/140506-NATO%20FMN.aspx>
31. <https://intranet.nr.ncia/articles/Pages/150430-ITMod-IFB.aspx>
32. <https://intranet.nr.ncia/articles/Pages/140506-NATO%20FMN.aspx>
33. <https://intranet.nr.ncia/articles/Pages/140506-NATO%20FMN.aspx>
34. AC/4-N(2014)0034: Software Intensive Projects Task Force Final Report, 31 October 2014
35. AC/4-N(2014)0034-ADD1: SIP TF Final Report – Practical Application of Recommendations, 08 December 2014
36. AC/4-N(2015)0009 (27 April 2015)
37. AC/4-N(2015)0009 - ENCLOSURE 1: RESPONSE TO RECOMMENDATIONS ASSIGNED TO SCs
38. THE NEW NATO COMMAND STRUCTURE IN ALLIED COMMAND OPERATIONS - IMPLEMENTATION REPORT (13 May 2015)

**ABBREVIATIONS**

|        |                                                |
|--------|------------------------------------------------|
| AC2IS  | Air Command and Control Information Services   |
| ACCS   | Air Command and Control System                 |
| ACO    | Allied Command Operations                      |
| ACT    | Allied Command Transformation                  |
| AD     | Active Directory                               |
| AGS    | Alliance Ground Surveillance                   |
| AHR    | Alliance Replication Hub                       |
| AIFS   | ACE Information Flow System                    |
| AIMS   | ACE Information Messaging System               |
| AIS    | Automated Information System                   |
| ALTBMD | Active Layer Theatre Ballistic Missile Defence |
| AMN    | Afghanistan Mission Network                    |
| ANWI   | Active Network Infrastructure                  |
| AOM    | Alliance Operations and Missions               |
| APF    | Advanced Planning Founds                       |
| APMS   | Automated Personnel Management Services        |
| ARH    | Alliance Replication Hub                       |
| ASB    | Agency Supervisory Board                       |
| ASIA   | AIS Service Implementation Architecture        |
| ASOC   | Air Support Operation Centre                   |
| ATMB   | AIS Transition Management Board                |
| BAIP   | Bi-SC AIS Implementation Plan                  |
| BAPPL  | Bi-SC AIS Procurement Product List             |

|            |                                                                |
|------------|----------------------------------------------------------------|
| BATSG      | Bi-SC AIS Transition Steering Group                            |
| BICC       | BICES Initial Core Capability                                  |
| Bi-SC      | Bi-Strategic Command                                           |
| Bi-SC AIS  | Bi-SC Automated Information System                             |
| BISCIT     | Bi-SC CIS Information Technology (Co-ordination Group)         |
| BMD        | Ballistic Missile Defence                                      |
| BOD        | Board of Directors                                             |
| BRASS      | Naval Broadcast And Ship-Shore Services                        |
| C&I Agency | Communication and Information Agency                           |
| C2ISR      | Command Control Intelligence Surveillance and Reconnaissance   |
| C3CMB      | C3 Capability Management Board                                 |
| C4I        | Command and Control, Communications, Computer and Intelligence |
| CAOC       | Coalition Air Operation Center                                 |
| CAW        | Contract Award                                                 |
| CBT        | Computer Based Training                                        |
| CBRN       | Chemical, biological, radiological and nuclear                 |
| CC         | Component Command                                              |
| CDDSS      | Cyber Defence Decision Support System                          |
| CDR        | Critical Design Ready                                          |
| CE         | Crisis Establishment                                           |
| CES        | Core Enterprise Service                                        |
| CFI        | Connected Forces Initiative                                    |
| CIA        | Component Implementation Architecture                          |

|        |                                                  |
|--------|--------------------------------------------------|
| CIS    | Communication and Information Systems            |
| CJTF   | Combined Joint Task Force                        |
| CM     | Configuration Management                         |
| CMB    | Configuration Management Board                   |
| CMRE   | Centre for Maritime Research and Experimentation |
| CNAD   | Conference of National Armaments Director        |
| CMS    | Configuration Management System                  |
| CMDB   | Configuration Management DataBase                |
| COI    | Community of Interest                            |
| CONOPS | Concept Of Operations                            |
| CONOS  | Concept Of Operational Support                   |
| COP    | Common Operational Picture                       |
| COS    | Chief of Staff                                   |
| COTS   | Commercial Off The Shelf                         |
| CP     | Capability Package                               |
| CPO    | Civilian Personnel Office                        |
| CR     | Change Request                                   |
| CRAMM  | CCTA Risk Analysis and Management Method         |
| CRO    | Crisis Response Operation                        |
| CS     | Core Service                                     |
| CSA    | Component Service Architecture                   |
| CSRS   | Community Security Requirements Statement        |
| CTO    | Chief Technology Office                          |
| CTAC   | Cyber Threat assesment Cell                      |

|          |                                                                                                                   |
|----------|-------------------------------------------------------------------------------------------------------------------|
| CUR      | Crisis Response Operation (CRO) Urgent Requirements                                                               |
| DAS      | Director of Application Services                                                                                  |
| DC       | Data Centers                                                                                                      |
| DCAOC    | Deployable Coalition Air Operation Center                                                                         |
| DCIS     | Deployable Communication and Information Systems                                                                  |
| DEU      | Germany                                                                                                           |
| DIS      | Director of Infrastructure Services                                                                               |
| DM       | Demand Management                                                                                                 |
| DMS      | Document Management Services                                                                                      |
| DOP      | Director of Production                                                                                            |
| DOTMLPFI | Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, Facilities and Interoperability. |
| DPC      | Defence Planning Committee                                                                                        |
| EDMS     | Electronic Document Management Services                                                                           |
| EMS      | Enterprise Management Services                                                                                    |
| EOB      | Enemy Order of Battle                                                                                             |
| EPOW     | Experimentation Programme of Work                                                                                 |
| ESP      | Spain                                                                                                             |
| ETEE     | Education, Training, Exercise and Evaluation                                                                      |
| FAS      | BIFunctional Service                                                                                              |
| FMN      | Future Mission Network                                                                                            |
| FMN      | Federated Mission Networking                                                                                      |
| FOC      | Full Operational Capability                                                                                       |
| FrOB     | Friendly Order of Battle                                                                                          |
| FS       | Functional Service                                                                                                |

