

NCI Clarification Requests – AMENDMENT 4 – Attachment B to Cover Letter

Administration or Contracting

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
A.1	Book I 3.2.4, 3.6.1.5 & 3.6.4.1	§3.6.1.5 states that the RMP is a part of the PMP, which is included in the Management Proposal. Besides, §3.2.4.4 states that the RMP is a part of the risk approach proposal. Could you please confirm that the RMP shall be duplicated: one copy in the management proposal, one copy in the risk approach proposal?	Only one copy of the RMP plan shall be provided under the Risk Approach proposal. Only after Contract Award the RMP shall become part of the PMP.	3
A.2	Book I 3.6.1.5	"Bidder's shall provide a draft management plan [...] including as separate chapters the project work breakdown structure (PWBS), the project Master Schedule (PMS) and the Risk management plan" . Please confirm that "separate chapters" shall be read "annexes" ?	The Project Work Breakdown Structure (PWBS) and the Project Master Schedule (PMS) shall be separate chapters not annexes (see also A.1).	3
A.3	Book I 3.6.1.5	"Bidder's shall provide a draft management plan [...] including as separate chapters the project work breakdown structure (PWBS), the project Master Schedule (PMS) and the Risk management plan [...]The PMP shall not exceed 50 pages". Do the 50 pages include those separate chapters?	The 50 pages does include the separate chapters of the Project Work Breakdown Structure (PWBS) and the Project Master Schedule (PMS).	3
A.4	Book II Contract special Provisions	"The Intellectual Property Rights to all designed documentation and system operating software shall reside in participating NATO member countries, and no license fee, or royalty charges shall be paid by the Contractor to firms, individuals or governments other than within the NATO member community". Could there be any waiver to this requirement under specific circumstances?	Bidders are invited to note, that Clause 30 of the Contract General Provisions make a distinction between background intellectual property, foreground intellectual property and third party intellectual property.	3
A.5	Book II Contract special Provisions 7.10	"7.10 In the absence of valid security clearances for the Contractor's personnel at contract signature, the Purchaser reserves the right to terminate the Contract for "Default". Could the Purchaser consider delaying the requirement until the relevant personnel perform activity requiring such clearance (Contractor's personnel visiting of working at Purchaser's facilities (see § 7.4 of Book II Contract Special Provisions)?	See A.21	3

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A.6	Book II Contract special Provisions 8.1.1	"8.1.1 Any use of Contractor Background IPR for the purpose of carrying out the Work pursuant to the Contract shall be free of any charge to Purchaser. The Contractor hereby grants to NATO and NATO Nations a non-exclusive, royalty-free and irrevocable licence to use and authorise others to use any Contractor Background IPR for the purpose of exploiting or otherwise using the Foreground IPR". Could you clarify the term "others" and the perimeter of the Foreground use.	See A.4	3
A.7	Book II Contract special Provisions 23.8	"23.8 The Contractor will have no right for any claims in reference to a delay in the Purchaser's confirmation of start of work, as long as the delay does not exceed 90 days. This includes the delivery of all Purchaser Furnished Equipment (PFE)". Could the Purchaser consider managing such delays as contractual changes when relevant?	No, the Purchaser reserves this right in the Contract.	3
A.8	BOOK II, Part III. Contract general provisions 30.1.3	"30.1.3 The Purchaser gives no warranty as to the validity of any Purchaser Background IPR". Could you clarify the meaning of "the validity" in the above sentence? Please confirm that the Purchaser Background IPR will be delivered with the required license for use by the Contractor in the frame of the NCI contract.	The successful bidder is authorized to use the Purchaser Background IPR for the purpose of the contract. The Purchaser Background IPR will provided 'as is'.	3
A.9	Book II Contract special Provisions	"15.2 The Purchaser shall exercise due care and diligence for Contractor's furnished 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". Please indicate which measures and precautions are taken by the Purchaser to limit the risk (secured environment, rooms not exposed to harsh environmental conditions ..) and allow the Contractor to assess it .	Communications Rooms are protected according to NATO policy. Refer to the SRS Annex F for specification of the protection of Communications Rooms. Refer to the SOW § 3.4.3 "Site Access Preparation" for Contractor Access.	3

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A.10	Book I - Bidding Instructions. Para 3.6.1.6 Book II - SoW - Core Document. Para 2.3 Book II – Part II Contract Special Provisions. Para 13.1	Given the inconsistency noted between the Bidding Instructions/SOW on the one hand and the Contract Special Provisions in the other hand, please confirm that for bidding purposes the list of Key Personnel specified in the Bidding Instructions and SoW documents prevails over the list indicated in the Contract Special Provision document?	BI and CSP are corrected and now use the same terminology as the SOW: "NATO Embedded Contractor Team (NeCT)" (SOW PM-10(8)).	3
A.11	Book II - Part II Contract Special Provisions. Para 7.12	Could the Purchaser consider allowing the Contractor to perform work requiring processing information higher than NATO RESTRICTED at Contractor's facilities provided that such facilities have obtained the required security accreditation?	This could be allowed on request on a case-by-case basis but only for Contractor internal preparatory activities.	3
A.12	Book II, Part IV, SOW /226	"The Purchaser maintains different Approved Fielded Product Lists (AFPL) for each major network (security domain), such as NS or NU networks. The Purchaser will make the relevant AFPL available to the Bidder". Please confirm that the Purchaser will deliver AFPL updates to the Contractor throughout the contract on a regular basis.	The Purchaser will endeavour to release to the Contractor any updates to the released AFPL.	3
A.13	Book II, Part IV, SOW /311	"The Purchaser will review and approve the updated implementation documents within the periods stated in the Contract Special Provisions, at which time the Contractor will also be authorized to resume the Sites Installation sequence with the next Wave". Please confirm that the time taken by the Purchaser to review and approve the documentation will be stated in an update of the Contract Special Provisions.	The Contract Special Provisions does not specify a period in which the Purchaser will review and approve. SOW [311] shall read: <i>"The Purchaser will review and approve the updated implementation documents within two weeks the periods stated in the Contract Special Provisions, at which time the Contractor will also be authorized to resume the Sites Installation sequence with the next Wave."</i>	3
A.14	Book II, Part IV, SOW /340	Statement 340 is a requirement (includes "shall") that should be identified as such in the document.	This is correctly identified as a SHALL statement. The statement [340] is renumbered to ST-47b in AMD2.	3
A.15	Book II, Part IV, SOW /SA-30	"The NCI system shall be finally accepted (FSA completion) after the successful completion of the following phases:" Please complete the requirement statement above.	SOW SA-30 shall read: <i>"The NCI system shall be finally accepted (FSA completion) after the successful completion of the following phases meeting the FSA conditions and actions stated in the paragraphs 8.4.1, 8.4.2 and 8.4.3 below."</i>	3

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A.16	Book II, Part IV, SOW /table 9.1 - Intended Training Courses	" L2 commercial vendor courses -Time : Before pertinent PSAs" . Please confirm that " before pertinent PSAs" shall be read "at a pertinent time before Mons/SHAPE and Brunssum PSAs"	The text in the Time column is to read “ Before pertinent PSA’s of the NOC’s”	3
A.17	3.6.1.7 in IFB-CO-13735-NCI BOOK I Instructions to Bidders	The requirement to provide valid certificates for the key personnel with respect to the English language skill : can this be replaced by proof of number of years working in company with English as working language (referring to similar requirement in 3.6.1.7.5. for having completed study in English)	No, this will not be possible.	3
A.18	IFB-CO-13735-NCI BOOK I Instructions to Bidders Annex B-13	What are the different "Labour Categories" that can be used in Annex B-13 (list of Proposed Key Personnel)	The labour categories shall be annotated as either prime or sub contract labour.	3
A.19	Bidders Conference	Why has NCI defined so many key personnel? Compared with ITM which had 4 named key personnel this seems significantly higher requirement adding cost. Identifying key personnel 12 months at least prior to contract award limits bidders flexibility	ITM’s implementation is more aligned with commercial practices, whereas NCI is more bespoke and needs to deal with lots of legacy interfaces and third parties, across the network of 73 sites. Experience shows that the specified key personnel is necessary and continuity of individuals in those posts shall be assured to the highest possible degree.	3
A.20	Bidders Conference	Completion of a PoC during system design will be challenging regarding the short schedule. What level of POC documentation do you expect at the KOM?	<p>The system design phase can last up to 40 weeks, and that includes PoCT. The Purchaser does not consider this as short.</p> <p>The expected level of PoCT-related documentation, to be available at the KOM, is quite advanced, specifically:</p> <ul style="list-style-type: none"> • The <u>Proof of Concept (PoC) Platform Design Specification (PDS)</u> at the KOM is already advanced when included in the Bid (Bidding Instructions § 3.6.2.2 and § 3.6.2.2.1). • § 4.5.3.2.1 of the Bidding instructions defines that the draft PDS with detailed description and configuration as well as the proposed PoC Inventory list shall be include in the BID • Table 13.3. in the SoW core document defines the Draft Proof of Concept Test (PoCT) Procedures to 	3

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			<p>be provided during the KOM.</p> <ul style="list-style-type: none"> The <u>PoCT Procedures</u> are expected to include all procedural and technical details necessary for verification and demonstration that the NCI (sub)system design, as specified in the Draft SDS, meets the functional and non-functional requirements listed in the SRS and its associated annexes (refer to SoW SD-242). 	
A.21	Bidders Conference SOW 1.4 [31]	According to the Bidding Instructions some of Contractor personnel (NSEG-embedded Contractor team) are required to hold a NATO CTS clearance, which our engineers do not hold, as our National Authority requires valid contract for starting security screening. Does this requirement have to be proved by providing valid security clearance certificates at bid submissions, or relevant NATO CTS clearances can be issued upon contract award and start of execution?	No the requirement does not have to be provided upon Bid closure. Please refer to Section 1.5 of the Bidding Instructions.	3
A.22	Bidders Conference SoW SD-4	A size agnostic design is not directly compatible with cost efficiency. Does it mean that the bidder has to foresee all the necessary options for capability extension?	<p>The NCI design and installation shall not limit the system to only the initially procured number of sites.</p> <p>Bidder shall foresee the sizing, scalability and network growth as specified in the IFB, specifically the Bidder must consider:</p> <ul style="list-style-type: none"> There are two classes of NCI Nodes, which are: 40G and 5G; The sizing and scalability requirements specified in the SRS and its Annexes; and The options for Network, Single Node and Performance growth specified in § 3.3.2 of the SoW. 	3
A.23	Bidders Conference SoW SD-166	Extensive Emulation will be needed. How will this be provided? In the CLINS?	This is part of the PoCT (CLIN 2.5).	3
A.24	Bidders Conference	Please specify your understanding of “major” subcontractors and which is the difference between “major” and “minor” subcontractors?	A Major Sub Contractor under the prospective Contract is when the value of the Sub-contract is known or estimated to exceed 15 percent for the total value; or the Sub-contract is one of a number of Sub-contracts with a single Sub-contractor for the same or related Work under the prospective Contract that in the	3

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			aggregate are known or expected to exceed 15 percent of the total Contract value.	
A.25	Bidders Conference	Your description today of project kick-off demonstrated that you will expect a complete re-engineering of the solution without any PM present to ensure schedule and scope compliance. How is that possible? You just introduced 100% risk of the proposed design will not be implemented.	<p>The Configuration Capturing sessions are not intended “re-engineering of the solution”, but to refine it to a point that its implementation is viable at the lowest possible risk to both the Contractor and the Purchaser.</p> <p>It is about knowledge transfer to de-risk the project to the maximum extent possible.</p> <p>Tracking of this effort will fall under PM responsibility.</p> <p>Note, the statement of “no PMs during the Configuration Capturing stage”, made during the technical presentation, was just a witticism to alert the audience that the intent of the CC is not limited to “management views” only but also to engage in detailed technical discussions.</p> <p>The SoW clearly indicates the broad scope of Contractor individuals that shall attend the Configuration Capturing period, e.g. SD-72 - SD-75.</p>	3
A.26	Bidders Conference	You indicate a major engineering effort post-award. You therefore plan a potential ECP to cover the changes from the bid to the re-engineered solution?	<p>No. The basic design shall be implemented as proposed and contracted. The engineering effort post-award shall not focus on changing the design, but on refining it to the point that implementation and transition risks are kept as low as possible.</p> <p>There will be engineering effort resulting from the site-surveys (and the subsequent production of the Site Installation Data Packages), which again is not to be in the form of ECPs, but as contracted.</p> <p>Refer to CR A.25.</p>	3
A.27	Bidders Conference	Will TCO be part of the evaluation?	Yes. The Bid shall include a draft Logistics Support Analysis Plan (LSAP, see e.g. BI 4.5.4.2) which shall, among other, explain in detail how the Bidder shall fulfil all Logistics Support Analysis requirements including e.g. reliability, availability and maintainability requirements with the emphasis on	4

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			section 11.4 of the SoW. This section further describes that the design of the system shall include sufficient redundancy and other reliability, maintainability, availability and testability measures to ensure the RAMT requirements in this Contract are achieved and attained at an optimal Total Cost of Ownership (TCO), minimising preventive maintenance, spare parts consumption, manpower requirement and usage of special-to-type tools and test equipment.	
A.28	Instructions to Bidders – Book I, Page I-10	Due to high architecture complexity and in order to provide our best possible offer, we kindly ask you to consider an adequate delay of the Bid Closing Date currently set on 5 January 2016.	See Amendment 2	2
A.29	Instruction to Bidders §3.6.1 Management	<p>§3.6.1.6 / §3.6.1.8 to §3.6.1.11. Can the purchaser please clarify if these sections are to be included in the PMP and within its 50 Page limitation or if these should be provided in a separate section?</p> <p>If the purchaser considers the average CV is 2 pages and each past performance is 1 page, only these items would constitute the volume for the page limitation.</p>	Information requested through §3.6.1.6 / §3.6.1.8 to §3.6.1.11. are not to be included in the PMP. They shall be separately provided in Part 1 (Management Proposal) of the Technical Proposal Package.	4
A.30	Contract Special Provisions 21.5	<p>Can the purchaser please clarify what are the major performance milestones referenced in section 21.5 of the special contract provisions?</p> <p>The bidders assumption is that these performance milestones are the payment milestones according to 18.5 of the special contract provisions, if this assumption is correct please update clause 21.5 to reflect this correlation.</p>	<p>The Bidders assumption is correct the Major Payment Milestones are referenced at 18.5 of the Contract Special Provisions</p> <p>CSP at 21.5 have been amended for consistency to reflect Contract Payment Milestones.</p>	4
A.31	Instruction to Bidders – Annex B15	Can the purchaser please provide an explanation of the purpose of Annex B15?	Premium Level Partner certificate with the manufactures of the major equipment types proposed in the bid demonstrates that the Bidder has several advantages e.g. can expect the best possible support from the manufacturer including technical support, training and access to	4

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			manufacturer resources.	
A.32	Instruction to Bidders – Annex B15	Can the purchaser please provide a definition of Manufacturer premium partner?	Premium level partner is the highest level that a manufacturer offers. The specific name for this highest level differs per manufacturer.	4
A.33	CLIN 1.4.4 and SoW SI-165	<p>Can the purchaser confirm that the augmentation of the NeCT for the purposes of SRTS work is to be conducted at the purchaser's premises in Mons?</p> <p>In addition can the purchaser confirm the number of trips potentially involved in this work if it is to be conducted at the purchaser's premises?</p>	<p>The additional member to the NeCT for the production of the SRTS's will be located at the purchaser's premises in Mons.</p> <p>There are no trips involved with the SRTS work to any locations other than Mons.</p>	4
A.34	General and Special Contract Provisions	The Intellectual Property clauses do not work particularly well for the training element of the requirement where training providers, especially commercial training providers, would typically need to retain and protect their and their 3 rd party suppliers' and licensors' rights. Would NCI be prepared to relax the IP obligations in respect of the bidder's obligations regarding training materials and methodologies so that the IP can be retained by the bidders or the bidder's subcontractors?	The General Terms and Conditions do make a distinction between background, foreground and third party intellectual property.	4
A.35	Instruction to bidders 3.6.1.6 & 4.5.2.5	Purchaser to confirm <u>Senior</u> ILS engineer or ILS engineer as key personnel?	<p>A Senior ILS Engineer is required as key personnel in accordance with the SOW Section 2.3. and BI 3.6.1.6.</p> <p>BI 4.5.2.5 corrected to 'Senior ILS Engineer' per v1.3 AMD 4.</p>	4
A.36	Bidding Instructions 3.5.2.1	Can the purchaser please clarify whether the figures presented are the ceiling prices for bidders i.e. typically 130% of the authorized budget or the budget values?	The Bid shall not exceed the ceilings mentioned in section 3.5.2.1 of the Bidding Instructions.	4
A.37	Bidding Instructions §4.5.3.2	The RTDS and PSD are mentioned as annexes of the SDS. However, §3.6.2.2 excludes RTDS from the draft SDS, and SoW Table 3-1 states that PDS, RTDS, RSPD, and RTM are delivered in their 1st version in Project deliverable "SDS Final draft 1", which is a deliverable for	<p>The Draft SDS, as part of the bid, shall include an annex for the Proof of Concept (PoC) Platform Design Specification (PDS). However, the RTDS, RSPD and RTM are project deliverables not to be submitted in the Bid.</p> <p>Bidding Instructions §4.5.3.2 shall read: "...The SDS, excluding its Proof of</p>	4