|      |                                           |
|------|-------------------------------------------|
| FSA  | Final Service Acceptance                  |
| GBR  | United Kingdom                            |
| GIS  | Geographical Information Services         |
| GM   | General Manager                           |
| HLR  | High Level Requirements                   |
| HN   | Host Nation                               |
| HQ   | Headquarter                               |
| HVAC | Heating, ventilation and Air Conditioning |
| HW   | Hardware                                  |
| IA   | Information Assurance                     |
| IA   | Implementation Authority                  |
| IaaS | Infrastructure as a Service               |
| IAMD | Integrated Air and Missile Defence        |
| IATO | Interim Approval To Operate               |
| IC   | Infrastructure Committee                  |
| ICB  | International Competitive Bidding         |
| ICD  | Interface Control Document                |
| ICG  | Implementation Coordination Group         |
| ICOP | Initial Common Operational Picture        |
| ICT  | Information and Communications Technology |
| IDGM | Interim Deputy General Manager            |
| IDM  | Identity Management                       |
| IDS  | Intrusion Detection Services              |
| IEG  | Information Exchange Gateway              |

|         |                                                |
|---------|------------------------------------------------|
| IER     | Information Exchange Requirements              |
| IFB     | Invitation for Bidding                         |
| IFTS    | Interim Force Tracking System                  |
| IGEOSIT | Interim GeoSpatial Intelligence Tool           |
| ILSP    | Integrated Logistics Support Plan              |
| IOC     | Initial Operational Capability                 |
| IPB     | Intelligence Preparation of the Battle-space   |
| IPMT    | Integrated Project Management Team             |
| IPR     | Intellectual Property Rights                   |
| IPSG    | Integrated Programme                           |
| IPT     | Integrated Programme Team                      |
| IS      | Information Service                            |
| ISAF    | International Security Assistance Force        |
| ISM     | Information Services Module                    |
| ISP     | Implementation Specification Package           |
| IT      | Information Technology                         |
| ITA     | Italy                                          |
| ITB     | Integrated Test-bed                            |
| ITIL    | Information Technology Infrastructure Library  |
| ITM     | IT infrastructure Modernization                |
| IWG     | Implementation Working Group                   |
| JALLC   | Joint Analysis and Lessons Learned Center      |
| JC2IS   | Joint Command and Control Information Services |
| JFAC    | Joint Forces Airs Command                      |

|         |                                                    |
|---------|----------------------------------------------------|
| JFAI    | Joint Formal Acceptance Inspection                 |
| JFC     | Joint Forces Command                               |
| JFTC    | Joint Force Training Centre                        |
| JHQ     | Joint Headquarter                                  |
| JISR    | Joint Intelligence Surveillance and Reconnaissance |
| JSSR    | Joint Staff Screening Report                       |
| JWC     | Joint Warfare Centre                               |
| LAN     | Local Area Network                                 |
| LAPD    | Logical Architecture Perspective Documents         |
| LC2IS   | Land Command and Control Information Services      |
| LCE     | Last Cost Estimate                                 |
| LCWG    | Life Cycle Working Group                           |
| LINC    | Limited Interim NRF Capability                     |
| LoA     | Level of Ambition                                  |
| LTX     | Leased Transmission Services                       |
| MBC     | Military Budget Committee                          |
| MC      | Military Committee                                 |
| MC2IS   | Maritime Command and Control Information Services  |
| MCCIS   | Maritime Command and Control Information Services  |
| MCM     | Mine Counter Measure                               |
| MF      | Military Function                                  |
| MMR     | Minimum Military Requirements                      |
| MNDs/Bs | Multi National Divisions/Brigades                  |
| MN NST  | Multinational NATO Software Tools                  |

|           |                                                           |
|-----------|-----------------------------------------------------------|
| MOA       | Memorandum of Agreement                                   |
| MOB       | Main Operating Base                                       |
| MP-RTIP   | Multiplatform radar technology insertion programme        |
| MTD       | Mission Task Decomposition                                |
| MWA       | Memorandum of Working Agreement                           |
| NA        | Not Applicable                                            |
| NAC       | North Atlantic Council                                    |
| NACMA     | The NATO Air Command and Control System Management Agency |
| NAF       | NATO Architecture Framework                               |
| NATO IS   | NATO International Staff                                  |
| NC3 Board | NATO Consultation, Command and Control Board              |
| NC3A      | NATO Consultation, Command and Control Agency             |
| NCI       | NATO Communications Infrastructure                        |
| NCIO      | NATO Communications & Information Organization            |
| NCIRC     | NATO Computer Incident Response Capability                |
| NCOIC     | Network Centric Operations Industry Consortium            |
| NCS       | NATO Command Structure                                    |
| NCSA      | NATO CIS Services Agency                                  |
| NDPP      | NATO Defence Planning Process                             |
| NEDS      | NATO Enterprise Directory Services                        |
| NFIP      | NATO FMN Implementation Plan                              |
| NIS       | NATO First Solution (NIS)                                 |
| NGCS      | NATO General Communication Services                       |
| NII       | NATO Information Infrastructure                           |

|      |                                             |
|------|---------------------------------------------|
| NIM  | NATO INFOSEC Management                     |
| NIMP | NATO Interoperability Management Plan       |
| NIP  | NATO Information Portal                     |
| NITB | NATO Intelligence Toolbox                   |
| NMA  | NATO Military Authorities                   |
| NML  | NATO Maturity Level                         |
| NMM  | NAF Meta Model                              |
| NMS  | NATO Messaging Services                     |
| NNEC | NATO Network Enabled Capability             |
| NOR  | NATO Office of Resources                    |
| NOR  | Norway                                      |
| NOS  | NATO Office of Security                     |
| NPC  | NATO Programming Center                     |
| NPKI | NATO Public Key Infrastructure              |
| NR   | NATO Restricted                             |
| NRF  | NATO Response Forces                        |
| NROI | NATO Restricted Over the Internet           |
| NS   | NATO Secret                                 |
| NSA  | NATO Standardization Agency                 |
| NSAB | NATO Security Accreditation Board           |
| NSII | NATO Secure Information Exchange Interfaces |
| NSIP | NATO Security Investment Programme          |
| NU   | NATO Unclassified                           |
| NURC | NATO Undersea Research Center               |

|      |                                                 |
|------|-------------------------------------------------|
| O&M  | Operations and Maintenance                      |
| OA   | Operational Authority                           |
| OCD  | Operational Concept Document                    |
| OSS  | Operational Services Support                    |
| OSSP | Operational Services Support Plan               |
| OSWG | Operational Support Working Group               |
| OUG  | Operational User Group                          |
| PBD  | Project Baseline Document                       |
| PCM  | Programme Co-ordination Meeting                 |
| PDR  | Preliminary Design Ready                        |
| PID  | Project Initiation Document                     |
| PIP  | Project Implementation Plan                     |
| PKI  | Public Key Infrastructure                       |
| PMB  | Project Management Board                        |
| PMIC | Programme Management and Integration Capability |
| PO   | Programme Office                                |
| PO   | Poland                                          |
| POL  | Portugal                                        |
| POTR | Programme Technical Open Repository             |
| POW  | Programme of Work                               |
| PPSO | Programme and Project Support Office            |
| PRT  | Provisional Service Acceptance                  |
| PS   | Preparation Stage                               |
| PSA  | Provisional Site Acceptance                     |

|          |                                                        |
|----------|--------------------------------------------------------|
| QA       | Quality Assurance                                      |
| QMP      | Quality Management Plan                                |
| RA       | Reference Architecture                                 |
| RFBV     | Request for Bidder's View                              |
| RMP      | Risk Management Plan                                   |
| RMT      | Risk Management Team                                   |
| RJP      | Recognized Joint Picture                               |
| RPPB     | Resource Planning and Policy Board                     |
| RPP      | Rolling Programme Plan                                 |
| RQM      | Rational Quality Manager                               |
| SA       | Service Architecture                                   |
| SAA      | Security Accreditation Authorities                     |
| SACT     | Supreme ACT                                            |
| SAP      | Service Application Plan                               |
| SAS      | Security Accreditation Strategy                        |
| SATCOM   | Satellite Communications                               |
| SecOps   | Security Operating Procedures                          |
| SFJAZZ13 | Steadfast Jazz 2013                                    |
| SHAPE    | Supreme Headquarter Allied Powers Europe               |
| SID      | Supplemental Information Document                      |
| SISRS    | System Interconnection Security Requirements Statement |
| SIP      | Service Infrastructure Plan                            |
| SL       | Service Line                                           |
| SLMB     | Service Lifecycle Management Board                     |

|        |                                                                  |
|--------|------------------------------------------------------------------|
| SMC    | Service Management and Control                                   |
| SME    | Subject Matter Expert                                            |
| SMF    | Service Management Framework                                     |
| SNTOR  | Support of Near-Term Operational Requirements                    |
| SOA    | Service Oriented Architecture                                    |
| SOW    | Statement of Work                                                |
| SPA    | Service Provision Authority                                      |
| SPOW   | Scientific/Support Programme of Work                             |
| SRR    | System Requirement Ready                                         |
| SRS    | System Requirement Specification                                 |
| SSC    | System Support Centre                                            |
| SSRS   | System-Specific Security Requirements Statement                  |
| SSTRAT | Service Strategy                                                 |
| STIVF  | System Testing, Integration and Validation Facility              |
| SW     | Software                                                         |
| TA     | Transition Authority                                             |
| TA     | Target Architecture                                              |
| TBCE   | Type B Cost Estimate                                             |
| TC     | Technical Center                                                 |
| TF     | Task Force                                                       |
| TMD    | Tactical Missile Defence                                         |
| TOPFAS | Top Functional Service (Joint Ops Planning and Force generation) |
| TrWG   | Training Working Group                                           |
| TUR    | Turkey                                                           |

|             |                                                                            |
|-------------|----------------------------------------------------------------------------|
| UAV         | Unmanned aerial vehicle                                                    |
| UGs         | User Groups                                                                |
| VOIP        | Voice over IP                                                              |
| VOSIP       | Voice over Secured IP                                                      |
| VTC         | Video Teleconference                                                       |
| WGNTe (ADP) | Working Group of National Technical Experts<br>(Automated Data Processing) |
| XML         | EXtensible Markup Language                                                 |





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**PART IV, ANNEX A**  
**PERFORMANCE GOALS**

DOCUMENT CONTROL PAGE

VERSION HISTORY

| Version | Author    | Date     | Reason for Change             | Superseded Version |
|---------|-----------|----------|-------------------------------|--------------------|
| 0.1     | Koksal, H | 11/01/16 | Initial version               |                    |
| 0.7     | Koksal, H | 10/03/16 | First Execution Stage drafted | 0.6                |

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## SECTION 1: RAMP-UP STAGE

### 1.1 Introduction

- 1.1.1 The overall goal for the Ramp-Up Stage is to take over the core of a programme and project management capability that can be expanded and improved through subsequent stages.
- 1.1.2 Clearly, the challenge of taking over and refining the programme and project management framework in the midst of running projects and legacy practices is significant. During this transition; both the previous Contractor and the new Contractor shall work in coordination.
- 1.1.3 This does not mean, though, that all work can stop while the Programme and Support Office (PgSO) function, its services, and the framework are being transitioned. Unnecessary interference with or delay of active programme services and projects shall be avoided. But this change presents an opportunity to introduce benefits through refinements of the existing structure and may, in some cases, justify making changes in the scope, approach, or management to align it with a new framework. For this reason, the Purchaser has defined a set of transition priorities for the Ramp-Up Stage.