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		<p>the project and not the bid.</p> <p>Do you confirm that RTDS, RSPD and PSD are not to be submitted in the bid phase?</p>	<p>Concept (PoC) Platform Design Specification (PDS), Reference and Testing Facility Design Specification (RTDS), Reference Sensor Placement Design (RSPD) and Requirements Traceability Matrix (RTM) annexes (see below for PDS), does not exceed 100 pages. ...".</p>	
A.38	Instruction to bidders 3.1.8	Can the purchaser confirm which parts of the bidders proposal should be considered NATO restricted?	Though all individual elements are expected to be unclassified, the totality of the Technical Proposal Package shall be considered NATO RESTRICTED, similar to the organisation of the IFB. Bidders shall not include information classified as higher than NATO RESTRICTED in their Bid	4
A.39	SoW SD-52 & CS-28 to CS-36 & CS-49 & SoW Appendix 2 - Table 13-2 - ID. 2.1.6	<p>The Contractor shall ensure that all software and firmware introduced by the NCI can be enlisted in the AFPL not later than FDR at PRM-5 (34 WAEDS). The Contractor shall account for a minimum of three (3) months and a maximum of twelve (12) months, subject to the OEM commitments and the five factors in CS-33, for any new product to get enlisted into the AFPL.</p> <p>Can the purchaser clarify the consequences if the Purchaser-led CCP process takes more than 34 WAEDS and the Contractor have provided the necessary efforts to Support the Purchaser?</p>	<p>It is the contractor's responsibility to start the CCP process ASAP for any new products proposed for deployment under NCI.</p> <p>In case the contractor can prove with evidences that he did everything in his powers to cover this requirement for AFPL, a waiver can be requested for the 34 WAEDC (max. 12 months).</p> <p>It is the contractor's responsibility to provide manufacturer's support for the CCP process and also to select new hardware or software elements, which are not vulnerable, good quality product and for which the Contractor can provide convincing evidence why he is confident that the new hardware or software can be enlisted into the AFPL.</p>	4
A.40	Book II Part IV (SoW) ILS 111	"The Contractor shall procure, provide, organise and manage standard, commercially available support contracts offered by the original equipment manufacturer of the items provided under this Contract ...". May the required support be delivered by a company certified by this OEM ?	No, the support contracts are between the OEM and the Purchaser and the services offered through these contracts are to be provided by that same OEM, directly to the Purchaser.	4
A.41	Book II, Part IV, SOW /SD-216	"The Contractor shall provide samples of formatted DOORS exports as part of the bid for the Purchaser to assess their suitability as formal documentation deliverables". Please confirm that this	Confirmed this is not a bid instruction. See updated SoW 3.5 Requirements and Test Case Management.	4

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		requirement is not a bid instruction but a project requirement.		
A.42	PM-08	<p>“CEFR scores and other English Certificates. As the most of the NATO member countries aren't part of the Anglo-Saxon speaking language model, it's a fact that the most of the highly skilled team members and companies aren't holding these kinds of certificates as a standard certification. However it's also a proven fact that those persons are performing their tasks with a really high level of competence then working in an international environment. Taking that into account, can NATO agree that previous experience of working in the role and evidence of role based competence in the English language would be acceptable as an alternative to the required certification?</p> <p>Can a proven experience of working in the English language within related projects, for the Project Manager with a minimum of 5 years and with a minimum of 3 years proven experience for the other profiles, be an acceptable alternative?</p>	See A.17	4
A.43	3.6 Technical Proposal Package 3.6.1.3 Annex C	Please clarify; is Annex C the Cross Reference Matrix, to be included as part of the Executive Summary 10-15 pages?	Annex C the Cross Reference Matrix Table is not part of the 10-15 page Executive Summary requested at Bidding Instruction 3.6.1.1.	4
A.44	3.6 Technical Proposal Package the 3.6.1.5 Draft Project Management Plan PMP-NTE 50 pages	Please clarify re: Key Resumes; Is Annex B-13 to be included as part of the PMP 50-page limit?	The Resumes of the Key personnel at Annex B-13 do not form part of the draft PMP's 50 page limit, requested at Bidding Instruction 3.6.1.5.	4
A.45	3.6 Technical Proposal Package the 3.6.1.5 Draft Project Management Plan PMP-NTE 50 pages	Please clarify; is 3.6.1.8 Corporate Structure to be included as part of the PMP 50-page limit?	<p>See A.29:</p> <p>Information requested through §3.6.1.6 / §3.6.1.8 to §3.6.1.11. are not to be included in the PMP. They shall be separately provided in Part 1 (Management Proposal) of the Technical Proposal Package.</p>	4

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A.46	3.6 Technical Proposal Package the 3.6.1.5 Draft Project Management Plan PMP-NTE 50 pages	Please clarify; is 3.6.1.9, available Corporate resources, to be included as part of the PMP 50-page limit?	See A.29	4
A.47	3.6 Technical Proposal Package the 3.6.1.5 Draft Project Management Plan PMP-NTE 50 pages	Please clarify, 3.6.1.11.1 The Bidder shall provide relevant and successful corporate experience in at least two Contracts within the last five years. Is this to be included as part of the PMP 50-page limit?	See A.29	4
A.48	Book II, SOW Section 2.6.2.1	Are Bidders required to provide an additional Executive Summary specific to the PIP? Does this additional Executive Summary count towards the 50page limit?	SoW 2.6.2.1 Section 1 of the PIP (i.e. Introduction) is not requested in the Bidding Instructions.	4
A.49	Section 1.5, Book I, Instructions to Bidders	Will NATO Cosmic Top Secret (NCTS) clearances be required upon contract??	In accordance with SOW section 1.5.6 CTS security clearances will be required after Contract signature. Contract signature will not be delayed to allow for the processing of clearance documentation for personnel, as per SOW section 1.5.5.	4
A.50	Chapter 5 of the Contract Special Provisions and chapter 9 of the Contract General Provisions	Would it be in accordance with (i)chapter 5 of the Contract Special Provisions or the respective NATO policy and (ii) chapter 9 of the Contract General Provisions if software products which are used for the performance of the services under this contract are owned and developed by an entity which has its place of business in a NATO country but uses resources of NATO countries and Non NATO countries as a work bench. Full ownership and IP for products including all identifiable components and sub-assemblies reside in NATO country.	In accordance with Special Provisions section 5.3 all works including labour, design and services must be from within NATO participating countries. Therefore it is not possible to use resources from 'Non NATO countries as a work bench'.	4

Price

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P.1	Bidding Sheets	Shall the Bidders quote the CLS years for the 8 optional sites of WP8? If so, please indicate which years (1, 2 to 5) shall be quoted, and in which CLINs?	The Bidders shall provide prices for all CLS option CLINs. CLS option CLINs are 8.1 thru 8.4, in addition the contractor shall provide a pricing quote for the 8 optional locations in CLIN 8.5.	4
P.2	SoW § 5.3.2.3 / Bidding Sheets	SoW Req. SI-77 states that the Contractor shall deploy vertical cabling for the sites where the PABX will be removed (table 13-7). In which lines of the Bidding sheets shall the corresponding prices be entered?	Material costs for the vertical cabling shall be included in the "Supply of NCI equipment" CLINs, whereas labour shall be included in the "Conduct Installation" CLINs. In the SSS sub-tabs for NOC and Wave 1 till 4, the cabling shall be included in the CLIN 1.4 titled "MMA subsystem (NU domain))	4
P.3	Bidding Sheets : CLIN Summary sheet /NOC tab	The line "Conduct Subscribers Migration" appears in the "NOC (3 sites)" tab (WBS line 8) , but not in the "CLIN Summary sheet" tab (CLIN 4.3) related to the NOC installation. Please confirm that the CLIN Summary sheet will be modified to include this item.	CLIN 4.3 has been amended in the SSS v1.3 AMD4 to include the migration of the subscribers of two NOC locations (third location is a NOC DC site with no locally connected subscribers).	4
P.4	Bidding Sheets / SoW Appendix 5	In which CLINs shall the Bidders include the prices corresponding to the vertical cabling and PABX replacement for the 10 sites listed in table 13-8 of the SoW?	Prices for Horizontal and Vertical cabling and PABX replacement for the 10 sites listed in table 13-8 shall be included in CLIN 9.2 (description updated in SSS v1.3 AMD4 i.o.t. clarify that this CLIN includes also Vertical Cabling) SSS sub-tabs for Wave 1 till Wave 4 CLINS 13 have been updated accordingly. Please note that installation of LAN switches is independent of supplier (contractor or PFE)	4
P.5	Bidding Instructions Section 3.5.2.6	The RFP states that we can quote in different NATO currencies. Could NATO provide a suggested format to show the potential multiple currencies priced?	Yes, the formats will be the standard formats that have been provided in the bidding sheets. Bidders are required to clearly state the NATO currency that they are quoting their prices in. The Purchaser suggest that the Bidders add separate columns for different currencies. The Bidders shall ensure that the total adds up correctly.	4