### 1.2 Transition Priorities

- 1.2.1 The projects in the current framework are those delivering services of long-term importance to the Bi-SC AIS and NGCS programmes—the services that form the primary components of the enterprise architecture. These projects, roughly eighty in number, are, with a few exceptions, currently in Project Execution stages. Most have established contracts or solicitations underway, which will constrain the extent to which changes can be made to align with a new framework, if planned. Even with these constraints, however, a structure of tolerances can be established within which the project can be governed in a refined framework, if necessary.
- 1.2.2 The Contractor shall assume an average of 3 (three) staff days per project of project support to these projects during this stage in its Stage Plan for business as usual.
- 1.2.3 The previous Contractor shall have transition responsibilities during this period mainly addressing the current programme framework handover, handing over the programme repositories and processes, as well as business as usual activities and keeping the tools and integration facility up and running; supporting the planned integration activities.

- 1.2.4 The second priority is to control any new projects created during the Ramp-Up Stage within the framework, by undertaking Project Start-Up as a programme-driven effort. From the point the PgSO is handed over, every effort should be made to define, plan, execute, and control new projects in a consistent manner, in line with current processes and quality. It is expected that approximately eight new projects will be created during this stage.
- 1.2.5 The Contractor shall assume an average of 10 (ten) staff days per project of project support to these projects during this stage in its Stage Plan.
- 1.2.6 The lowest priority is to bring projects nearing the end of their execution stages and projects not delivering critical enterprise services under management.
- 1.2.7 The Contractor shall assume no more 20 (twenty) staff days total of project support to these lowest priority projects during this stage in its Stage Plan.

**1.3 Performance Goals**

Performance goals for New Contractor and associated MoSCoW ratings are shown in following table<sup>1</sup>. The set of performance goals which forms the basis for the assessment of potential price reduction (following chapter) includes ‘M’ but excludes ‘S’, ‘C’ and ‘W’ goals.

| Performance Goals                                                                                                | MoSCoW Rating |
|------------------------------------------------------------------------------------------------------------------|---------------|
| 1.3.1 Programme Management: The Contractor shall:                                                                | M             |
| 1.3.1.1.1 Perform the handover of the programme and project governance processes and establish the new baseline. | M             |
| 1.3.1.1.2 Review and refine the current versions of the Projects Dossier.                                        | M             |

<sup>1</sup> Legend:

- M – Must Have
- S – Should Have: the result will be a ‘best effort’ within the available resources while respecting the priority of the M goals
- C – Could Have: the result will be a ‘best effort’ within the available resources while respecting the priority of the M and S goals
- W – Won’t Have this time

|            |                                                                                                                                                                     |   |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.1.1.3  | Provide the refined version of the Programme Product Breakdown Structure.                                                                                           | S |
| 1.3.1.1.4  | Review and submit changes of processes to manage, monitor, and control elements of common interest with the following related programmes: AGS, BMD, ACCS, and DCIS. | M |
| 1.3.1.1.5  | Review and amend the process for quarterly sub-programme progress reviews and conduct such reviews for each sub-programme.                                          | M |
| 1.3.1.1.6  | Review and amend the process for quarterly programme progress reviews and organize and conduct at least one such review.                                            | M |
| 1.3.1.1.7  | Refine existing or prepare new strategic objective chains, benefit maps, blueprints and programme tranches for the sub-programmes.                                  | S |
| 1.3.1.1.8  | Review and recommend a set of tolerances for the sub-programmes and projects.                                                                                       | M |
| 1.3.1.1.9  | Track critical dependencies and commitments and recommend corrective actions, as appropriate                                                                        | M |
| 1.3.1.1.10 | Prepare Project Briefs for projects created during this stage.                                                                                                      | S |
| 1.3.2      | Change Management: The Contractor shall:                                                                                                                            | M |
| 1.3.2.1.1  | Review and amend the programme and project issue management processes.                                                                                              | M |
| 1.3.2.1.2  | Maintain online issue management capability.                                                                                                                        | M |
| 1.3.2.1.3  | Maintain the programme Issue Log.                                                                                                                                   | M |
| 1.3.2.1.4  | Organize weekly issue reviews.                                                                                                                                      | M |
| 1.3.2.1.5  | Review and amend the programme and project change control processes.                                                                                                | M |
| 1.3.2.1.6  | Provide change management support to current                                                                                                                        | M |

|           |                                                                                                                      |   |
|-----------|----------------------------------------------------------------------------------------------------------------------|---|
|           | and new sub-programmes and projects.                                                                                 |   |
| 1.3.3     | Communications Management: The Contractor shall:                                                                     | M |
| 1.3.3.1.1 | Review and amend the Programme Communications Plan.                                                                  | M |
| 1.3.3.1.2 | Assume management and administration responsibility for the programme portals on the NCIA Intranet and the Internet. | C |
| 1.3.3.1.3 | Maintain the portal capabilities defined in the SOW.                                                                 | C |
| 1.3.3.1.4 | Populate the portals with information, reports, plans, and other products from all service areas.                    | M |
| 1.3.3.1.5 | Review and amend a process for programme and project highlight reporting.                                            | M |
| 1.3.3.1.6 | Produce at least one quarterly Programme Highlight Report.                                                           | M |
| 1.3.3.1.7 | Provide communications management support to current projects portfolio.                                             | S |
| 1.3.4     | Risk Management: The Contractor shall:                                                                               | S |
| 1.3.4.1.1 | Review and amend the risk management processes.                                                                      | S |
| 1.3.4.1.2 | Maintain the Programme Risk Log.                                                                                     | S |
| 1.3.4.1.3 | Maintain a continuous capability to identify, estimate, evaluate, and recommend responses to programme risks.        | S |
| 1.3.4.1.4 | Perform at least three programme risk reviews.                                                                       | S |
| 1.3.4.1.5 | Provide risk management support to current and new sub-programmes and projects.                                      | C |
| 1.3.5     | Schedule Management: The Contractor shall:                                                                           | M |
| 1.3.5.1.1 | Review and amend the schedule management processes.                                                                  | M |