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P.6	Bidding Sheet File version 1.1 AMD 1.xlsx, all CLIN tabs	Template questions: Does the data in the CLIN tabs (labor, subcontractor labor, material, ODC and travel) have to be presented at the sub CLIN level? Is the purpose of Column O to present the sub CLIN data? If so, how is that data transferred to the CLIN Summary Sheet tab?	The purpose of Column O is strictly to present any notes that pertain to that particular cost.	4
P.7	Bidding Sheet File version 1.1 AMD 1.xlsx	Can we create sub CLIN tabs (example CLIN 1.1.1) in the Bid Sheet files to roll-up to the CLINs and support the sub CLIN amounts in the CLIN Summary tab?	Yes	4
P.8	Bidding Sheet File version 1.1 AMD 1.xlsx, Column H of the CLIN Summary tab	Will NATO provide a CLIN Summary tab which totals the sub CLINs lines (totals for the blue highlighted cells)?	Yes, a CLIN Summary tab has already been provided in the Bidding Sheets and inserted in the beginning of the Bidding Sheet File. All following CLIN tabs should sum up (roll up/add up) to the Summary tab.	4
P.9	Bidding Sheet File version 1.1 AMD 1.xlsx, Wave tabs, CLIN Summary Sheet tab	Does NATO want an average unit price for the sites based on the aggregate total from the Wave tabs? Do we take the total from the Wave tab and divide by the number of sites in that Wave to produce the average unit price for each sub CLIN? Example, Wave 1 (14 sites) average of Column Q by sub CLIN to the corresponding Unit Price column G of the CLIN Summary tab.	The Bidder shall provide an average for all wave sites. The prices shall add up correctly.	4
P.10	Bidding Sheet File version 1.1 AMD 1.xlsx	The CLIN tabs show the cost build-up by cost type. Since the Wave tabs have to tie into the CLIN tabs, do the bidders have to reflect the price or cost data on the Wave tabs?	The Bidder only need to insert price data in the WAVE Tab. Cost data is only included in the CLON or Bub CLIN Tabs	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.11	Bidding Sheet File version 1.1 AMD 1.xlsx and NCI SS v1 AMD1 20151014 rev.xlsx	The Wave tab in the NCI Bidding Sheet file does not have the Evaluated and Non-Evaluated Options CLINs as shown in the SSS SOW Bidding Sheets file. Is this correct? (Not sure about this one. I am having trouble tracking the CLIN 13 the CLIN 9 Non-evaluated)	This is not correct the Bidding sheets include wave sites for CLIN 8 Evaluated Options and CLIN 9 Non Evaluated Options The Bidder shall provide prices for all CLINS as indicated in the Bidding Sheets	4
P.12	Bidding Sheet File version 1.1 AMD 1.xlsx	There are many empty sheets added to the bidding sheet file in amendment one, can NATO clarify on what the bidders will have to provide on these empty sheets?	The Bidding Sheets are corrected in AMD 4	4
P.13	Bidding Sheet File version 1.1 AMD 1.xlsx, Column C of the Offer Summary tab	The cells in Column C Offer Summary tab all say #REF!. What are the correct formulas?	The Bidding Sheets are corrected in AMD 4	4
P.14	Bidding Sheet File version 1.1 AMD 1.xlsx	How can we expand the Materials and Labor Sections of the CLIN tabs without disrupting the drop-down data lists in Column A?	The Bidder can add rows to both the materials and labour categories that should not disrupt the drop down list.	4
P.15	Bidding-Instructions _v1 1 AMD 1	There is an "Error! Reference source not found" in section 4.6.3.2. What is the correct reference?	Faulty references are corrected in AMD 4.	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.16	IFB-CO-13735-NCI BOOK I Instructions to Bidders	Paragraph 2.11.1 specifies: "The Bidder shall furnish with his Bid a guarantee in an amount equal to Five Hundred Thousand Euro (€300,000)." Is the Bid guarantee set at 300.000€ or 500.000€? Please specify the correct amount.	The Bid Guarantee is set at Euro 300,000. This amount is specified correctly in AMD 1 to the IFB. This was corrected in IFB AMD 3.	3
P.17	SoW 2.3.8 & SSS CLIN 1.4.2 – 1.4.3	<p>Can the purchaser explain the split of price for the 2 CLINs for the NeCT. i.e. explain difference between “establish” and “sustain” and how the purchaser sees this cost split?</p> <p>It is the bidders assumption that CLIN 1.4.2 should only include any initial and final mobilization costs such as travel, accommodation etc. and that CLIN 1.4.3 is the recurring service price for the individuals.</p>	No, the bidder’s assumption is not correct. CLIN 1.4.2 pertains to the cost of the NeCT until and including 38 WAEDC (this includes the training and familiarization of the NeCT with the NCI specific design, participating in the 5 weeks full time Configuration Capturing in Mons etc) while CLIN 1.4.3 pertains to the maintenance/sustainment of the NECT until FSA.	4
P.18	SoW PM-58	Can the purchaser please identify the quantity of trips for the 50% of the NeCT team and in which CLIN this should be included?	Every site will have to be visited several times, e.g. for site surveys, installation activities, dry run, testing and acceptance activities etc. However, the exact quantity of trips cannot be determined by the Purchaser as it also heavily depends on the type and quality of the solution the Contractor will field, the quality of his team and quality of the work performed e.g. quality of site surveys reports, quality of installation work etc.. The price shall be included in the total price for subclin 1.4	4
P.19	SoW 2.3.9	Can the purchaser please identify what notice period the standby on-site support engineers have to be available within?	The standby on-site support engineers quoted in PM-61 will be requested with a notice period not shorter than two calendar weeks. Same notice period applies to up-to 50% of the NeCT that can be deployed as per requirement PM-58.	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.20	SoW 2.3.9	Can the purchaser identify in which CLIN, costs and pricing should be attributed to, for the additional on-site support personnel?	The CLINs of the two activities quoted under 2.3.9 for which the additional support would be required, i.e. CLINs titled "Conduct Subscribers Migration" and "Provide OpEval Support" The effort will also depend of the quality of the design of the NCI, the quality of the installation, quality of Contractor Staff etc. Bidder should calculate and distribute his estimate across the proposed CLINs.	4
P.21	SoW 2.3.9	Can the Purchaser clarify if travel costs should be included for the additional on-site personnel? If so can the purchaser confirm the volume of travel that the bidder should consider for inclusion?	All travel costs shall be included for the additional onsite personnel required to support of the Subscribers Migration and OpEval activities The number of sites is provided in the IFB. However, the amount of support required also depends heavily on the on the type and quality of the solution the Contractor will field, the quality of his team and quality of the work performed e.g. quality of installation work etc.	4
P.22	SoW 7 & SSS Various	Can the purchaser confirm that if the bidder proposes a migration plan including resource estimation and associated cost that this will not be changed by the purchaser? Or can the purchaser provide additional criteria/information that should be considered by the bidder?	The SOW requires a Subscribers Migration Plan (SMP) to be provided as part of the PIP (Section 7). The plan shall describe all the activities, milestones and actors associated with the Subscribers Migration stage. The associated costs shall be quoted under CLINs "Conduct Subscribers Migration". The SMP in the PIP will be subject to the standard review and change process as the other sections of the PIP, until the PIP is final and is approved in PRM-2. The Purchaser will use the final SMP to develop the Purchaser Cut Over and OpEval Plan (PCOP). The PCOP will take over the SMP. As per PM-130, the Bidder shall further use the PCOP to create an addendum to the PMS, which effectively also supersedes the SMP.	4
P.23	SOW-SD 98 and CLIN 9.1.1.1.1	Can the purchaser please confirm that the additional 10 site surveys identified in SD-98 is the same as CLIN 9.1.1.1.1? If so the quantity seems to be incorrect	The Purchaser confirms that the 10 site surveys identified in SD-98 are the same as CLIN 9.1.1.1.1. The quantity is correct as this is an option and the number of potential site surveys is not relevant at this stage. The Bidder shall indicate a unit price for a single site survey and be prepared to execute up to 10 sites at request.	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.24	SSS CLIN 8.5 & SOW [SD-14, SD-27] & Appendix 4 [484]	CLIN 8.5 does not include a sub CLIN for site surveys, can the purchaser please clarify?	Sub CLIN 8.5.11 (Site Surveys) has been added in the Bidding sheets and SSS per SSS v1.3 AMD 4.	4
P.25	SSS and Bidding Sheets	As an example CLIN 4.3.1 has a quantity of 3 for the 3 NOC locations, however in the bidding sheets the bidder can have a different unit price per location (this is correct as there could be different amounts of effort to be used at each location), Can the purchaser please clarify how this can be reflected in the SSS?	The SSS (CLIN Summary Sheet) is just for summary purposes. If a breakdown of price by location is required, this can be done on the 'NOC (3 sites)' tab.	4
P.26	SoW 2.3.8	When NeCT engineers are asked by the Purchaser to work on NCI locations other than Mons, please confirm that the Purchaser takes charge of corresponding travel and accomodation costs.	No, the effort will depend heavily on the type and quality of the solution the Contractor will field, the quality of his team and quality of the work performed e.g. quality of installation work etc.	4
P.27	SoW 2.3.9	When on-site support engineers are asked by the Purchaser to work on NCI locations, please confirm that the Purchaser takes charge of corresponding travel and accommodation costs.	The Bidder shall include all costs in their firm fixed price bid. See P21	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.28	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 1.4.4 / WAEDC	CLIN 1.4.4 Augment NeCT for SRTS. End date=7 WAEDC This CLIN pertains to the augmentation of the NeCT with one additional member appointed as SRTS administrator for operation of the SRTS tool during Stage 2 in support of site migration activities. As the end date indicated for this CLIN (7 WAEDC) cannot be the end of the period encompassing the 25 working weeks of the SRTS administrator, please indicate how the 7 WAEDC date should be read. Shall it be read as the date at the latest for the delivery of the STRS Introduction Training by the Purchaser during the Configuration Capturing session ([303]) ?	CLIN 1.4.4 corrected to FSA in SSS v1.3 AMD 4.	4
P.29	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 2.5.2 / WAEDC	CLIN 2.5.2 Install and configure PoC platform. End date=7 WAEDC. This end date cannot be achieved given that: - SoW requirement SD-162 specifies that installation of the PoC platform can start "immediately after CDR (PRM-1)" scheduled 12 WAEDC (see CLIN 2.6.1); and - Table 6.1 indicates that the PoC Platform installation will last 5 weeks, Please clarify how CLIN 2.5.2 end date should be read.	CLIN 2.5.2 adjusted in SSS v1.2 AMD 3 CLIN 2.5.2 adjusted in Bidding Sheets AMD 4	3 4
P.30	Bidding Sheets CLIN Summary Sheet and SSS Main/ CLIN 2.5.1 / WAEDC	CLIN 5.2.1 Supply of PoC platform. End date=7 WAEDC. Please indicate if the supply of the PoC platform equipment can last until CDR/PRM1 scheduled at 12 WAEDC since installation cannot start prior to CDR/PRM1 (SD-162).	Purchaser assumes this question is about CLIN 2.5.1 instead of CLIN 5.2.1. CLIN 2.5.1 adjusted in SSS v1.2 AMD 3	4
P.31	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 2.5.4 / WAEDC	CLIN 2.5.4 Support Purchaser's CCP Process. End date=7 WAEDC It is understood that Contractor support to Purchaser CCP process for Contractor solution products that are not on the AFPL shall be initiated as early as possible during the design stage and shall continue until FDR to ensure that all software and firmware introduced by the NCI can be enlisted in the AFPL not later than FDR at PRM-5 scheduled 40 WAEDC. Please clarify how CLIN 2.5.4 end date=7 WAEDC shall be read.	CLIN 2.5.4 has been updated in the SSS v1.2 AMD3. CLIN 2.5.4 has been deleted SSS v1.3 AMD4 because CLIN 2.5.4 (Support to CCP Process) is covered under CLIN 3.3. Deletion is reflected in the Bidding Sheet v1.2 AMD 4. Refer also to the response to CR T.33 (AMD 3)	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.32	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 3.3.2 / WAEDC	<p>CLIN 3.3 Support to Purchaser's CCP Process. End date=28 WAEDC</p> <p>CLIN 3.3.2 Support to Vulnerability Testing. End date=12 WAEDC.</p> <p>SoW statement [230] Penetration Testing and Vulnerability Assessment by the Purchaser will commence two weeks following CDR, and may continue until FDR.</p> <p>It is understood that Contractor support to Purchaser PTVA shall be provided until 28 WAEDC.</p> <p>Please indicate how CLIN 3.3.2 due date=12 WAEDC shall be read.</p>	Dates for CLINs 3.3, 3.3.1 and 3.3.2 adjusted in SSS v1.3 AMD 4.	4
P.33	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.2.5 / WAEDC	<p>WP4.2 - Reference and Testing Facility CLIN 4.2.2 Conduct Installation. End date=34 WAEDC.</p> <p>CLIN 4.2.5 Conduct STVP Testing. End date=33 WAEDC.</p> <p>There seems to be a discrepancy in CLIN 4.2.5 end date in view of other RTF implementation CLINs end dates. Please clarify.</p>	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4
P.34	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.3.5 / WAEDC	<p>WP4.3 - Network Operations Centres (3 sites)</p> <p>CLIN 4.3.2 Conduct Installation. End date=41 WAEDC.</p> <p>CLIN 4.3.5 Conduct STVP Testing. End date=33 WAEDC.</p> <p>There seems to be a discrepancy in CLIN 4.3.5 end date in view of other NOC implementation CLINs end dates. Please clarify.</p>	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4
P.35	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.4.5 / WAEDC	<p>WP4.4 - Wave 1 Implementation and Acceptance (14 sites)</p> <p>CLIN 4.4.2 Conduct Installation. End date=41 NLT T1 + 24 months AEDC.</p> <p>CLIN 4.3.5 Conduct STVP Testing. End date=33 WAEDC.</p> <p>There seems to be a discrepancy in CLIN 4.4.5 end date in view of other Wave 1 implementation CLINs end dates. Please clarify.</p>	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4
P.36	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.4.6	<p>WP4.4 - Wave 1 Implementation and Acceptance (14 sites)</p> <p>CLIN 4.4.6 Conduct training</p> <p>Please indicate what service or deliverable shall be quoted under CLIN 4.4.6 given that no training course delivery is required at non-NOC site locations</p>	The Conduct Training CLINs under CLIN 4 (excluding 4.2.6 for the R&TF and 4.3.6 for the NOC locations) are deleted per SSS version 1.3 AMD4. Same with the training CLINs under CLIN 8.5.6 and CLIN 9.1	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.37	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.5.5 / WAEDC	WP4.5 - Wave 2 Implementation and Acceptance (10 sites) CLIN 4.5.2 Conduct Installation. End date=41 NLT T1 + 24 months AEDC. CLIN 4.5.5 Conduct STVP Testing. End date=33 WAEDC. There seems to be a discrepancy in CLIN 4.5.5 end date in view of other Wave 2 implementation CLINS end dates. Please clarify.	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4
P.38	Bidding Sheets CLIN Summary Sheet and SSS Main/ CLIN 4.5.6	WP4.5 - Wave 2 Implementation and Acceptance (10 sites) CLIN 4.5.6 Conduct training Please indicate what service or deliverable shall be quoted under CLIN 4.5.6 given that no training course delivery is required at non-NOC site locations.	The Conduct Training CLINs under CLIN 4 (excluding 4.2.6 for the R&TF and 4.3.6 for the NOC locations) are deleted per SSS version 1.3 AMD4. Same with the training CLINs under CLIN 8.5.6 and CLIN 9.1	4
P.39	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.6.5 / WAEDC	WP4.6 - Wave 3 Implementation and Acceptance (23 sites) CLIN 4.6.2 Conduct Installation. End date=41 NLT T1 + 24 months AEDC. CLIN 4.6.5 Conduct STVP Testing. End date=33 WAEDC. There seems to be a discrepancy in CLIN 4.6.5 end date. Please clarify.	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4
P.40	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.6.6	WP4.6 - Wave 3 Implementation and Acceptance (23 sites) CLIN 4.6.6 Conduct training Please indicate what service or deliverable shall be quoted under CLIN 4.6.6 given that no training course delivery is required at non-NOC site locations.	The Conduct Training CLINs under CLIN 4 (excluding 4.2.6 for the R&TF and 4.3.6 for the NOC locations) are deleted per SSS version 1.3 AMD4. Same with the training CLINs under CLIN 8.5.6 and CLIN 9.1	4
P.41	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.7.5 / WAEDC	WP4.7 - Wave 4 Implementation and Acceptance (23 sites) CLIN 4.7.2 Conduct Installation. End date=41 NLT T1 + 24 months AEDC. CLIN 4.7.5 Conduct STVP Testing. End date=33 WAEDC. There seems to be a discrepancy in CLIN 4.7.5 end date in view of other Wave 3 implementation CLINS end dates. Please clarify.	The STVP dates have been updated in the SSS. Please see SSS v1.3 AMD4 for corrected SVTP dates and locations.	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.42	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 4.7.6	WP4.7 - Wave 4 Implementation and Acceptance (23 sites) CLIN 4.7.6 Conduct training Please indicate what service or deliverable shall be quoted under CLIN 4.7.6 given that no training course delivery is required at site locations.	The Conduct Training CLINs under CLIN 4 (excluding 4.3.6 for the NOC locations) are deleted per SSS version 1.3 AMD4. Same with the training CLINs under CLIN 8.5.6 and CLIN 9.1	4
P.43	Bidding Sheets CLIN Summary Sheet and SSS Main/ CLIN 7.2.1	CLIN 7.2.1 Perform RAMT modelling and prediction. End date=10 WAEDC SoW - ILS-27 The Contractor shall ensure that RAMT analysis and prediction is performed and delivered before FDR and accepted at FDR. Please clarify how CLIN 7.2.1 end date=10 WAEDC shall be read in view of ILS-27 requirement.	RAMT modelling and prediction shall be provided at 10 WAEDC. However, as the design finalizes, the RAMT modelling and prediction may need to be revisited. ILS-27 then requires the RAMT modelling and prediction, applicable for the final design, as a condition for FDR acceptance.	4
P.44	Bidding Sheets CLIN Summary Sheet and SSS Main / CLIN 7.2.2	CLIN 7.2.2 Perform FMECA. End date=10 WAEDC SoW - ILS-34 The Contractor shall ensure that the FMECA is performed and delivered before FDR and accepted at FDR. Please clarify how CLIN 7.2.2 end date=10 WAEDC shall be read in view of ILS-34 requirement.	FMECA shall be provided at 10 WAEDC. However, as the design finalizes, the FMECA may need to be revisited. The FMECA, applicable for the final design, is a condition for FDR acceptance.	4
P.45	Book I Annex A Bidding Sheet - Site Price Breakdown Bidding Sheets	Can you please explicit "Training documentation" , WBS 3.8 of the Site Price Breakdown bidding sheets	See P42. CLINs 3.8 of the Wave 1 till 4 Tabs in the Bidding Sheets are deleted per v1.2 AMD 4.	4
P.46	Book I Annex A Bidding Sheet - subCLIN 2.5.5/2.5.6 and SubCLIN 6.5/6.6	It seems that SubCLINs 2.5.5 and 2.5.6 are redundant with subCLINs 6.5 and 6.6. If so, which ones shall be quoted?	CLINs 6.5 & 6.6 shall be quoted. CLINs 2.5.5 and 2.5.6 are deleted from the Bidding Sheet version 1.2 AMD 4 and SSS. v1.2 AMD 3	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.47	Book I Annex A Bidding Sheet - subCLIN 2.5.5/2.5.6 and SubCLIN 6.5/6.6	It seems that SubCLIN 4.2.6 is redundant with subCLIN 6.10. If so, which one shall be quoted?	CLIN 6.10 shall be quoted. CLIN 4.2.6 is deleted from Bidding Sheet 1.2 AMD 4 and SSS v1.3 AMD4.	4
P.48	Book I Annex A Bidding Sheet - sheet "NOC (3 sites)"	The activity " Conduct Subscribers Migration " (WBS 8) has to be quoted in the Site Price Breakdown bidding sheet for the NOC , but does not appear in the CLIN Summary Sheet. Can you please confirm it is missing in the CLIN Summary Sheet SUBCLIN 4.3 ?	Refer to CR response P.3	4
P.49	SSS Main tab WP3 CLIN 3.3.1, CLIN 3.3.2 and WP4	Can you please confirm that the content of cells "E51", E52", "F51" and "F52" of the SSS should be moved up one row.	CLIN 3.3.2 and CLIN 4 have been updated in the SSS v1.2 AMD3. CLIN 3.3.2 and CLIN 4 have been updated in the Bidding Sheet v1.2 AMD 4	4
P.50	Bidding Sheet File version 1.1 AMD 1.xlsx	On all of the CLIN tabs, there are formula errors, starting with the formula for month 73. For example, for month 73 the formula is currently being listed as \$L12*CW12; when it should be \$L12*CK12. The formula skipped 12 columns. This is true for the 24 months of calculations for years 7 and 8 in columns GD through HA. The year 8 calculations should be multiplied by the cost or rate in column \$M. Can NATO please correct these errors?	The formulas have been corrected. The file reference is Bidding Sheet File v1.2 AMD4.	4
P.51	Bidding Sheet File version 1.1 AMD 1.xlsx	On all of the CLIN tabs, there are formula errors. For month 73, the formula is currently being listed as \$L12*CW12; when it should be \$L12*CK12. The formula skipped 12 columns. Can NATO please correct these errors?	The errors have been corrected. The file reference is Bidding Sheet File v1.2 AMD4.	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.52	Bidding Sheet File version 1.1 AMD 1.xlsx	On the CLIN 8.6 tab, there are #REF values in cells E47-E51. Can NATO please correct these errors?	The errors have been removed. The file reference is Bidding Sheet File v1.2 AMD4.	4
P.53	Bidding Sheet File version 1.1 AMD 1.xlsx	The current formulae for travel calculation provided on each of the CLIN tab does not account for the number of trips into the calculation. We suggest that the formulae should be updated from "Total cost = (number of trips*number of people*cost per round trip flight) + (number of people*number of days per trip*per diem)" to "Total cost = (number of trips*number of people*cost per round trip flight) + (number of trips*number of people*number of days per trip*per diem)". Can NATO please correct these errors?	The formula has been updated.in the Bidding Sheets V1.2 AMD 4	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.54	SSS main tab / Bidding Sheets CLIN summary	<p>There is an inconsistency between the CLIN names and associated delivery dates between the SSS and bidding sheets concerning WP2.3:</p> <ul style="list-style-type: none"> - The SSS asks performance of batch 1 site survey for EDC + 10 weeks whereas the bidding sheets mention EDC + 6 weeks - The SSS asks performance of batch 2 site survey for EDC + 16 weeks whereas the bidding sheets mention EDC + 10 weeks - The SSS asks performance of batch 3 site survey for EDC + 22 weeks whereas the bidding sheets mention EDC + 16 weeks - The SSS asks performance of batch 4 site survey for EDC + 28 weeks whereas the bidding sheets mention EDC + 22 weeks - The SSS asks for delivery of the SSR template at EDC+6 weeks, which is not mentioned in the bidding sheets - The Bidding sheets include one additional line for site survey reports requested at EDC + 28 weeks on top of the site survey reports per batch requested for EDC + 31 weeks. This line is not in the SSS. <p>Please clarify</p>	The Bidding sheet is incorrect and is amended in AMD4.	4
P.55	SSS optional wave 8 sites	<p>8 locations are considered in SOW Appendix 4 point 484 as optional evaluated sites for NCI - however we don't see any description of these 8 locations under SOW Appendix 5 PABX removal locations points 494-495 and within tables 13-7 and 13-8. As we see that these sites aren't grey within the SSS for CLIN 1.7 NU VoIP Appliances, can NATO confirm that these are in scope of an optional evaluated SSS for MMA position also? If yes, can NATO provide the description if these 8 sites for large or small capacity, VoIP terminals, DECT handsets, FAX ext?</p>	The Optional Wave for 8 locations is not eligible for PABX replacement. BS is updated per v1.2 AMD4	4

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
P.56	SSS	Referring to SOW Appendix 5 point 5.4 494 & 495 and table 13-8. Can NATO confirm that no pricing is requested for these optional locations as we see that these sites are grey within the SSS for CLIN 1.4 and 1.7 NU VoIP Appliances.	The non-evaluated options for horizontal cabling, NU LAN switches and VoIP appliances, for the locations listed in SoW Table 13-8, are addressed in the Bidding Sheets under CLIN 9.2 NOC and Wave sites Sub-CLIN 13 for the respective Waves. The Bidders shall provide prices for these items in Sub CLIN 13 of the respective waves.	4