|             |                                                                                                                                       |   |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.5.1.2   | Maintain a programme master schedule incorporating:                                                                                   |   |
| 1.3.5.1.2.1 | Major milestones for all projects.                                                                                                    | M |
| 1.3.5.1.2.2 | Relevant stakeholder events.                                                                                                          | M |
| 1.3.5.1.2.3 | Major milestones for programmes with which the Bi-SC AIS and NGCS manages interfaces or shares services.                              | M |
| 1.3.5.1.3   | Review and amend the schedule change control process.                                                                                 | M |
| 1.3.5.1.4   | Prepare schedule products as inputs to the programme reports.                                                                         | M |
| 1.3.5.1.5   | Provide schedule management support to current and new sub-programmes.                                                                | S |
| 1.3.6       | Cost Management: The Contractor shall:                                                                                                | W |
| 1.3.6.1.1   | Review and amend the cost management processes.                                                                                       | C |
| 1.3.6.1.2   | Collect and compile data on the status of programme funds for input to quarterly reports.                                             | C |
| 1.3.7       | Configuration Management: The Contractor shall:                                                                                       | M |
| 1.3.7.1.1   | Review and amend the configuration management processes.                                                                              | M |
| 1.3.7.1.2   | Review and amend the configuration management capability and capture the relevant functional baselines for all priority one projects. | M |
| 1.3.7.1.3   | Provide configuration management support to current and new sub-programmes and projects.                                              | M |
| 1.3.8       | Quality Management: The Contractor shall:                                                                                             | S |
| 1.3.8.1.1   | Review and amend the quality management processes on Programme and Project Level.                                                     | S |

|              |                                                                                                                                                                                                                                                                                                                                   |   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.8.1.2    | Maintain the Programme Quality Log.                                                                                                                                                                                                                                                                                               | S |
| 1.3.8.1.3    | Provide quality management support to current and new sub-programmes and projects.                                                                                                                                                                                                                                                | C |
| 1.3.9        | C4ISR Systems Engineering: The Contractor shall:                                                                                                                                                                                                                                                                                  | M |
| 1.3.9.1.1    | Review and amend system of systems architecture and the component implementation roadmap for the Bi-SC AIS and NGCS programmes.                                                                                                                                                                                                   | M |
| 1.3.9.1.2    | For at least one programme level issue, develop an engineering strategy document to overcome the issue (e.g., to migrate/consolidate/enhance/refresh outdated/to-be-expired element(s) of the current design in such a way that a proposed new design element(s) would resolve the current issue in future implementation phase). | M |
| 1.3.9.1.3    | Review and amend the programme engineering guidance.                                                                                                                                                                                                                                                                              | S |
| 1.3.9.1.4    | Review and amend the design of the Engineering Repository.                                                                                                                                                                                                                                                                        | S |
| 1.3.9.1.5    | Maintain the Engineering Repository.                                                                                                                                                                                                                                                                                              | M |
| 1.3.9.1.6    | Provide systems integration support to current projects of the programme.                                                                                                                                                                                                                                                         | S |
| 1.3.10       | C4ISR Integration Management                                                                                                                                                                                                                                                                                                      | M |
| 1.3.10.1.1   | Test Management Support                                                                                                                                                                                                                                                                                                           |   |
| 1.3.10.1.1.1 | The Contractor shall review the current set of test management processes and improve the testing processes                                                                                                                                                                                                                        | M |
| 1.3.10.1.2   | Project Test Management Support                                                                                                                                                                                                                                                                                                   |   |
| 1.3.10.1.2.1 | The Contractor shall provide project integration support to current sub-programmes and projects.                                                                                                                                                                                                                                  | M |

|                                                                                                                                                                     |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.10.1.3 Testbed Support. The Contractor shall:                                                                                                                   |   |
| 1.3.10.1.3.1 Survey active and planned projects and organize and establish the initial version of the test requirements baseline.                                   | M |
| 1.3.10.1.3.2 Survey existing test data sets and identify deficiencies in terms of supporting programme test requirements.                                           | S |
| 1.3.10.1.3.3 Organize a requirements review to validate this baseline.                                                                                              | S |
| 1.3.10.1.3.4 Review and amend the Programme Test Plan.                                                                                                              | M |
| 1.3.10.1.3.5 Review and update the System Security Requirements Specification and Security Accreditation Plan for the testbed.                                      | M |
| 1.3.10.1.3.6 Identify Purchaser facility modifications required to support operation of the testbed.                                                                | S |
| 1.3.10.1.3.7 Provide the detailed design for the integration testbed.                                                                                               | M |
| 1.3.10.1.3.8 Review the current capabilities and prepare specifications for the additional COTS components of the integration testbed.                              | M |
| 1.3.10.1.3.9 Prepare compliance criteria that will be used to determine if proposed equipment meets the specifications.                                             | M |
| 1.3.10.1.3.10 Prepare the facility for additional equipment installation and improvements.                                                                          | S |
| 1.3.11 C4ISR Software Engineering and Design: The Contractor shall:                                                                                                 | M |
| 1.3.11.1.1 Establish C4ISR software Development and Operations (DevOps) environment for programme activities in accordance with Service Strategy (SStrat) guidance. | M |

|            |                                                                                                                                                                                                                                                                            |   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.11.1.1 | At least for one C4ISR software component in its analysis phase, develop a proof of concept level mock-up software using new software technologies and open standard based interfaces.                                                                                     | M |
| 1.3.11.1.2 | At least for one C4ISR project, perform a risk-mitigation assessment activity in accordance with Architecture Tradeoff Analysis Method (ATAM) or a similar method to identify if a suitable architecture for the project by discovering trade-offs and sensitivity points. | M |
| 1.3.11.1.3 | Review and amend the architecture management processes.                                                                                                                                                                                                                    | S |
| 1.3.11.1.4 | Review and amend the programme engineering repository.                                                                                                                                                                                                                     | C |
| 1.3.11.1.5 | Provide architecture management support to current and new sub-programmes and projects.                                                                                                                                                                                    | C |
| 1.3.12     | C4ISR Operational User Experience (UX): The Contractor shall:                                                                                                                                                                                                              | M |
| 1.3.12.1.1 | Document C4ISR Operational User Experience (UX) process for programme and project levels                                                                                                                                                                                   | M |
| 1.3.12.1.2 | Develop a Human Machine Interface (HMI) Style Guide for Web-page based C4ISR Applications that will be used by the projects to develop consistent and coherent HMIs throughout the programme.                                                                              | S |
| 1.3.12.1.3 | Establish UX environment using appropriate tools to develop mock-ups, prototypes, and proofs of concept as required                                                                                                                                                        | M |
| 1.3.13     | C4ISR Requirements Management: The Contractor shall:                                                                                                                                                                                                                       | M |
| 1.3.13.1.1 | Review and amend the requirements management processes.                                                                                                                                                                                                                    | M |
| 1.3.13.1.2 | Review and amend the programme level requirements baseline.                                                                                                                                                                                                                | M |

|                                                                                                                        |   |
|------------------------------------------------------------------------------------------------------------------------|---|
| 1.3.13.1.3 Review and amend the programme non-functional requirements.                                                 | M |
| 1.3.13.1.4 Provide requirements management support to the current and new sub-programmes and projects.                 | M |
| 1.3.14 Programme Assurance: The Contractor shall:                                                                      | M |
| 1.3.14.1.1 Review and amend the verification and validation processes.                                                 | M |
| 1.3.14.1.2 Provide verification and validation support to current and new sub-programmes and projects.                 | S |
| 1.3.14.1.3 Other Project Verification and Validation support will be defined and performed under separate Task Orders. |   |
| 1.3.15 Transition Management: The Contractor shall:                                                                    | S |
| 1.3.15.1.1 Review and amend the transition management processes.                                                       | S |
| 1.3.15.1.2 Provide transition management support to current sub-programmes and projects.                               | S |
| 1.3.16 Information Security Management: The Contractor shall:                                                          | W |
| 1.3.16.1.1 Review and amend the initial security management processes.                                                 | C |
| 1.3.16.1.2 Provide security management support to current sub-programmes and projects.                                 | C |

**1.4 Price Reduction Guidelines**

1.4.1 Price Reductions will not be applied during this stage.

## SECTION 2: FIRST EXECUTION STAGE

### 1.5 Introduction

1.5.1 Table 1 identifies the specific process compliance requirements for Programme Governance and Change Management service areas.

| Maturity Model<br>Service Area | CMMI for Acquisition         | P3M3                                                                                                                                                  | P2MM                                                                                                                                                                |
|--------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Programme Governance           |                              | <ul style="list-style-type: none"> <li>• Programme definition</li> <li>• Project establishment</li> <li>• Programme planning &amp; control</li> </ul> | <ul style="list-style-type: none"> <li>• Directing a Project</li> <li>• Initiating a Project</li> <li>• Controlling a Stage</li> <li>• Closing a Project</li> </ul> |
| Change Management              | Project Monitoring & Control |                                                                                                                                                       |                                                                                                                                                                     |

**Table 1. Process Maturity Compliance Requirements for First Execution Stage**

- 1.5.2 In addition, by the end of this stage, the Contractor shall be operating the programme tools, repositories, and integration testbed at their full potential.
- 1.5.3 Project Support
- 1.5.4 The Contractor shall continue to treat as its first priority for project support those roughly thirty five projects delivering services of long-term importance to the Bi-SC AIS and NGCS programmes—the services that form the primary components of the enterprise architecture.
- 1.5.5 The Contractor shall assume an average of 7 (seven) staff days per project of project support to these projects during this stage in its Stage Plan.
- 1.5.6 The second priority for project support during this stage is new projects. Roughly 8 (eight) projects will be started during this stage.
- 1.5.7 The Contractor shall assume an average of 10 (ten) staff days per project of project support to these projects during this stage in its Stage Plan.
- 1.5.8 The lowest priority is the roughly 15 (fifteen) projects nearing completion.
- 1.5.9 The Contractor shall assume no more than 20 (twenty) staff days total of project support to these lowest priority projects during this stage in its Stage Plan.

**1.6 Performance Goals**

Performance goals for the Contractor and associated MoSCoW ratings are shown in following table<sup>2</sup>. The set of performance goals which forms the basis for the assessment of potential price reduction (following chapter) includes ‘M’ goals but excludes ‘S’, ‘C’ and ‘W’ goals.

| Performance Goals                                                                                                                                               | MoSCoW Rating |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1.6.1 Programme Management: The Contractor shall:                                                                                                               | M             |
| 1.6.1.1 Conduct the handover of the programme and project governance processes and establish the baseline.                                                      | M             |
| 1.6.1.2 Review and update the Projects Dossier.                                                                                                                 | M             |
| 1.6.1.3 Update the Programme Product Breakdown Structure.                                                                                                       | S             |
| 1.6.1.4 Continuous improvement of processes to manage, monitor, and control elements of common interest with the following programmes: AGS, BMD, ACCS and DCIS. | M             |
| 1.6.1.5 Continuous improvement of the process for quarterly portfolio progress reviews and organize at least one such review for each portfolio.                | M             |
| 1.6.1.6 Update and prepare new strategic objective chains and programme tranches for the projects portfolio.                                                    | S             |
| 1.6.1.7 Update a set of tolerances for the projects portfolio.                                                                                                  | M             |
| 1.6.1.8 Prepare Project Briefs for projects created during this stage.                                                                                          | S             |
| 1.6.2 Change Management: The Contractor shall:                                                                                                                  | M             |