Technical

Serial NR	IFB REF	Bidder's Question	NCI Agency Answer	AMD
T.1	SoW 7.5 [372]	Please precise the list of sites that are used 24/7/365.	<p>Unfortunately such a list is not static. There are several factors that influence if a site is to be considered as a 24/7 site or not. Factors such as:</p> <ul style="list-style-type: none"> • Military operations at the time; • Carrying transit traffic (affected by the NCI migration); and • Hosting of CES and/or FAS. <p>Site access (opening hours) will be adjusted by the Purchaser to allow for access within a 24h/7 schema, based on an operational assessment of that moment in time and for that specific site. Maintenance downtime needs to be granted site-by-site and service-by-service basis by the Purchaser.</p> <p>Scheduled maintenance downtime is typically at night or week-ends; but not necessarily always at those times (depending on the military operations at that time). Coordination with the OPS Centre at Mons (SHAPE) is necessary when planning an actual maintenance outage.</p> <p>For the purpose of bidding, as a minimum, the following locations ought to be considered as 24/7/365:</p> <ul style="list-style-type: none"> • NCI locations with LTX tier Core, which includes the DC locations; • NCI locations operating a NCI NOC and/or the ITM SOC • AIRCOM, MARCOM, LANDCOM, and CAOC locations. <p>The Bidder shall account in his Subscribers Migration Plan (SMP), and pricing, for possible changes to this list as needed.</p>	3
T.2	SoW 5.6.5 & Appendix 5	In § 5.6.5 of the SoW, Zagreb is listed as a site where the PABX is to be replaced with IP telephony. However, Zagreb is not included in the tables of Appendix 5 which list the sites where the PABX have to be removed. Please clarify.	<p>Appendix 5 prevails for PABX replacement.</p> <p>The PABX replacement in § 5.6.5 for Zagreb is incorrect.</p>	3

T.3	SRS Annex D, [MNG-14]	The MNG-14 requirement states: 'The NCI DSMS shall implement interfaces with the existing enabling services including the existing "LTX" transport network'. Could you please provide the specifications for these interfaces.	The NED, and the Transport Service it provides, is managed through: Alcatel Lucent 5620 Service Aware Manager (SAM), Version 12.0 + Alcatel Lucent 5650 Control Plane Assurance Manager (CPAM), Version 8.0 Build 5 Patch 0. Note that the versions might change over time.	3
T.4	SRS – Core document v1.0 20150928.pdf', page 14 [SYS-10], (3)	This appears to be a copy/paste error. Could NATO clarify this requirement?	<p>Indeed a mistake, [SYS-10] shall read:</p> <p><i>[SYS-10] The NCI shall implement the following subsystems, as separate entities, from a physical implementation perspective and from a management perspective:</i></p> <p><i>(1) A Protected Core (PCore) Access Subsystem (PCA);</i></p> <p><i>(2) Multiple Coloured Cloud (CC) Access subsystems (CCA), which in turn is decomposed in:</i></p> <p><i>a) NS IP Access subsystem;</i></p> <p><i>b) NR IP Access subsystem;</i></p> <p><i>c) NU IP Access subsystem;</i></p> <p><i>(3) Ok they were not, just ; and</i></p> <p><i>(4) An NU Multimedia Access subsystem (MMA).</i></p>	3
T.5	SRS for MMA defines wireless phones.	Will the contractor be required to install Wi-Fi as a part of this effort?	<p>No, it is not required for the Contractor to install the WiFi Access Points under this contract; Figure 1 refers to "ports reserved for WiFi Access Points (PFE)" at the Local Area Network (NU)".</p> <p>SRS Annex C, § 3.5.1.3 specifies the mobile telephone base stations and telephones to implement DECT (refer to [MMA-317]). Base stations are connected to the network as wired (refer to [MMA-311] + [MMA-312]). The use of WiFi for the wireless telephones is not in line with the requirement for DECT.</p> <p>The Contractor is required to deliver and install the DECT base stations and DECT phones.</p>	3

T.6	SRS - Core Document v1.0 20150928	Req. [SYS-10] (3) We assume this sentence is a typo. If so, please correct.	This is indeed a mistake. Full answer provided in T.4	3
T.7	SRS - Annex C Multimedia Access subsystem v1.0 - 20150928	[MMA-49] Name stating for both ad-hoc AND meet-me?	Yes for both ad-hoc and meet-me voice conferences.	3
T.8	SRS - Annex C Multimedia Access subsystem v1.0 - 20150928	[MMA-83] <i>For access to the voice mail, through another NCI-VoIP telephone, users shall dial their extension number to reach the voice mail and use the PIN to gain access to the voice:</i> please confirm if no pilot number has to be dialled.	Correct this is what [MMA-83] states, dialling a pilot number is not required. The requirement specifies a mechanism where the user dials its own number, from another NCI telephone, and through his/her PIN can activate the voice mail menu. The exact mechanism is not specified and subject to design.	3
T.9	Annex D, Table 1	We need a clarification if Change Management is in scope or out of scope. In Annex D says it is out of scope instead of paragraph seems it has to be in scope	<p>In the context of the NCI systems the Change Management process will be supported by the NCI Agency's Enterprise Service Management System (ESMS). Therefore Table 1 states that Change Management process is not in the scope for the NCI.</p> <p>The current implementation of the ESMS is based on the Remedy ITSM suite in which the Change Management module is deployed.</p> <p>The Service Asset & Configuration Management (SACM) process is in scope of the NCI. The SACM process for the NCI assets will be supported by the NCI's Domain Service Management System (DSMS). The SACM module of the NCI DSMS shall provide, through the Northbound Interface (Fig. 2, interface 7), the necessary information to the ESMS in order to relate a change to the affected configuration items.</p>	3

T.10	6.7 DSMS interface	We need clarification from customer expectation about interfaces for incident/event management	<p>In order to detect occurrences of events (as required in [MNG-42]), the DSMS must interface with the NCI subsystems (i.e. PCA, CCA and MMA), and components thereof. The interfaces, between the DSMS and the subsystems/components, are implemented as specified in § 6.7.7. Note that “managed system group” in [MNG-214] relates to the NCI subsystems. Further note that [MNG-214] does not limit the Technical Interfaces to the protocols listed (Syslog, SNMPv3 and/or NMS Web Services); however, § 6.4 specifies technical constraints in the form of IA requirements, which require secure management protocols. These IA requirements also apply to the Technical Interfaces specified in § 6.7.7.</p> <p>The DSMS Event handling, refer to [MNG-42], must interface to the ESMS’ Event and Incident handling functions through the logical DSMS-ESMS interface that is identified in Figure 2 as interface 7.</p> <p>The DSMS-ESMS interface is referred to as the “Northbound Interface”. The Northbound Interface is specified in § 6.8.2 to implement MTOSI and OSS/J as defined by TMF. The interface 7, depicted in Figure 2, is a logical part of this Northbound Interface.</p> <p>As specified in § 5.2.6, the DSMS shall reuse the Purchaser’s ESMS incident management module. Appendix 3 specifies this as “BMC Remedy ITSM 8.1”. (Note that ITSM 8.1 will be implemented in Q1 2016, in the meantime 7.6.4 SP2 is used)</p> <p>Summarizing: The DSMS interfaces with the managed subsystems/components (interface specified in § 6.7.7); The DSMS interfaces with the ESMS through the Northbound Interface (specified in paragraph 6.8.2); At time of implementing of the NCI, the ESMS uses BMC Remedy ITSM 8.1.</p>	3
T.11		What service management capability was deployed?	<p>SRS Annex D specifies in Appendix 3 the software that the Purchaser uses to implement the existing ESMS (at time of delivery of the NCI):</p> <p>COTS:</p> <ul style="list-style-type: none"> • BMC Remedy ITSM 8.1 for incident management • BMC Atrium CMDB 8.1 for SACM <p>In-house developed:</p> <ul style="list-style-type: none"> • Service Request Tracking System (SRTS) 	3

			<ul style="list-style-type: none"> • Change Management System (CAMS) • CAST: Data Repository for Centrally Provided & Managed CIS services configuration data, circuit configuration database. • IPMGT: IP management <p>SRS Annex G further specifies the tools currently in use to manage the current NGCS (the DSMS function):</p> <ul style="list-style-type: none"> • HP Network Automation, for configuration management and change management; • Cisco ACS, for access management; • SPLUNK / KIWI, for logging; • Infoblox (IPAM and NetMRI), for IP address management; • nGenius Performance Manager (nGenius ONE), for IP flow monitoring and packet analyses; • Intermapper, for live network mapping and status reporting; and • Voice - Cisco Prime Collaboration Provisioning, for Call Manager & telephony end-point management. <p>Note that the above list of tools, employed as the NGCS DSMS, does not constitute a requirement, nor does the Purchaser consider that these meet the requirements specified in this IFB.</p>	
T.12		What modules are included on the HTSM?	<p>Question not understood; HTSM is not understood. The question is responded to in the assumption that the question refers to BMC ITSM.</p> <p>The incident and change modules are implemented.</p>	3
T.13		Has it customized or that is a standard version of deployment?	<p>Question not fully understood, please define "it". The question is responded to in the assumption that the question refers to BMC ITSM.</p> <p>BMC ITSM modules (incident and change) are not customized.</p> <p>Custom Remedy frontend forms, inheriting standard functionalities, adding some additional features (i.e. security classification) are implemented.</p>	3

T.14		Is there any specific requirement about billing?	<p>Billing only applies to calls established through the MMA subsystem. Specifically:</p> <ul style="list-style-type: none"> • SRS Annex D specifies in [MNG-9]/Table 1 the implementation requirement for the Financial Management process to be used for VoIP CDRs only. • [MNG-207] requires the relay of Call Detail Records (CDRs) in the form of events (via interface 7) to the ESMS. 	3
T.15	[PCA-61] - SRS Annex A	Could NATO specify the bearer services of the PCA -SIOP2 interfaces (electrical/optical MM/SM/BaseT)?	<p>The technical specification of the PCA SIOP-2 interfaces is to match the CCA SIOP-2 interfaces. These are specified in the SRS Annex B.</p> <p>Electrical or optical is subject to design. The design shall adhere to the Installation Requirements specified in the SRS Core § 3.8.</p> <p>The NS IP Access subsystem employs the TCE-621/B and TCE-621/C of which the SRS Core, Appendix 7 provides the technical details, including specification of the physical interfaces.</p> <p>The TCE-621/B and TCE-621/C physical interfaces pose technical constraints, but so do the Installation Requirements, and the site layouts specified in the SRS Annex F.</p> <p>The NR IP Access subsystem's SIOP-2 is specified in SRS Annex B § 3.2.1.2.3. The types of interfaces required are specified, electrical or optical is subject to design.</p> <p>The NU IP Access subsystem shares the SIOP-2 interfaces with the NR IP Access subsystem, as specified in SRS Annex B § 3.2.1.3.3.</p>	3
T.16	[PCA-62] - SRS Annex A	The number of PCA-SIOP-2 interfaces on different Node Type Location is smaller than the sum of SIOP-2 interfaces required by CCA Subsitems	<p>That depends on how, and for what purpose, the required physical interfaces are used. In this context, note:</p> <ul style="list-style-type: none"> • [CCA-61] states: "All communications interfaces, logical or physical shall support identical features.". [CCA-62] states: "All communications interfaces shall be configurable to be one of the following: (1) IProuted; (2) LANext; (3) Physical SIOP-5; (4) Ethernet switched Logical SIOP-5 (refer to the Ethernet switching function required 	3

			<p>in [CCA-19]); and (5) SIOP-2.”</p> <ul style="list-style-type: none"> [PCA-51] states: “All communications interfaces, of the PCA subsystem, shall be configurable to be of the following type: (1) SIOP-2; (2) PCN-1; (3) PCN-2; (4) Bref” <p>The above implies that, subject to design and subject to further evolution of the PCA and CCA subsystems (after FSA), the “additional” interfaces may or may not be used.</p> <p>Further, refer to the answer to T.20; the NR IP Access subsystem’s SIOP-2 interfaces is incorrectly specified in [CCA-89]. This will be corrected in a subsequent amendment, which will add additional SIOP-2 interfaces on the side of the SIOP-2.</p>	
T.17	[PCA-162] - SRS Annex A	In case of dedicated external packet capture probe one of the two M3 interfaces become a PFE, therefore the PCA aggregation router will have only one M3 interface. Could NATO clarify?	<p>The specification of the M3 interface, in Figure 5 of the SRS Annex D, is logical and does not refer to a single physical interface.</p> <p>The distribution within the PCA subsystem is subject to design and is to be provided as part of the subsystem. That implies that the Bidder shall provide the appropriate distribution to the PCA subsystem components that are managed through the M3.</p> <p>Furthermore, consider [MNG-247] which requires <u>additional unallocated</u> out-of-band management interfaces, in addition to the once used to manage the PCA subsystems.</p>	3
T.18	[CCA-81] - SRS Annex B	Could NATO specify the the bearer services of the NS -CCA -SIOP2 interfaces (electrical/optical MM/SM/BaseT)?	<p>Electrical or optical is subject to design. The design shall adhere to the Installation Requirements specified in the SRS Core § 3.8.</p> <p>The NS IP Access subsystem employs the TCE-621/B and TCE-621/C of which the SRS Core, Appendix 7 provides the technical details, including specification of the physical interfaces.</p> <p>The TCE-621/B and TCE-621/C physical interfaces pose technical constraints, but so do the Installation Requirements, and the site layouts specified in the SRS Annex F.</p>	3

T.19	Section 3.2.1.2- SRS Annex B	Could NATO advise if the SATCOM NCI Node has NR/NU Subsystems on its architecture?	There is one CCA subsystem, which in turn consists of an NS, an NR and an NU IP Access subsystem (refer to SRS Annex B, requirement [CCA-5]. That applies to all CCA instances at each NCI node, including those with LTX tier SATCOM. Therefore, yes.	3
T.20	[CCA-89]- SRS Annex B	There is no 1000BaseT SIOP-2 GigEthernet ports for NU/NR subsystems for NCI 40G Node, making a NCI 40G Node to have less SIOP-2 interface than NCI-5G Node. Could NATO clarify?	<p>That is a mistake, the 40G and 5G nodes are intended to have both copper and fibre based SIOP-2 interfaces. Furthermore the 10Gbit/s interfaces at LTX Tier = CORE were omitted for the 40G Node.</p> <p>[CCA-89] will read in AMD3: <i>[CCA-89] The number of SIOP-2 interfaces at NCI 40G Locations shall be as follows.</i></p> <p>(1) 2x 1Gbit/s configurable as single or multi-mode and</p> <ul style="list-style-type: none"> a) For single-mode conform to standard IEEE 802.3z 1000BASE-LX; b) For multi-mode conform to standard IEEE 802.3z 1000BASE-LX and 1000BASE-SX (but not simultaneously); and c) Implement the [LC] Connector <p>(2) 2x 1Gbit/s over Copper, and shall</p> <ul style="list-style-type: none"> a) Conform to standard IEEE 802.3ab 1000BASE-T; and b) Implement the [RJ45] Connector <p>(3) At NCI Nodes at location with LTX Tier = CORE, 2x 10Gbit/s configurable as single and multi-mode fibre, and shall</p> <ul style="list-style-type: none"> a) For single-mode conform to standard IEEE 802.3ae 10GBASE-LR; b) For multi-mode conform to standard IEEE 802.3ae 10GBASE-SR; and c) Implement the [LC] Connector <p>Note: the LC connector applies for all fibre optic interfaces specified throughout the SRS Annex B.</p>	3

T.21	[CCA-88]& [CCA-98]- SRS Annex B	Could NU and NR subsystem share the Control and Forwarding Plane of the same physical network device?	<p>Sharing the same Control and Forwarding Plane of the same physical network device is not explicitly forbidden in the SRS Annex B.</p> <p>However, Bidder shall prove:</p> <ul style="list-style-type: none"> • Compliance to the IP Encryption requirements specified in the SRS Core document § 2.3.2, specifically [SYS-35], in the offered configuration; • Where VLANs are used, compliance to [NIATC - VLAN - 004.Feb.2013] as required in [SYS-282]; • Full compliance to the CS requirements specified in the SoW Section 4; • The minimum capacity of both the NR and the NU IP access subsystems (as specified in [SYS-109], [SYS-110], [SYS-111], and [SYS-112]) is provided such that the capacity of the individual NR and NU IP Access subsystems does not degrade below the minimum required when both the NR and the NU are loaded at their maximum load in parallel (i.e. the minimum capacity of the NU shall be sustained if the NR is loaded to its maximum and vice versa); • The Forwarding plane segregates both classifications, and within a classification segregates the different communities of interest; and • The Control plane signalling and housekeeping is segregated for both classifications. 	3
T.22	Section 3.2.1.2 & Section 3.2.1.3 SRS Aneex B	If NU and NR subsystems are provisioned on the same physical device (that will share SIOP-2 Interfaces as per [CCA-88] & [CCA-98] what will be the total number of the SIOP-5 interface of the physical device ? It will be the sum (NR-SIOP-5 Interfaces + NU-SIOP5 Interfaces ex for NCI-40G :12x1GE MMF, 12x1GE1000Baset and 4x10Ge?)? Or Max(NR-SIOP-5 Interfaces,NU-SIOP5 Interfaces) ex 6x1GE MMF, 6x1GE 1000BaseT and 2x10GE, separation done at the VLAN level	<p>The SIOP-5 interfaces are specified for the NS, the NR and the NU IP Access subsystem separately.</p> <p>The numbers of SIOP-5 interfaces refers to physical interfaces, which is specified per IP Access subsystem (separate for NR and NU).</p> <p>Refer to T.21</p>	3