<sup>2</sup> Legend:

- M – Must Have
- S – Should Have: the result will be a ‘best effort’ within the available resources while respecting the priority of the M goals
- C – Could Have: the result will be a ‘best effort’ within the available resources while respecting the priority of the M and S goals
- W – Won’t Have this time

|                                                                                                           |   |
|-----------------------------------------------------------------------------------------------------------|---|
| 1.6.2.1 Continuous improvement of the programme and project issue management processes.                   | M |
| 1.6.2.2 Maintain online issue management capability.                                                      | M |
| 1.6.2.3 Maintain the programme Issue Log.                                                                 | M |
| 1.6.2.4 Organize weekly issue reviews.                                                                    | M |
| 1.6.2.5 Continuous improvement of programme and project change control processes.                         | M |
| 1.6.2.6 Provide change management support to current projects portfolio.                                  | M |
| 1.6.3 Communications Management: The Contractor shall:                                                    | M |
| 1.6.3.1 Continuous improvement of the Programme Communications Plan.                                      | M |
| 1.6.3.2 Take responsibility for the programme portals on the NCIA Intranet and the Internet.              | C |
| 1.6.3.3 Maintain the portal capabilities defined in the SOW.                                              | C |
| 1.6.3.4 Populate the portals with information, reports, plans, and other products from all service areas. | M |
| 1.6.3.5 Continuous improvement of the process for programme and project highlight reporting.              | M |
| 1.6.3.6 Produce at least one quarterly Programme Highlight Report.                                        | M |
| 1.6.3.7 Provide communications management support to current projects portfolio.                          | S |
| 1.6.4 Risk Management: The Contractor shall:                                                              | S |
| 1.6.4.1 Continuous improvement of the risk management processes.                                          | S |
| 1.6.4.2 Maintain the Programme Risk Log.                                                                  | S |

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|----------------------------------------------------------------------------------------------------------------------------------|---|
| 1.6.4.3 Maintain a continuous capability to identify, estimate, evaluate, and recommend responses to programme risks.            | S |
| 1.6.4.4 Perform at least one programme risk review.                                                                              | S |
| 1.6.4.5 Provide risk management support to current projects portfolio.                                                           | C |
| 1.6.5 Schedule Management: The Contractor shall:                                                                                 | M |
| 1.6.5.1 Continuous improvement of the schedule management processes.                                                             | M |
| 1.6.5.2 Maintain a programme master schedule incorporating:                                                                      |   |
| 1.6.5.2.1 Major milestones for all projects.                                                                                     | M |
| 1.6.5.2.2 Relevant stakeholder events.                                                                                           | M |
| 1.6.5.2.3 Major milestones for programmes with which the Bi-SC and NGCS manages interfaces or shares services.                   | M |
| 1.6.5.3 Continuous improvement of the schedule change control process.                                                           | M |
| 1.6.5.4 Prepare schedule products as inputs to the programme reports.                                                            | M |
| 1.6.5.5 Provide schedule management support to current projects portfolio.                                                       | S |
| 1.6.6 Cost Management: The Contractor shall:                                                                                     | W |
| 1.6.6.1 Continuous improvement of the cost management processes.                                                                 | C |
| 1.6.6.2 Collect and compile data on the status of programme funds for input to quarterly reports and other briefings or reports. | C |
| 1.6.7 Configuration Management: The Contractor shall:                                                                            | M |
| 1.6.7.1 Continuous improvement of the configuration                                                                              | M |

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| management processes.                                                                                                                                                                                                                                                                                                       |   |
| 1.6.7.2 Continuous improvement of the configuration management capability and capture the relevant functional baselines for all priority one projects.                                                                                                                                                                      | M |
| 1.6.7.3 Provide configuration management support to current projects portfolio.                                                                                                                                                                                                                                             | M |
| 1.6.8 Quality Management: The Contractor shall:                                                                                                                                                                                                                                                                             | S |
| 1.6.8.1 Continuous improvement of the quality management processes on Programme and Project Level.                                                                                                                                                                                                                          | S |
| 1.6.8.2 Maintain the Programme Quality Log.                                                                                                                                                                                                                                                                                 | S |
| 1.6.8.3 Provide quality management support to current projects portfolio.                                                                                                                                                                                                                                                   | C |
| 1.6.9 C4ISR Systems Engineering: The Contractor shall:                                                                                                                                                                                                                                                                      | M |
| 1.6.9.1 Enhance and maintain system of systems architecture and the component implementation roadmap for the Bi-SC AIS and NGCS programme.                                                                                                                                                                                  | M |
| 1.6.9.2 For programme level issues, develop engineering strategy documents to overcome the issue (e.g., to migrate/consolidate/enhance/refresh outdated/to-be-expired element(s) of the current design in such a way that a proposed new design element(s) would resolve the current issue in future implementation phase). | M |
| 1.6.9.3 Enhance the programme engineering guidance.                                                                                                                                                                                                                                                                         | S |
| 1.6.9.4 Enhance and maintain the Engineering Repository.                                                                                                                                                                                                                                                                    | M |
| 1.6.9.5 Provide systems integration support to current projects of the programme.                                                                                                                                                                                                                                           | S |
| 1.6.10 C4ISR Integration Management                                                                                                                                                                                                                                                                                         | M |
| 1.6.10.1 Test Management Support                                                                                                                                                                                                                                                                                            |   |
| 1.6.10.1.1 The Contractor shall review and improve the current set of test management processes.                                                                                                                                                                                                                            | M |