T.23	Section 3.2.1.2 & Section 3.2.1.3 SRS Aneex B	If NU and NR subsystems are provisioned on the same physical device (that will share the SIOP-2 Interfaces as per [CCA-88] & [CCA-98] what will be the total number of the IProuted and LANext interface? It will be (NR- IProuted and LANext Interfaces + NU- IProuted and LANext Interfaces)? Or Max(NR- IProuted and LANext Interfaces,NU- IProuted and LANext Interfaces) and separation will be done at the VLAN level?	The IProuted and the LANext interfaces are specified for the NS, the NR and the NU IP Access subsystem separately. The numbers of IProuted and LANext interfaces refers to physical interfaces, which is specified per IP Access subsystem (separate for NR and NU). Refer to T.21	3
T.24	Section 3.2.3 SRS Aneex B	What are the bearer services of the M2 Interface (electrical/optical MM/SM/BaseT)?	The physical interface of the TCE-621/A is specified in § 8.3 of Appendix 8 of the SRS Core Document. The actual interface, and distribution, towards the individual NS CCA subsystem components is subject to design, the Installation Requirements, the Physical Implementation Requirements, and the Information Assurance requirements specified in the SRS and the SoW.	3
T.25	[CCA-137]- SRS Annex B	Could NATO advise if full packet capture and long term recording is required for LTX-Access, LTX-None (1G,100M Node) or SATCOM Sites?	CCA-137 requires the implementation of full packet capture and long term recording probes only at LTX tier CORE and LTX tier DISTRIBUTION and not at other LTX tiers.	3
T.26	Section 3.4.2 SRS Annex B	Could NATO advise if full packet capture and long term recording is required for NU and NR sub-systems as well?	No, the full packet capture and long term recording is not required for NU and NR subsystems. However, the traffic mirroring interfaces, as specified in [CCA-130], are required on all CCA classifications.	3
T.27	[CCA-140]- SRS Annex B	If the full packet capture is done by the external device, is this storage capacity delivered by the PFE?	The storage for the full packet capture is not PFE but shall be provided and integrated as part of this procurement.	3

T.28	[CCA-142]- SRS Annex B	In case of dedicated external packet capture probe one of the two M2 interfaces become a PFE, therefore the NS-CCA sub-system will have only one M2 interface. Could NATO clarify?	<p>The specification of the M2 interface, in Figure 5 of the SRS Annex D, is logical and does not refer to a single physical interface. The only limit is the single physical TCE-621/A for use by the NS M2.</p> <p>The distribution within the CCA subsystem is subject to design and is to be provided as part of the subsystem. That implies that the Bidder shall provide the appropriate distribution, from the single TCE-621/A interface, to the CCA subsystem components that are managed through the M2.</p> <p>Furthermore, consider [MNG-247] which requires <u>additional unallocated</u> out-of-band management interfaces, in addition to the once used to manage the PCA subsystems.</p>	3
T.29	[MNG-234] - SRS Annex D	NATO call M1/M2/M3 as "out-of-band management interfaces" The out-of-band is usually assigned RSS-232 Local Console-Port. We see that those interfaces carry IP traffic for different protocol therefore are perceived as interfaces for "in-band traffic" therefore should be considered as dedicated 1-Gb Ethernet dedicated management port and not as Local Console port (aka out-of-band interface). Could NATO clarify?	<p>Out of band implies via a different path than the data plane in this context. I.e. the management traffic shall not be carried over the Bref interface across the LTX, but across a dedicated interface referred to as M1, M2 and M3.</p> <p>The Purchaser will provision transport for these separately through the NED.</p> <p>RS-232 is a mere example of an interface that could be carried out-of-band. It is not required to use RS-232 interfaces on the devices for out-of-band management. These may also be Ethernet interfaces segregated from the data plane and dedicated for management traffic only.</p>	3
T.30	SRS Annex D	NS-CCA is the single sub-system is in scope with the existing IFB. We need to propose a DSMS system for the entire NATO secret domain. What are the supported management protocols for the rest of the devices that out of scope in this IFB and we need to consider for NS-DSMS system?	<p>First, the assumption that the IFB has only a NS-CCA in scope is incorrect. The NCI CCA consists of:</p> <ul style="list-style-type: none"> • NS IP Access subsystem; • NR IP Access subsystem; and • NU IP Access subsystem. <p>Second, the NCI Management subsystem shall manage the NGCS Legacy Infrastructure as specified in the SRS Annex D, § 6.10.4. Note that this applies to all security classifications, not only NS.</p> <p>Refer to the SRS Annex G for specification of the current-state and of the end-state.</p> <p>The platforms currently in use (these are</p>	3

			<p>to be managed with the NCI Management subsystem) are specified in SRS Annex G, Section 2, paragraph 2.2.</p> <p>The actual set of protocols to be used is subject to design; accounting for the platforms used in the NLI, and accounting for SRS Annex G [MNG-261] and [MNG-262].</p>	
T.31		Can we re-use the deployed licences during the migration period?	<p>Whereas the question refers to licenses, delivered as part of the NCI procurement, re-use is permissible during the migration of users from the NGCS to the NCI. Such re-use is considered to be subject to design.</p> <p>Whereas the question refers to licences owned and deployed by the Purchaser in the existing NGCS, for the purpose of bidding, only licenses identified in the IFB as PFE (either explicitly or implicitly as part of PFE hardware) may be considered for re-use.</p> <p>Any use, and re-use, of licenses must be documented in the Bid as appropriate.</p>	3
T.32	3.6.1.5 & 3.6.4 in IFB-CO-13735-NCI BOOKI Instructions to Bidders	The RMP needs to be provided as chapter of PMP (part 1 admin package) and as deliverable of risk approach (part 4 admin package). We assume this is the same RMP, with 2 copies provided. Please confirm assumption is correct or identify if a difference is meant	See A.1	3
T.33	CLIN 2.1.1 & 2.5.2 & 2.5.4 on the Schedule of Supplies and Services	The PoC platform installation and configuration needs to be ready at 7 WAEDC - which is prior to the system requirements review. Is this correct or can it be extended till w10	<p>That is a typo. See SOW 3.4.6, 4.5.2 and updated SSS:</p> <p>Supply of POC platform ready at 12 WAEDC</p> <p>Install and Configure PoC platform ready at 16 WAEDC</p> <p>Support Purchaser's CCP Process till FDR at 36 WAEDC</p>	4

T.34	Appendix 3, section 3.1 [467] in SOW Core Document v1.0 20150928 3.4.5.2 (SD-145) in SOW Core Document v1.0 20150928 CLIN 4.2.5 & 2.5.3 on the Schedule of Supplies and Services	The POC should evolve into RTF but lead times in SSS indicate that both POC & RTF should exist next to each other : STVP testing on the RFT needs to be done one week earlier (week33) then on the POC (week 34)	<p>The question confuses the Proof of Concept and the Platform on which the Proof of Concept is executed. Refer to SoW § 3.4.6.</p> <p>CLIN 2.5.3 refers to SoW 4.5.1 “Contractor-led Security Testing”. This addresses the overall execution of the STVP. The Security Testing is part of the Proof of Concept; but does not apply to the Proof of Concept Platform itself.</p> <p>The execution of the STVP shall be delivered <u>completed</u> at 34 WAEDC. Complete delivery of the STPV execution includes the Test Report documenting the outcomes of the STVP.</p> <p>The STVP testing itself for the R&TF shall be delivered <u>complete</u> at 33 WAEDC (CLIN 4.2.5). The same applies to the STVP testing for the Network Operations Centres (CLIN 4.3.5), the Wave 1 (CLIN 4.4.5), the Wave 2 (CLIN 4.5.5), the Wave 3 (CLIN 4.6.5), and the Wave 4 (CLIN 4.7.5) implementations and acceptances.</p> <p>Completion of the actual tests in 33 WAEDC leaves 1 week to complete the Test Report, referred to above, and complete CLIN 2.5.3 in 34 WAEDC.</p>	3
T.35	3.4.5 (SD-137) & 3.4.7 (SD-200) in SOW Core Document v1.0 20150928	There's a conflict in required timeline to release the final SDS : SD-137 states 4 weeks after FDR; SD-200 states 2 weeks after FDR. Which one is correct?	<p>CLIN 2.4 “Delivery and Acceptance of System Design Specification (SDS)” prevails, which equates to 40 WAEDC. That is 4 weeks after delivery of CLIN 2.6.5 “Conduct Final Design Review (FDR) during PRM-5” at 36 WAEDC.</p> <p>SoW SD-200 is incorrect and will be corrected in AMD3.</p>	3
T.36	SOW ILS 11.3.2 ILS-11, ILS-12	Requirement states that contractor will be responsible for all levels of operation, maintenance and support of the NCI infrastructure from PSA (first site) through to FSA. In view of security restrictions, how does NATO envision that this will be effected? With contractor staff working 24X7 within the NATO buildings? Will SLAs apply during this period?	<p>The Contractor is the owner of the equipment until FSA and hence responsible for operation, maintenance and support. In practice, the Purchaser will start operating and maintaining the system from first site PSA, enabled to do so by the L1, L2 and L3 training the Purchaser will receive from the Contractor before site PSA. The Contractor is expected to support the Purchaser in doing this by gradually transferring operation and maintenance activities to the purchaser in the period from first site PSA to FSA. How the Contractor supports this transfer is for the Bidder to propose in the bid. It will certainly not require the</p>	3

			Contractor to work 24/7 in NATO buildings. But if equipment fails in this period between PSA and FSA, the Contractor will still be responsible for replacing the faulty equipment (at no additional cost to the Purchaser). There will also not be an SLA for the Contractor, neither during the implementation of NCI (until FSA) nor during the subsequent Warranty and CLS period (starting at FSA).	
T.37	BOOK II Part IV SOW p.19 PM-20	2.3.2 Deputy Project Manager "PM-20 The Contractor shall designate a Deputy Project Manager (DPM), who shall direct and coordinate the activities of the Contractor's project team at the Purchaser facilities." Is the presence of the DPM required on a full time basis at the Purchaser facilities and can the location be clarified?	No, it is not required that the DPM is present at the Purchaser's facilities at all times.	3
T.38	BOOK II Part IV SOW p.37 PM-131	2.6.2.2.2 PMP : Project Master Schedule (PMS) "PM-131 The Contractor shall develop and maintain the PMS using the latest commercial version of Microsoft Project." Microsoft has recently issued a new version (2016), which is announced to be only compatible with Windows 10, 8/8.1 and 7; wouldn't it be safer to use the previous one (2013) ?	MS Project 2010, MS Project 2013 and MS Project 2016 are equally acceptable for the Contractor to use. The Purchaser predominantly uses MS Project 2010. Obviously sharing project files in 2010 compatible, or exported, format is necessary.	3
T.39	Bidders Conference	NCI Agency requires proven but latest technology. Why there is limitation to Thales TC-621, NS VPN Gateway? There are at least 2 more moderns "NS" VPN Gateways, with full approval of Military Committee, Evaluation through SECAN and MCM number availability and listed within NIAP (Nucleo-SPAIN, SINA-Germany?) Isn't this limitation to Thales product counterproductive in context of technology and competition? Why has the Agency not included late generation cryptos within scope of NCI currently TCE severely limits the solution	The crypto element is PFE. The project was authorized by the Nations, through the Investment Committee, to use the crypto devices quoted in the IFB (TCE-621C) with the requirement to re-use existing inventory. Furthermore, NATO has selected TCE621 as the NICE through an IFB process, and thus the Alliance is bound to use this product as the NATO IP crypto, until NINE-compliant cryptos are available for procurement and fielding. Procurement of the next generation cryptos will occur through NATO's crypto modernization initiatives and capability packages.	3

T.40	Bidders Conference	Is the NED NATO owned and operated infrastructure?	The NED is not NATO owned, but is NATO managed and operated.	3
T.41	Bidders Conference	Is the NED reconfigurable to accommodate NCI solutions?	Yes, but only by the Purchaser, ultimately following the design proposed by the Contractor (e.g. traffic profiles) and subject to the constraints posed by the LTX transmission infrastructure the NED may be re-configured by the Purchaser if required.	3
T.42	Bidders Conference	Does the PICO-NED have to be Alcatel or can we propose functionally compliant alternatives?	<p>The Pico NED shall be from Alcatel in accordance to the specification included in Appendix 7 of the SoW Core document.</p> <p>The rationale is the installed base in the Purchaser's Transport network (implemented either as Pico-NED or as CED).</p> <p>Note that a Pico NED is always implemented in pairs, with one in the so-called "anchor location" and one at the NCI Location with LTX Tier = NONE. The Purchaser expects that, at time of delivery of the NCI, all anchor locations are covered with Pico NED anchors in support of the LTX Tier = NONE locations.</p>	3
T.43	Bidders Conference	Regarding MMA functionality you discussed the requirement for interfaces to local emergency services. Will NCIA test these interfaces?	No, the Contractor will test the interfaces. Site Surveys will allow the Contractor to define the exact details of the requirements on that interface at each location.	3
T.44	Bidders Conference	<p>In your discussion on survivability you mentioned the term PRECEDENCE. In this context, are you re-defining the standard definition of communications PRECEDENCE?</p> <p>Did you not mean to use the term RESTORATION PRIORITY in relation to survivability. Traditionally, PRECEDENCE and SURVIVABILITY have different meaning</p>	<p>We believe our use of precedence in the SRS does not redefine the definition.</p> <p>We define PRECEDENCE as path-specific priority for given flows, which results in higher availability for those flows.</p> <p>As specified in the SRS Core, the Military Precedence is signalled in each IP packet (per packet, as stated in [SYS-22]. Military Precedence shall be implemented as</p>	3

			specified in the SRS Core Appendix 1, and specifically Appendix 1 [163]. Hence flows that signal "Priority" in the IP packet header achieve a higher availability than flows that signal "Routine".	
T.45	Bidders Conference SRS Annex C MMA-15/[19]	Figure 2 connects MMA aggregation function to NUNI. Figure 1 is showing all MMA functions connecting to SIOP-5. Which is true?	NUNI is the interface between the phone and the LAN switch. SIOP-5 is the interface to the site infrastructure, which in this context starts with a BPD between the MMA and the CCA subsystems.	3
T.46	Bidders Conference	Is it expected to connect LTX on PCA directly in the future?	It is not excluded, but outside the scope of this bid, and it is at the Purchaser's discretion.	3
T.47	Bidders Conference	There should be one CMDB for NCI/ITM ... Why are you creating an inherent system of configurations that cannot be managed by not standardizing across these programs?	The CMDB is one logical entity, which aggregates multiple CMDB instances, ITM and NCI ones amongst them, tied together by the SID (Shared Information Data-model).	3
T.48	Bidders Conference	Why are you trying to procure a completely different management subsystem separate from ITM/laaS? Is this requirement going to be thrown away later?	No, both ITM and NCI procure Element and Domain management systems which are necessarily independent and can run on separate infrastructure. The glue is only provided by the overarching SMC, which is subject of a different project. Furthermore, to clear any strong dependency from NCI on a critical element like network management, NCI specifies its own, dedicated physical infrastructure to host these services.	3

T.49	Bidders Conference Annex C MMA-23	Can we propose an alternative solution that delivers the same results with 5 precedences, while keeping MLPP interoperability with other systems?	No, the standards specified in SRS Annex C (Appendix 1) prevail.	3
T.50	Bidders Conference Annex C MMA-284	May we propose a better solution = better compression + equal quality while keeping G.729 interoperability with other systems?	No	3
T.51	Bidders Conference	Should it be possible to have evidence of the content of following standards: STANAG 4705- Ed 1 2010, STANAG 4214 – Ed.2 2006, STANAG 4705 – ED1 2015	STANAG 4214-Ed.2 2005 and STANAG 4705 Ed.1 2015 will be provided as part of the amendment. The reference in SRS Annex C [115] to STANAG4705-Ed1:2010 is an incorrect reference to the 2010 ratification draft. The SRS Annex C will be corrected to read: “[115] The NCI numbering plan is based on [STANAG4705-Ed1:2015], which supersedes STANAG 4214 [STANAG4214-Ed2:2005].”	3
T.52	Bidders Conference	The public number (E.164) attributed to emergency TDM/GW in site with PBX migration ... has to be the same used to reach end-user phone inside the site?	Emergency gateway function is only intended for outward dialling. No need for inward dialling through the “emergency TDM/GW” function .	3
T.53	Bidders Conference	Is it possible to propose two separate call handling functions? One for European area, a second one for American area?	We see no need for that. There is one area only, the NATO area.	3

T.54	Bidders Conference	Is it possible to better clarify if you're thinking about one single SIP trunk or you'd prefer one SIP trunk connection for each country?	<p>The Purchaser looks for centralized SIP management through centralized SIP Boundary Protection functions in the Data Centre, with potentially local Public Telephone Network access available in each country.</p> <p>Ultimately, full NATO-wide centralized Public Telephone Network access is envisioned. However, the Purchaser is still in the preparation phase of this transition; today to a large extent the Public Telephone Network access relies on local access.</p> <p>With respect to the IFB, after all each site must implement the necessary local elements of the interoperability function. I.e. in order to establish the Emergency Gateway function, the PBX-IP-GW, interconnections with the NDN, or other 3rd party interconnections. These can be used for this purpose.</p>	3
T.55	Bidders Conference	Is it possible to clarify if operator console, with or without IVR, are desirable for you?	<p>No requirement for a central operator.</p> <p>The IFB does require a central Call Centre functionality, which calls for an IVR, as per SRS Annex C.</p>	3
T.56	Bidders Conference	Is it possible to have some information about the existing Video infrastructure?	<p>As described in the IFB, the VTC infrastructure is IP based; the NCI is to provide IP transport services with QoS and traffic engineering.</p> <p>Further details are not considered necessary for bid preparation purposes; but will be disclosed during the Configuration Capturing stage.</p>	3
T.57	Bidders Conference	Is it possible to have some more details about the characteristics of the IP phone to be delivered (ergonomics, display, video, ...)	<p>The information provided in the SRS Annex C is deemed sufficient.</p>	3

T.58	Bidders Conference	Is it possible to know if you require the substitution of existing fax machines rather than their integration in the final solution?	Integration of existing assets (FAX machines) is required.	3
T.59	Bidders Conference	Is it possible to have some more information about telephonic traffic to use to dimension the solution (Erlangs, calls per second, call duration ...)	<p>The design (and associated investment cost) is only sensitive to the number of licenses required. The number of licenses is expected to correspond to the user population as specified and to the scalability requirements quoted in the SRS (specifically SRS Annex C, paragraph 3.7).</p> <p>The number of licenses should not influence nor constrain the draft System Design Specification to be included in the Bid.</p> <p>To facilitate the configuration of the NCI subsystems, representative Call Detail Records will be provided during the Configuration Capturing stage.</p> <p>The SRS Annex C already specifies the blocking probability and Erlang per extension (including scalability) for the Interoperability Services. Furthermore, SRS Annex C specifies the channel capacity of individual D_{ref} and SIP_{if} interfaces (including the scalability requirement for the number of interfaces).</p> <p>The NCI Internal capacity may only be constrained by the number of telephones (including the specified scaling factor) and the IP capacity provided through the CCA, PCA and the Purchaser's Ethernet Transport Network capacity.</p>	3
T.60	Bidders Conference	What is the NATO definition for Coloured (Cloud/Core Services)? Can you give examples “?	<p>The definition is provided in the SRS Core, Appendix 3 and Appendix 6, paragraph 6.2.</p> <p>Summarizing, an IP Coloured Cloud is an IP-routed network, operating at a given level of security, implemented as an overlay network across the Protected Core. One example is today's NS WAN.</p>	3

T.61	Bidders Conference	Is within of the scope of the tender the provision of the WAN links?	No. The WAN transport links are PFE.	3
T.62	SOW	Can Bidders propose a technical solution to include products/items that are not currently on the approved NGCS Fielded Products list?	<p>Yes a product/item not currently on the AFPL may be offered as part of a technical solution.</p> <p>The AFPL merely reflects what is or has been implemented so far and is not intended to be static.</p> <p>SOW CS-28 states: "Any products (i.e. Software, Operating Systems, Middleware, and Firmware) used in the NCI shall be listed of the Purchaser's Approved Fielded Product List (AFPL)." This implies that <u>before</u> actual implementation the product shall be included in the AFPL. The Purchaser operates a Configuration Change Process (CCP) that allows validation, and subsequent inclusion, of products in the AFPL.</p> <p>The Contractor remains responsible for the inclusion of a product in the AFPL through the Purchaser's CCP. The Contractor shall provide the necessary support in order to complete the CCP. Furthermore, if the testing/validation as part of the CCP reveals flaws that would lead to inability of the product or solution to meet the specified IA requirements, the Contractor shall provide a resolution such that the requirements are met and ensure that corrected or alternate products are included in the AFPL. (Refer to CS-35)</p> <p>The requirement with regards to the AFPL and Security Testing is further elaborated in SOW § 4.4 CS-28 ... CS-36 and SOW § 4.5. Also refer to the SOW SD-52, SD-131.</p>	3

T.63	SOW	Will the Bidders have an opportunity and ample time to ensure that any proposed products that are not already on the NGCS Approved Fielded Products list will and can be added to the list after contract award?	<p>The schedule allows time for the AFPL Configuration Change Process to complete.</p> <p>Consider SOW CS-33 and CS-34.</p> <p>The Contractor must initiate and support the process as quickly as possible, after contract award, in order to ensure all software and firmware is enlisted in the AFPL not later than FDR (SOW CS-36), which is set in CLIN 2.6.5 to 36 WAEDC.</p>	3
T.64	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	<p>The NCI's telephonic numbering plan is based on "STANAG 4705 - Ed 1 2010" supersedes STANAG 4214 - Ed 2 2005. The new PNP must be compliant with STANAG 4705 - Ed 1 2015.</p> <p>Is it possible to receive a copy of these standards?"</p> <p>If not, Is it possible to have more information about the actual PNP organization?</p>	<p>Refer to T.51.</p> <p>STANAG 4214-Ed.2 2005 and STANAG 4705 Ed.1 2015 will be provided as part of the amendment.</p>	4
T.65	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	In case of site with PBX migration the local breakout to PSTN connection, managed by Emergency TDM-GW function and connected to Dref interface, must be reachable via an E.164 public number. In case of fault the incoming off-net call must be redirected automatically on this number, without any evidence to the caller?	<p>Where a Dref is used in combination with the E-TDM-GW function, the Dref + E-TDM-GW function shall allow local subscribers to call to the Public Emergency Services, from an NCI telephone at the NCI Location.</p> <p>No need for inward dialling through the "emergency TDM/GW" function.</p> <p>Refer to T.52 and the SRS Annex C, § 2.2.2.3</p>	4
T.66	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	Do you think that will be acceptable to propose two separate Call handler clusters (geographically redundant for a total amount of four involved data center): one for EU countries and the second for Americas (US and Canada)?	<p>No. There is one Call Handling function only for the whole NATO area (implemented as a cloud service from the central locations).</p> <p>Refer to T.53</p>	4
T.67	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	<p>According with previous question (number T.66), do you think that will be acceptable to propose two separate SIP trunk connection versus PSTN?</p> <p>One in the data center that host call handler cluster for EU Countries and the second for Americas Countries</p>	The transition from distributed Public Telephone Network service access to centralized Public Telephone Network service access is anticipated, and being planned, by the Purchaser. It has to be mentioned here that the transition from local / distributed PSTN access, to centralized Public Network service access, has not been finished yet and local PSTN access are provisioned depending on the site (e.g. SIP or E1 direct dial in etc.).	4

			At time of transition from the existing NGCS to the procured NCI, the NCI must accept and use the interconnections to the Public Telephone Network service providers in place at that moment. Getting the information locally about the site's PSTN access shall be part of the Site survey.	
T.68	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	Can you confirm that the support of video communication it is related only to the capability of NCI-VoIP network to transport correctly this kind of IP traffic?	<p>The purchaser's understanding of this question is as follows:</p> <ol style="list-style-type: none"> 1) Shall the NATO NU VTC system be connected to the NU MMA LAN? 2) Does it need to be controlled by the NU MMA call handler function or VTC service uses the NU MMA simply for transmission purposes? <p>Based on the above assumption the reply to T.68 CR is:</p> <p>For the purpose of the specification of the MMA, the MMA contains a LAN. That LAN is considered as a logical part of the MMA, because the LAN connects and powers the VoIP telephones.</p> <p>The Purchaser would use the same LAN for connecting NU VTC terminals. The NU IP Access subsystem, implemented by the CCA subsystem, provides IP transport for the Purchaser's NU VTC service.</p> <p>It is confirmed that for the NU VTC service the NU IP Access subsystem, and the NU Ethernet LAN, only provide transport services..</p>	4
T.69	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	In the tender documentation are definite two different type of phone: standard desktop, Secretary/Manager. Can you give us more details about power supply: Power over Ethernet or AC/DC converter?	<p>The SRS Annex C, MMA-227 states: "The End-user Access function shall power fixed telephones (wired), wireless LAN access point and wireless telephony base stations with power over Ethernet (PoE)."</p> <p>MMA-227 applies to all fixed telephones, including the Standard Desktop Telephone and the Secretary/manager Desktop Telephone.</p>	4
T.70	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	Some IP phone include a switch port to connect a personal computer to the same LAN where it is connected the phone. Do you think that will be acceptable to propose the use of this kind of phone?	<p>There is no requirement to connect NU workstations to the wired LAN in this IFB.</p> <p>There is no requirement in this IFB that explicitly prohibits the <u>physical existence</u> of a built-in LAN port that can be used to connect a workstation to the VoIP telephone.</p> <p>So the answer is a VoIP phone with two Ethernet ports is acceptable but it is not</p>	4

			the purchaser's intention to use the LAN port for connecting additional NU workstation to it.	
T.71	SoW - Core Document v1.0 20150930	<p>Could you give us, if available, more info regarding telephonic behaviour of NATO Employees?</p> <p>Assumed a defined number of phone calls, in a definite time slot, equal to 100:</p> <p>how many are local (intra site)?</p> <p>how many are on-net (inter site)?</p> <p>how many are off-net (to and from PSTN)?</p> <p>For each call type, which is it its average duration?</p>	Please refer to Answer in T.59 Clarification request	4
T.72	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	Can you confirm that the support of traditional fax, alongside with FAX Server, is it required?	<p>Service Access Points for traditional G3 FAX machines are required. At PABX Removal Locations the Service Access Points of existing G3 FAX machines must be migrated, from analogue circuit switched interfaces on NGCS, to the NCI.</p> <p>FAX Server is not procured in the scope of the current NCI contract. The Purchaser owns an existing FAX Service that shall be migrated to the NCI along with other external networks and services. The interface is a SIPext interoperability interface.</p> <p>The FAX Server elements in the SRS Annex C have been removed in AMD1 for clarity.</p>	4
T.73	SoW - Core Document v1.0 20150930	Can you confirm that you require to install the "Core infrastructure" in 2 sites (Mons and Brussum) and the "IT Infrastructure" in Castelgate?	<p>For the purpose of the Bid, the requirement of the two NOC sites is confirmed, and in the meantime the decision has been made (see later in this reply), that these sites are Mons and The Hague premises of NCI Agency.</p> <p>The Bidder should consider:</p> <p>Today the Purchaser has Data Centre locations in Belgium Mons/SHAPE and Italy Joint Force Command Naples in Lago Patria. As described in SRS Annex G, today an element of the redundant NU</p>	4

			<p>V2 Network core is located in Castlegate. Furthermore, today, the management servers for the secondary NCI NOC are located in Castlegate, which is a supporting site for the current second NOC in Brunssum.</p> <p>Today the NOC's are located in Mons (primary) and Brunssum (secondary).</p> <p>The Purchaser has conducted a study concerning the location of the 2nd NCI NOC, in line with the placement of the 2nd ITM SOC. As a result it has been endorsed that the 2nd NCI NOC shall be located in The Hague.</p>	
T.74	<p>SoW - Core Document v1.0 20150930</p> <p>Appendix 5 PABX Removal Locations</p>	<p>Regarding site without PBX migration only PBX-IP-GW function is required? If not, please specify other items to be quoted?</p>	<p>The NCI MMA shall implement the Infrastructure function as specified in the SRS Annex C § 2.2. That requirement applies to all NCI locations, regardless if the location is a PABX Removal Location or not.</p> <p>An engineering <u>example</u> of the distribution of the various functions is provided in SRS Annex C Figure 2.</p> <p>The requirements are functional. This means that the actual implementation of these functions into hardware components is not prescribed and subject to <u>design</u> by the bidder, <u>provided</u> the <u>functional and non-functional</u> requirements specified in the SRS, its annexes and the SoW are met.</p>	4
T.75	<p>SRS - Annex C Multimedia Access subsystem v1.0 – 20150928</p> <p>3.1.1 Standard Desktop Telephone</p>	<p>Could you better define quantities and features of required IP Phone, as follows:</p> <ul style="list-style-type: none"> - Standard Desktop Telephone: for all employee? How many? - Secretary/manager Desktop Telephone: the same IP Phone for Secretary and Manager? How many? Do they need particular function (ex.: speed dial)? 	<p>SRS Annex C specifies the non-functional requirements for the Standard Desktop Telephone in § 3.1.1. SRS Annex C specifies the non-functional requirements for Secretary/Manager Desktop Telephone in § 3.1.3. MMA-247 specifies the additional requirements for a Secretary/Manager Desktop telephone.</p> <p>The same physical telephone is expected for the secretary and the manager.</p> <p>Note that the requirements are functional. The Bidder may opt to offer the functionality of the Standard Desktop Telephone and the functionality of the Secretary/Manager Desktop Telephone through the same hardware platform, tailoring the functionality through the user profile/configuration.</p> <p>For the purpose of bidding consider 5%,</p>	4

			with a minimum of 4 per NCI Location, of the Desktop Telephones is a Secretary/manager Desktop Telephone.	
T.76	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928	Do you need attendant console? If yes, how many?	No – no need for attendant console.	4
T.77	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928 2.2.1.6 Call Center	In the Technical Specification is also detailed the Call Center system: do you need also an IVR or Queue Manager for this Call Center? Is it only inbound or also outbound? Are there services that will be migrated? Please detail better if is possible.	Yes as specified in the SRS Annex C § 2.2.1.6, specifically MMA-117 and MMA-118.	4
T.78	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928 3.5.1.3 Mobile telephone base station interface 3.1.2 Wireless telephone	DECT or WiFi. Actually there are a DECT system: this system will be migrated to a WiFi System with a WiFi Device or do you want to integrate existing Dect System? If the DECT system is to be maintained, we need more detail. Please specify type of system, number of dect terminal, number of antennas, producer...	Refer to T.5 Note that erroneously SRS Annex C v1.1 was renumbered in AMD1 due to deletion of sections. Consequently, this answer refers to e.g. MMA-317 in AMD0, which is mapped to MMA-299 in AMD1 and later. The CR is answered using the AMD0 numbering. SRS Annex C, § 3.5.1.3 specifies the mobile telephone base stations and telephones to implement DECT (refer to [MMA-317]). Base stations are connected to the network as wired (refer to [MMA-311] + [MMA-312]). The use of WiFi for the wireless telephones is not in line with the requirement for DECT. The existing DECT systems on the PABX Removal Locations (SoW Appendix 5) are to be replaced. The Bidder is to use the SRS Annex F for assessment of an appropriate coverage with the proposed base stations. The site surveys shall define the final DECT base	4

			station coverage plan.	
T.79	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928 2.2.1.6 Call Center	Please specify if Call Recording functions are required for all incoming Call Center's calls? If not, please specify number of call that you want to be recorded and the average duration of a call and if the system that archive the data would be offer in this tender or are going to be provided by Nato?	Yes, as specified in SRS Annex C § 2.2.1.6, specifically MMA-119. The Call Centre call recording function is specified in the SRS Annex C § 3.6.6. Specifically MMA-372 specifies a continuous load of 35 concurrent calls during a 12 hour day, and a minimum of 15 day retention. The required infrastructure is to be provided as part of the NCI installation.	4
T.80	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928 2.2.1.5 Fax	Fax server: please detail number of contemporary fax calls and if a Fax server in High reliability is also required.	Refer to T.72 A FAX Server is not procured. The Purchaser owns an existing FAX Service that shall be migrated to the NCI along with other external networks and services. The interface is a SIPext interoperability interface.	4
T.81	SRS - Annex C Multimedia Access subsystem v1.0 – 20150928 2.2.1.5 Fax	Traditional fax. Some fax won't migrate: could you specified how many traditional Fax devices will be maintained, and in which location?	The number of FAX extensions to be migrated for each PABX Removal Location is specified in the SoW Appendix 5, Tables 13-7 (PABX Removal Base Locations) and Table 13-8 (PABX Removal Optional Locations). Refer to the column "FAX Ext".	4
T.82	SoW - Core Document v1.0 20150930 Appendix 5 PABX Removal Locations	Ten "optional" sites are mentioned (Mons, Castelgate, Northwood, Izmir, Monsanto, Ramstein, Uedem, Rome, Thessaloniki, Pristina) that are not ready to migrate to VoIP. VoIP infrastructure is required for these sites. Please clarify if is required to provide also all infrastructure components including LAN, Cabling, Switch PoE, Rack, etc. ?	The options, specified in SoW Appendix 5 Table 13-8, are to be priced accounting for all MMA components either logical or physical (except horizontal cabling and LAN switching), effort and services necessary to implement VoIP telephones and to migrate users from the existing PABX to the NCI; including full installation, configuration and migration; not including Horizontal LAN cabling; not including LAN switching equipment.	4