|             |                                                                                                                                                     |   |
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| 1.6.10.2    | Project Test Management Support                                                                                                                     |   |
| 1.6.10.2.1  | The Contractor shall provide test management support to current projects portfolio.                                                                 | M |
| 1.6.10.3    | Testbed Support. The Contractor shall:                                                                                                              |   |
| 1.6.10.3.1  | Survey active and planned projects and organize and establish the initial version of the test requirements baseline.                                | M |
| 1.6.10.3.2  | Survey existing test data sets and identify deficiencies in terms of supporting programme test requirements.                                        | S |
| 1.6.10.3.3  | Organize a requirements review to validate this baseline.                                                                                           | S |
| 1.6.10.3.4  | Continuous improvement of the Programme Test Plan.                                                                                                  | M |
| 1.6.10.3.5  | Update the System Security Requirements Specification and Security Accreditation Plan for the testbed when required.                                | M |
| 1.6.10.3.6  | Identify Purchaser facility modifications required to support operation of the testbed.                                                             | S |
| 1.6.10.3.7  | Update the detailed design for the integration testbed when there are changes.                                                                      | M |
| 1.6.10.3.8  | Continuous improvement of the current capabilities and preparation of specifications for the additional COTS components of the integration testbed. | M |
| 1.6.10.3.9  | Prepare compliance criteria that will be used to determine if proposed new equipment is in line with the specifications.                            | M |
| 1.6.10.3.10 | Prepare the facility for additional equipment installation.                                                                                         | S |
| 1.6.11      | C4ISR Software Engineering and Design: The Contractor                                                                                               | M |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| shall:                                                                                                                                                                                                                                                |   |
| 1.6.11.1 Enhance and maintain C4ISR software Development and Operations (DevOps) environment for programme activities in accordance with SStrat guidance.                                                                                             | M |
| 1.6.11.2 Develop and maintain proof of concept level mock-up software for C4ISR components.                                                                                                                                                           | M |
| 1.6.11.3 Perform risk-mitigation assessment activities in accordance with Architecture Tradeoff Analysis Method (ATAM) or a similar method to identify if a suitable architecture for the project by discovering trade-offs and sensitivity points.   | M |
| 1.6.11.4 Perform the software architecture management process.                                                                                                                                                                                        | S |
| 1.6.11.5 Provide architecture management support to current projects portfolio.                                                                                                                                                                       | M |
| 1.6.12 C4ISR Operational User Experience (UX): The Contractor shall:                                                                                                                                                                                  | M |
| 1.6.12.1 Perform C4ISR Operational User Experience (UX) process for programme and project levels                                                                                                                                                      | M |
| 1.6.12.2 Develop Human Machine Interface (HMI) Style Guides for Rich C4ISR Applications and Mobile Applications and maintain all HMI Style Guides that will be used by the projects to develop consistent and coherent HMIs throughout the programme. | M |
| 1.6.12.3 Develop UX mock-ups, prototypes, and proofs of concept as required                                                                                                                                                                           | M |
| 1.6.13 C4ISR Requirements Management: The Contractor shall:                                                                                                                                                                                           | M |
| 1.6.13.1 Perform the requirements management processes.                                                                                                                                                                                               | M |
| 1.6.13.2 Enhance and maintain the programme level requirements baseline.                                                                                                                                                                              | S |
| 1.6.13.3 Enhance and maintain the programme non-functional requirements.                                                                                                                                                                              | S |

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| 1.6.13.4 Provide requirements management support to the current projects portfolio.                                  | M |
| 1.6.14 Programme Assurance: The Contractor shall:                                                                    | M |
| 1.6.14.1 Continuous improvement of the verification and validation processes.                                        | M |
| 1.6.14.2 Provide verification and validation support to current projects portfolio.                                  | S |
| 1.6.14.3 Other Project Verification and Validation support will be defined and performed under separate Task Orders. |   |
| 1.6.15 Transition Management: The Contractor shall:                                                                  | S |
| 1.6.15.1 Continuous improvement of the transition management processes.                                              | S |
| 1.6.15.2 Provide transition management support to current projects portfolio.                                        | S |
| 1.6.16 Information Security Management: The Contractor shall:                                                        | W |
| 1.6.16.1 Continuous improvement of the information security management processes.                                    | C |
| 1.6.16.2 Provide information security management support to current projects portfolio.                              | C |

**1.7 Price Reduction Guidelines**

1.7.1 Table 2 below identifies the guidelines by which the Project Board will determine the recommended price reduction for this stage.

| Level of Goal Achievement    | Applicable Price Reduction | Description                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FIRST EXECUTION STAGE</b> |                            |                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Satisfactory                 | 0 %                        | All deliverables associated with the Stage have been or are on track to be delivered and accepted. All Performance Goals have been or are assessed as likely to be met or exceeded. Some goals may not have been met but these goals are more than offset by the level of achievement of other goals. The Process Maturity targets for Programme Governance and Change Management have been or on track to be met. |
| Marginal                     | 1 to 2.9 %                 | Less than 15 % of the goals specified in the Performance Goals document have not been met. Unmet goals are not offset by the level of achievement against the other goals. The Process Maturity targets for Programme Governance and Change Management have been or on track to be met.                                                                                                                            |
| Unsatisfactory               | 3 to 6 %                   | Less than 25 % of the goals specified in the Performance Goals document have not been met. Unmet goals are not offset by the level of achievement against the other goals. The Process Maturity targets for Programme Governance and Change Management have not been or are not forecasted to be met.                                                                                                              |

**Table 2. Price Reduction Guidelines – First Execution Stage**

*If exercised, the performance goals for the 2<sup>nd</sup> and 3<sup>rd</sup> Execution Stages shall be similar to that of the 1<sup>st</sup> Execution Stage.*