T.83	Sow PM-45	Can the Purchaser confirm resources delivered for the NeCT team by the bidder fall under the control of the purchaser and not the bidder's project delivery team?	Yes, the NeCT team falls under the daily management of the Purchaser's NCI Service Area Engineering Group.	4
T.84	Sow PM-46	Can the purchaser please clarify the requirement for the NeCT team to be present at the configuration capturing session (PM-46) as this is not in line with CLIN 1.4.2 deployment of NeCT team at WAEDC 38.	<p>CLIN 1.4.2 refers to the NeCT taking up routine duties as part of the Purchaser's NCI Service Area Engineering Group (NSEG).</p> <p>SoW PM-46 facilitates the familiarization of the NeCT team with the Purchaser's environment, processes and systems.</p> <p>The Purchaser considers the participation of the NeCT team in the Configuration Capturing Process necessary for the NeCT to be operational as of the very first moment of deployment. Furthermore, the participation in the Configuration Capturing Process helps the NeCT team to understand the peculiarities of the Purchaser's environment that might affect the NCI in order to properly support the Alpha & Beta Testing, OpEval and migration.</p>	4
T.85	SOW 2.3.9	Is the bidder's assumption correct that the additional 2 x on-site support personnel are not considered key personnel?	That is correct the 2 On-site Support Engineers in reserve, as specified in PM-61, are not key personnel.	4
T.86	Sow PM-89	Can the purchaser indicate a level of effort expected from the bidder for OpEval support (i.e. activities, man-days, timelines), which is under the responsibility of purchaser	<p>OpEval starts after PSA and finishes with FSA. The effort provided by the Contractor is through the NeCT. The Purchaser's NSEG will assign tasks to the NeCT balancing OpEval and routine tasks as necessary.</p> <p>For the Purchaser it is not possible to quantify the level of effort for OpEval support because this level of effort depends on the (quality of the) design and implementation. However, as the NeCT is embedded full-time in the NSEG, the level of effort balance between OpEval and routine NSEG duties is considered opaque to the Bid.</p>	4

T.87	SoW [108]	Purchaser to confirm SIP should read SDP	Confirmed. Corrected in AMD3.	4
T.88	SoW SD-27	Purchaser to confirm paragraph should read; 8 (eight) additional sites listed under table 13-6	Confirmed, must be 8 locations as listed in Table 13-6. Corrected in AMD3.	4
T.89	SoW [197]	Can the purchaser clarify whether all DOORS modules required by the bidder in the delivery of the project are PFE?	As stated in SoW [197], the Bidder will receive at CAW one module for the SRS Core plus one module per SRS Annex.	4
T.90	SoW SD-86 & [171]	Can the Purchaser identify which locations have up to 4 months lead time in order to support the development of the draft Master project schedule?	The Bidder must assume that all locations have up to 4 months lead time. The factors influencing the lead time for site access are typically dynamic and outside the Purchaser's direct control. Hence, the lead time cannot be detailed.	4
T.91	SoW SD-95 & CDRL reverse lookup 13-3 & [176]	SD-95 states SS to be done before PRM 3, In CDRL reverse lookup it is entry condition for PRM 4. Can the Purchaser confirm the timeline for completing SS (If different than SSS) [176] to be done at PRM 4?	SD-95 states: "All Site Surveys shall be completed before PRM-3." SD-117 states" Each SSR shall be delivered for Purchaser's review not later than 2 weeks prior to the corresponding PRM." [176] states: "Four SSR are foreseen (one per batch) and will be subject of review and approval during PRMs (SSR-1 in PRM-1, to SSR-4 in PRM-4)." That means that: <ul style="list-style-type: none"> • Actual site survey activities shall be complete by PRM-3; • A SSR shall be delivered not later than 2 weeks after completing the Site Survey batch; • A SSR is subject to review in the corresponding PRM that follows; • The last SSR batch (SSR-4) shall be 	4

			<p>subject to review in PRM-4 completing the cycle.</p> <p>The timeline completing the Site Surveys ends earlier than the timeline for completing the Site Survey Report for that batch.</p>	
T.92	SoW SD-119	Can the Purchaser confirm the classification of the SSR that the bidder will deliver?	In general only an author of a document can define the classification based on the content. However, the Purchaser expects that the content will result in most cases in NATO Unclassified reports and some in NATO Restricted reports.	4
T.93	SoW SD-110	Can the Purchaser confirm the means of transferring configuration information from SST to CCT (due to possible Classification of information)?	<p>The Purchaser does not prescribe a technical means for transferring information captured by the SST to the CCT, provided that the information is stored, processed and transported in accordance to the applicable policies for handling classified information.</p> <p>Note that the Purchaser has centralized access to system configurations, there is no need for these to be captured locally by the SST.</p> <p>One mechanism that the Contractor can opt for is through the “NR Access and Hosting capability” provided by the Purchaser, using the NR Collaborative Environment and NR REACH Laptops. (Refer to SoW § 2.4.1).</p>	4
T.94	SoW SI-54	Purchaser to clarify how CBT package relates to The Reference and Testing Facility.	<p>One of the functional requirements for the Reference and Testing Facility is to enable the Purchaser to do subject matter expert training & practice (refer to SRS Annex E RTF-4.7). CBT are considered an integral element of these trainings, which would typically include a CBT and a hands-on element, executed under supervision of an experienced SME.</p> <p>TRN-2 and TRN-3 of the SOW require the Contractor to train L1 operators and maintainers through the use of CBTs. SOW 9.4.5 specifies the requirements for the CBTs. SOW 10.8 DOC-42 and 43 require the contractor to transfer all CBTs into the Reference and Testing Facility Wiki-based portal.</p>	4

T.95	SoW SI-55	Can the Purchaser confirm the bidders understanding that the Wiki referenced is a tool selected and delivered by the bidder as part of the reference and training facility deliverable?	<p>The Wiki function is required to be implemented on the R&T facility, as specified in the SRS Annex E and SoW SI-55.</p> <p>Refer to the definition of “Wiki” by Wikipedia on https://en.wikipedia.org/wiki/Wiki, which defines a Wiki as: “a website which allows collaborative modification of its content and structure directly from the web browser.”</p> <p>The Purchaser does not intend to specify a specific tool, brand or version to implement the Wiki, as long as the Wiki enables the functionality that makes up the above cited industry standard definition of a Wiki with the R&T facility.</p>	4
T.96	SoW [253] AND SD-88, SD-106, SD-119, SI-13	Can the Purchaser confirm the bidders understanding that civil works at the local sites are out of the scope of the current requirements for the bidder and that the bidder’s sole responsibility is to identify any works that maybe required and that any civil works are to be considered PFE?	<p>Confirmed.</p> <p>It is the bidder’s responsibility to identify civil works requirements (SoW SD-119.9). The Purchaser will provide for the actual implementation of civil works (SoW [253]) as considered necessary by the Purchaser.</p>	4
T.97	Sow SI-65	<p>Based on the requirement to assume that no UPS is available and then determine at site survey if its required will result in the bidder including the cost for UPS systems at all locations, when they may not be required.</p> <p>Can the purchaser please confirm this is the intention?</p>	<p>Confirmed, with the expectation that where PFE site UPS is available and of sufficient capacity, the “NCI UPS” is not delivered and the associated cost is removed from the NCI node pricing.</p>	4
T.98	SoW [260]	Can the Purchaser confirm Vertical cabling is PFE as well, and all cabling (except patch and drop) is to be considered under civil works as PFE, except where given as priced option to purchaser by the bidder?	<p>No vertical cabling is <u>not</u> PFE and is not considered under civil works.</p> <p>SI-77 states: “For the sites listed in in Table 13-7, the PABX Removal Sites, the Contractor shall provide the Vertical Cabling, in accordance to the SRS including the requirements in the SRS Annex C.”</p> <p>Only preparations, or modifications, to the building or site are considered civil works.</p>	4

T.99	SoW SI-81	<p>Can the Purchaser confirm it is either 2 TO per room for entire building(s) / compound (including hallways, meeting rooms, etc.)</p> <p>OR</p> <p>Number of procured phones + 30% and have 2 TO's for <u>designated</u> rooms of each NCI location.</p>	<p>For pricing the option specified in SoW SI-81, the Bidder shall estimate the number of TO at a NCI location as: "the number of procured telephones for that NCI Location plus thirty percent (30%)".</p> <p>If and where the option (SI-81) is executed by the Purchaser, he intends to flood wire buildings/areas with a minimum 2 TO per room. Any additional TO above SI-81.1 is covered through SoW SI-82.</p>	4
T.100	SoW SI-81	<p>Purchaser to confirm it expects each TO to have 2 RJ45 ports of which 1 used for VOIP and 1 for NU LAN bringing a total of 2 voip and 2 LAN ports per (designated) room, divided over 2 TO's</p>	<p>No.</p> <p>SoW SI-81.2 specifies: "With one (1) LAN connection per TO".</p> <p>Wired NU LAN extension for use with workstations is not intended.</p>	4
T.101	SoW 5.3.3.1	<p>Can the purchaser confirm the bidders understanding that any bidder's personnel to be issued with Cryptographic equipment, keys etc. at the local sites are required to have CTS security clearance?</p>	<p>For installation and handling of crypto by the Contractor, as required in the SoW § 5.3.3.1, requires as a minimum NS clearance level with Crypto Clearance for each person having access to crypto.</p> <p>Note that this includes all personnel that needs to access rooms that is equipped with PFE crypto (either existing or as part of the NCI installation).</p>	4
T.102	SoW SI-165	<p>Can the purchaser confirm the bidders understanding that the individual (s) required to conduct the SRTS Augmentation only require NS clearance?</p>	<p>SRTS requests are handled as minimum NATO CONFIDENTIAL security classification, so minimum NATO Secret Clearance is required to conduct SRTS Augmentation.</p>	4
T.103	SoW SI-165	<p>Can the Purchaser confirm this augmented additional member of the NeCT for SRTS's is not considered key personnel?</p>	<p>The SRTS augment will conduct the service request process; and, will be part of the NeCT team, as defined under 2.3.8 of the SoW core document; therefore it is treated as a key staff role. The foreseen workload is 25 weeks (not necessarily continuous).</p>	4
T.104	SoW SI-165 & PM-45	<p>Can the purchaser please confirm the bidders understanding that this additional NeCT team member will be under the direct control of the purchaser for the duration of the activities?</p>	<p>Yes - The augment's work schedule is dictated by the project implementation schedule, depending on when the new service request information is needed (taking into account of the processing delay of the SRTS system), therefore the augment will work as an SRTS administrator in the Service Fulfilment cell.</p>	4

T.105	SoW SI-194	Purchaser to confirm 13 is a typing error and should read 14	<p>The correct number of NCI sites/installations, included in Wave 1 is 14 sites. The breakdown in 40G and 5G NCI nodes, and the LTX tier, is specified in SoW Table 5-3.</p> <p>SI-194 is corrected in AMD3 to read: “During Wave 1 the Purchaser will configure and activate the following 1314 NCI sites:”</p>	4
T.106	SoW SI-201	Purchaser to confirm “23 small” is a typing error and should read: 22 small	<p>The correct number of NCI sites/installations, included in Wave 3 is 23 sites. The breakdown in 40G and 5G NCI nodes, and the LTX tier, is specified in SoW Table 5-5.</p> <p>SI-201 is corrected in AMD3 to read: “Wave 3 shall cover the following 23 Small Node (5G) and 1 Large Node (40G) installations.”</p>	4
T.107	SoW SI-202	Purchaser to confirm “23 small” is a typing error and should read: 22 small	<p>The correct number of NCI sites/installations included in Wave 4 is 23. The breakdown in 40G and 5G NCI nodes is specified in SoW Table 5-6.</p> <p>SI-202 is corrected in AMD3 to read: “Wave 4 shall continue with the remaining 23 Small Node (5G) and 1 Large Node (40G) installations.</p>	4
T.108	SoW [424] & TRN-14	The purchaser has identified the maximum number of students, however can the purchaser define the number of students per course that the bidders should anticipate?	The Bidder must anticipate the maximum number of students as specified in SoW Table 9-1. The Bidder may want to split trainings into sessions where appropriate (i.e. splitting the training audience of one course in groups).	4
T.109	Sow appendix 3 POC-20	Can the Purchaser identify if the NCI PoC will be installed in the same building and room as the NGCS reference platform (in order to assess cable installation efforts)? If elsewhere please estimate the distance	Yes, the Purchaser intends to locate the NCI PoC collocated with the existing reference platform for the NGCS.	4
T.110	Sow appendix 5 [491]	Table 13-7 has open fields for; voip terminals, DECT handsets and fax extension totals. Purchaser to confirm how to interpret the open fields. (i.e. read as 0?)	The open fields in Table 13-7 are to be interpreted as 0.	4
T.111	SoW SI-14	Purchaser to confirm or reconsider requirements for including cabling details (penetrations, routing, etc.) to be included in SIDP, especially for locations where cabling is considered as PFE.	<p>The SIDP shall cover all technical detail necessary to facilitate and document the physical installation.</p> <p>The horizontal cabling is the only element that is for most part PFE (VoIP terminal to TO cabling as well as Patch panel to switch cabling is the responsibility of the</p>	4

			<p>Contractor). Vertical cabling is not PFE (SoW SI-77). Furthermore, any intra and inter NCI subsystem cabling is provided by the Contractor.</p> <p>Concerning the documentation, where the horizontal cabling is provided as PFE, the Contractor is only required to document the patching and TO allocation.</p> <p>The Contractor shall document any other cabling, including all technical details as specified.</p> <p>Purchaser considers that cabling details are relevant for the installation regardless if they are implemented by the Contractor or by the Purchaser. Furthermore, these diagrams are the base of the as-built installation drawings as specified in SoW § 10.7.</p>	
T.112	SoW PM-155	Purchaser to confirm if an activity is missing or there is a typing error stating 4 activities to be listed in the paragraph.	The activities are listed in PM 155. AMD3 removes "four".	4
T.113	SoW Appendix 2 - Table 13-2 - ID. 2.3.1	Purchaser to confirm 28 should read 28 WAEDC	Indeed – as it is defined in the Table 13-1 of Appendix-2. The delivery date is 28 WAEDC.	4
T.114	SoW Appendix 2 - Table 13-2 - ID. 2.3.2	Purchaser to confirm 34 should read 34 WAEDC	Please see answer to T.113. The delivery date is 34 WAEDC.	4
T.115	SoW SD-55	Purchaser to confirm "...six activities" should read "...seven activities"	SD-55 refers to the bulleted list under SD-54. AMD3 changes SD-55 from six to seven activities (not altering the numbered list).	4

T.116	SoW SD-90	Can the Purchaser identify which nations require that Contractor staff working on-site have the local nationality	No – at this point in time the purchaser does not have that information individually for the sites listed in the SoW. Site Specific Security Access Procedures are different per site and also subject to change. This information shall be requested one by one from the sites when site survey preparation works will be started.	4
T.117	SoW SI-35	Purchaser to confirm “..four activities” should read “..three activities”	SI-35 considered the PSAT as the fourth step. AMD4 clarifies SI-35 to read as follows: “At each site, the System Implementation shall involve the following four three activities leading to PSAT as the completing (fourth) activity at each site , in this sequence (refer to Figure 5-3).”	4
T.118	SoW SI-197	Purchaser to confirm “10 Large Node” is a typing error and should read: 8 Large Node and 2 Small Node	The correct number of NCI sites/installations, included in Wave 2 is ten (10) sites. The breakdown in 40G and 5G NCI nodes, and the LTX tier, is specified in SoW Table 5-4. SI-197 was corrected in AMD-3 to read: “Wave 2 shall cover the following 10 Large Node (40G) site installations:”	4
T.119	SoW SD-245	Please verify the sentence as there appears to be word(s) missing	The correct sentence for SD-245 is: “The Contractor shall provide and use the Test Case Management tool of his choice in PoCT.” This text will be corrected in AMD4 of the SoW.	4
T.120	SoW ILS-84 SI-44	Purchaser to confirm whether contractor containers are needed or onsite storage can be arranged locally according to SI-44	Yes contractor containers are required, refer to SoW ILS-84. The storage of these containers is addressed by SI-44.	4
T.121	SI-184	Purchaser to confirm first paragraph should read “3 initial installations” opposed to 2 initial installations.	Correct, see SoW v1.3 AMD 4	4
T.122	SoW Appendix 1	There is no reference to Architecture Framework (for example NAF) nor to Engineering processes referential (for example: INCOSE Handbook), can the purchaser please identify which standards and or reference guides apply?	The Purchaser does not impose an architecture framework, nor a systems engineering framework, for the Contractors internal design processes beyond what is specified in the SoW.	4

T.123	SoW SD-131, CS-28 to CS-34	SD-131, CS-28 to CS-34. Considering the Configuration Change Process described in the IFB and the NCI schedule, is it granted to propose for the PoC, hardware products that are not already in the purchaser's AFPL?	<p>Yes, provided that the requirement in SoW CS-36 is met. The PoCT Platform is not considered as an operational system.</p> <p>Note, it remains the contractor's responsibility to address issues resulting from the Vulnerability Assessment and Penetration Testing (refer to CS-48), which ultimately may lead the need to replace building blocks, which are unable to pass the Vulnerability Assessment and Penetration Testing before FDR.</p>	4
T.124	Bidding-Instructions 3.6.2.2.3.2.3 / 3.6.2.2.3.3.1	<p>Can the purchaser provide further information regarding their implementation of BMC?</p> <p>In addition who will configure the ESMS? I.e. does the bidder implement changes or document what NATO needs to implement in their ESMS?</p>	<p>Please refer to T.9, T.10, T.11, T.12 and T.13.</p> <p>Necessary changes shall be implemented by the Contractor, following the pre-approved SIDP, under supervision of the Purchaser.</p>	4
T.125	SOW Core 3.2.2.4 [139] (3)	<p>The north bound interface is used to interface with NATO existing ESMS and used for cross domain. Can the purchaser provide details of the ESMS and in particular interface details or ideally an ICD?</p> <p>The user facing services are presumably in addition to core/resource based, please confirm?</p>	<p>The ESMS and the northbound interface are specified in the SRS Annex D. Specifically, the Northbound Interface is specified (in the SRS Annex D § 6.8.2) to implement MTOSI and OSS/J as defined by TMF. Further refer to the SRS Annex D Appendix 3 for a specification of the ESMS software that is used today to implement a subset of the final set of ESMS functions.</p> <p>Refer to clarification requests T.9, T.10, T.11, T.12 and T.13.</p>	4
T.126	SOW Core [140] (2)	Need definition of what EM capability is needed, in particular when it would be used i.e. only if DSMS is unavailable.	<p>Refer to the SRS Annex D. Specifically MNG-33.3 which requires a local management capability with: "all necessary tooling to provide on-site fault finding and service restoration when the NCI node or subsystem is isolated". In other words, the functionality to debug, find and correct faults such that the subsystem regains access to the DSMS. In addition, local signal support, if exist on site, might use the specific EM tools especially for basic monitoring purposes.</p> <p>Refer also to SRS Annex D, MNG-39.</p>	4
T.127	SOW Core SD-166	Can the purchaser confirm that any emulation devices/software/features required is the responsibility of the bidders?	Confirmed.	4

T.128	Annex D - Management Subsystem [MNG-28]	Currently there is no specific version of eTOM compatibility listed, please clarify?	Release 15.5.0 or newer.	4
T.129	Annex D - Management Subsystem [MNG-59]	Is there an ICD for this? What are the bounds of the interface?	SRS Annex D § 6.7 and SRS Annex D § 6.8.2 describes the details of DSMS Northbound interface.	4
T.130	Annex D - Management Subsystem [MNG-61]	It is implied that the bidder can make use of the existing ESMS rather than deploy NCI specific capability, can the purchaser confirm this? If so can the purchaser provide more information regarding this?	Yes, to establish the ESMS functionality required in the SRS Annex D. The provided DSMS functions shall integrate with and support the ESMS. Refer to SRS Annex D Appendix 3 for the list of Purchaser Furnished Equipment related to the NCI Management subsystem. As described in [MNG-5] paragraph of SRS Annex-D – it is the contractor’s responsibility to augment the existing ESMS. Fig 1. In the same SRS Annex depicts the NCI SMC Capability scope. In addition, refer to SRS Annex G § 2.2.7 for an overview of element and network management systems currently in use (note statement [74]).	4
T.131	Annex D - Management Subsystem [MNG-70]	Can the purchaser confirm the following: 1. References - Are these not ITIL & eTOM as specified elsewhere? 2. What customizations? how are these captured?	ITIL and eTOM represent best practice, not standards. The level of detail specified in the SRS Annex D is considered sufficient for the Bidding, details will be provided during the Configuration Capturing Process.	4
T.132	Annex D - Management Subsystem [MNG-116]	Can the purchaser confirm who is responsible for this, given that the ESMS is PFE owned and operated?	The Contractor, following the pre-approved SIDP, under supervision of the Purchaser.	4

T.133	Annex D - Management Subsystem [MNG-190]	In order to define the requirement further can the purchaser please clarify the term "unnecessary steps"?	<p>Following the definition found in Merriam-Webster, unnecessary is defined as: "dispensable, gratuitous, inessential, needless, nonessential, uncalled-for, unessential, unwarranted".</p> <p>In other words, MNG-190 requires that the DSMS enables the NCI (sub)system managers to perform the management tasks in the least possible number of steps. Hence, the DSMS must avoid:</p> <ul style="list-style-type: none"> • the need to go through screens or forms, or execute other activities, that do not add any real value to the process; • the need to provide information more than once; • the need to go back and forth between applications, screens or systems; • the need to provide information that the system already has (or could have) stored in its database; • the need for the manager to find configuration details before he/she can continue while these are stored in the system; • etc. <p>To summarize, the DSMS shall help the NCI (sub)system managers to manage and operate the NCI quickly and efficiently, minimizing the time spent; what can be automated, must be automated.</p>	4
T.134	Annex D - Management Subsystem [MNG-199]	In order to define the requirement further can the purchaser please clarify the term "complete and fine grained"?	<p>Following Merriam-Webster, complete is defined as: "having all necessary parts, elements, or steps".</p> <p>Following Oxford Dictionaries, fine-grained is defined as: "Involving great attention to detail".</p> <p>In other words, MNG-199 requires that the DSMS enables the Purchaser to achieve control over the NCI subsystems in all its parts and functions, covering all details. Hence, there shall not be any aspect of the NCI (sub)system technical functionality (specified in the SRS and its annexes) that cannot be controlled through the offered DSMS implementation.</p>	4

T.135	SoW MMA-14	Can the purchaser confirm that the MMA Col should be completely isolated without any interaction with the other network segments?	<p>As indicated on the Fig.1 of SRS Annex C the NCI NU MMA subsystem is connected through a SIOP-5 interface to the CCA. Specifically, this is the NU IP Access subsystem implemented by the CCA subsystem.</p> <p>As MMA-14 requires, the MMA shall be carried across the NU IP Access subsystem, implemented by the CCA subsystem, as a dedicated Col. (Col are specified in the SRS Annex B.)</p> <p>The MMA Col shall be implemented such that it can be independently traffic engineered across the CCA subsystem, the PCA subsystem, and the Purchaser's Ethernet Transport Network.</p> <p>As specified in the SRS Annex B, the segregation implemented for Col is logical and does not mean complete physical isolation. Within the LAN, segregation of the MMA Col is implemented through VLAN separation.</p> <p>Within the CCA subsystem, one purpose of the segregation is to enable dedicated traffic engineering for the MMA subsystem's traffic, potentially different from the Core Enterprise Services (CES) and Functional Area Services (FAS) traffic. The other purpose is protection of the MMA from the CES/FAS domain.</p>	4
T.136	SoW, MMA-15	Can NCIA provide vendor and model of BPD firewall device to assess compatibility and possible caveats?	<p>The BPD at the SIOP-5 consists of an NCIRC element and a firewall.</p> <p>The NCIRC element is further documented in the SRS Annex G, § 2.3.2 for details. The NCIRC BPD systems consist of different tools. SIOP-5 sensor refers to a network tap and a transparent intrusion prevention device – which is a Sourcefire 8000 series appliance. The appliance choice in the family depends on the throughput requirement, but from network perspective should be treated as transparent device.</p> <p>The firewalls used today are from two different vendors: Palo Alto Networks and CheckPoint CPNG, different models/series depending on the throughput and reliance required at the specific interface.</p>	4

T.137	SoW, MMA-18	Is there any NATO guidelines or reference document regarding numbering plan?	The numbering plan requirements are specified in SRS Annex C § 3.9.1.[MMA-18] only states the requirement that the numbering plan shall be hosted on the CH subsystem.	4
T.138	SoW, MMA-122	Can NATO specify if call centre system or agents/supervisors will be geographically distributed?	Yes, refer to the SRS Annex C § 2.2.1.6. I.e. refer to [MMA-124] requirement.	4
T.139	SoW, MMA-131	[MMA-131] Can NATO specify what Service Desk system is currently used?	BMC Remedy ITSM 8.1. Refer to T.11	4
T.140	SoW, MMA-20	What SCIP terminal model/vendor is planned to be used (if known)?	Unknown, this will be subject to a different IFB in due course.	4
T.141	SoW, MMA-24	Is the requirement minimum 5 levels or only 5 levels?	CH function shall implement five Multi-Level Priority and Pre-emption levels. The required implementation of MLPP is specified in Appendix 1 of Annex C. Note specifically [140] which describes the requested five levels mapped to the [RFC4412:2006] namespace and priorities.	4
T.142	SoW, MMA-60	Should Voicemail be considered a business critical application and delivered in high availability mode?	The voicemail implementation shall have the same availability as other elements of the MMA. There are no elements in the MMA that require a reduced availability.	4
T.143	SoW, MMA-278	This requirement lists SRTP (Secure RTP) encrypted voice deployment. Since traffic from MMA COI will be cryptographically isolated, what is the reason for double encryption?	Defence in depth of the voice service. I.e. SRTP adds a mechanism enhancing the confidentiality and integrity of the individual voice streams.	4
T.144	SoW, MMA-389	Is 150 call center skills acceptable instead of 256?	No	4
T.145	SoW, SD-162	States that “PoC Installation activities shall start immediately after CDR (PRM-1)” which is WAEDC+12, whereas in SSS, date is WAEDC+7. Please clarify?	SSS CLIN 2.5.1 and CLIN 2.5.2 have been corrected in AMD3. I.e. SSS shows WAEDC+12 now.	4

T.146	SRS, SYS-35	<p>Could you confirm that only a product already certified by a NSA can be used or if a product that will be certified in 2016 is acceptable?</p>	<p>As a minimum, products shall be certified as of contract award. At time of bidding, the Bidder shall <u>prove</u> that the offered products meet the requirements at the time of contract award. Note that a mere statement from the Bidder, without supporting evidence is not considered as proof.</p> <p>It has to be mentioned here, that the statement of proof shall include certification that the given equipment is releasable to NATO by the producing nation (i.e. commercially available, without a need for FMS [Foreign Military Sales] decided on a case by case basis), and also that the equipment is approved for processing the required classification (i.e. NATO Restricted or higher).</p>	4
T.147	SRS, MNG-33	<p>Please clarify if the bidder is to provide a laptop at each NCI node?</p>	<p>Yes, refer to T.156</p>	4
T.148	SRS, MNG-37	<p>Could you precise if the purchaser provides :</p> <p>A - NATO Microsoft Windows standard built (PFE) as ISO or other image format ?</p> <p>B - windows license for each installation, included industrial platform ?</p> <p>C – antivirus license for each installation, included industrial platform ?</p> <p>Could you precise if the virus checking infrastructure provided by NATO Microsoft Windows standard built include management tools or if antivirus/antimalware are managed from other systems?</p>	<p>The NATO Microsoft Windows standard build image is typically provided as a CD with the OS.</p> <p>The Windows License provided as PFE is currently Windows 7 Enterprise, but the Purchaser intends to migrate to Windows 10 as part of the implementation ITM (which runs virtually in parallel to the NCI). This covers in principle all MS Windows platforms dependent on Windows 7 Enterprise.</p> <p>The above mentioned standard built is focused on workstations.</p> <p>Industrial platforms that the Bidder offers as part of the NCI subsystems, where these are not covered by the above mentioned Microsoft licenses, require licenses to be provided (by the Contractor, not PFE).</p> <p>Here the Purchaser reserves the right to replace the license and associated cost as PFE through the Enterprise Agreement with Microsoft.</p> <p>Antivirus and DLP [Data Loss Prevention] license is PFE. The Antivirus will be distributed automatically by McAfee Epo as soon as the workstation gets on the domain (and in the right OU). The Purchaser deploys McAfee VirusScan Enterprise. All settings are managed</p>	4

			centrally by the Purchaser.	
T.149	SRS, MNG-128	<p>Could you precise the scope of “A centralized solution to manage network access control policies (i.e. 802.1X)” ?</p> <p>Is this for all network access (equipment of all systems connecting to NCI) or only for equipment connected to DSMS (pc or server used for management)?</p>	<p>As a minimum, the network access control applies to Desktop Telephones (SRS Annex, MMA-291) and MMA End-user Access Switches (SRS Annex C, MMA-321).</p> <p>As a consequence of MMA-321, all End-User devices, connected through the End-User Access Switches, implement 802.1X network access control, which includes workstations accessing the DSMS.</p> <p>Note that MMA-291 (MMA-309 in original IFB) contains a mistake that was corrected in AMD3 to read: “End-user Access Switches-Desktop telephones shall implement authentication towards the network access control function of the End-user Access Switch ...”</p>	4
T.150	SRS, MNG-132/133/134/135	Could you clarify if the event management system must process the system security events?	Where these events apply to the NCI subsystems or components thereof, yes.	4
T.151	SRS, MNG-159	Could you clarify if the five years retention are online or a mix between offline and online?	On-line. This does not mean that a single file shall be maintained on the AAA server, but that the archived log files shall be accessible on-line. The purchaser considers SAN storage as on-line, but e.g. tape drive or DVD are not an acceptable solution.	4
T.152		Duplicate of T.126, removed	Duplicate of T.126, removed	4
T.153	SRS, [74], [76], SYS-73&74, SYS-81	<p>There are needs of inline communications (Certificates enrolment via SCEP, CRL accesses via LDAP or HTTP, CRL checks via OSCP, Certificates revocation from NCI components) with the PKI services provided by the purchaser from all NCI components or some consumers (VOIP terminals in NU MMA COI).</p> <p>Can the purchaser provide more details</p>	<p>The Purchaser considers the specification in the SRS as sufficient to ensure compatibility of the solution to the future iNPKI.</p> <p>As the iNPKI is not yet available, no further details can be provided during the bidding phase.</p> <p>The Bidder must be prepared to interface with a PKI deployment, which uses the standards as specified in the SRS. The</p>	4

		about their deployment of the iNPKI services?	Purchaser assumes the Bidder's awareness of technical solutions offered by the current state of the art of COTS PKI products.	
T.154	SRS, [74], [76], SYS-73&74, SYS-81	Is there only one PKI instance for all the levels (NU, NR, NS) or one per level (NU, NR, NS) or one per security domain (NR, NS)?	<p>The Purchaser's PKI will be provided for usage by the NCI subsystems based on two infrastructures. Specifically:</p> <ul style="list-style-type: none"> • One PKI instance will be provided at NU/NR security level, for usage by the NCI subsystems operating at NU and the NCI subsystems operating at NR; • One PKI instance will be provided at NS security level, for usage by the NCI subsystems operating at NS. <p>Refer to T.155</p>	4
T.155	SRS, [74], [76], SYS-73&74, SYS-81	What are the technical network links between PKI and NCI deployments at the boundaries of NCI network environment? Are the PKI services accessible from PKI CoIs, from ESMS network or from NCIRC network?	<p>Refer to T.154.</p> <p>The Purchaser's PKI would be accessible through the SIOP-5, the interface towards the DC LAN. The locations from which PKI services are provided are today Mons and Brunssum. At time of implementation of the NCI, the Purchaser expects to provide PKI services from the DC locations in Mons, Lago Patria and Brussels (NATO HQ).</p> <p>That means that the NS PKI instance will be accessible from the NS LAN, through the SIOP-5 of the NS IP Access subsystem; the NU/NR PKI instance will be accessible from the NR LAN, through the SIOP-5 of the NR IP Access subsystem.</p> <p>The NCI shall ensure the NCI-internal distribution of the 2 PKI instances across the NCI subsystems, security classifications and all CoI; such that all NCI subsystems that need access to the PKI are able to access PKI services from the 2 PKI infrastructures (NU/NR and NS).</p> <p>The NU IP Access subsystem and the NU MMA shall use the NU/NR PKI instance.</p>	4

T.156	SoW SI-139 & SI-140, MNG-33	Several terminals are defined to manage NCI. Who is in charge to purchase these devices (DSMS consoles, management workstations, local management laptop) ?	<p>The Purchaser considers the workstations in MNG-33.1 and MNG-33.2 as PFE, and considers the dedicated laptops at each NCI node in MNG-33.3 as Contractor provided.</p> <p>[MNG-33] is updated to clarify.</p> <p>Furthermore statements [19a] and [19b] are added to clarify that the PFE element further.</p> <p>Finally requirement MNG-150a is added to clarify the capacity requirements in support of the abovementioned workstations with respect to the number of supported workstations.</p> <p>In this context also consider SoW SI-138 and SRS Annex D MNG-3, which in combination imply that the Contractor shall implement, deliver and configure all components that make up the Management subsystem, unless specified otherwise. Note, equivalent requirements like MNG-3 are present for each subsystem, in each SRS document.</p>	4
T.157	SoW SI-139 & SI-140, MNG-33	What is the “client side management tools”? Is it a global Nato clients (workstations) configuration management system used to manage users’ workstation that can be used to deploy some NCI components?	<p>In SI-140 requirement of the SoW Core document “client side management tools (management consoles accessing the DSMS)” refers to the workstations, OS, and software, used to access the DSMS as intended in MNG-33.</p> <p>These PFE workstations are going to be managed through central workstation management tools capable of deploying additional NCI management components.</p> <p>This includes for example OS and software installation and configuration, in order to gain access to the DSMS; including delivery, installation and configuration of additional software (i.e. any VPN software, refer to MNG-36), and configuring and activating software (components) already part of the NATO MS Windows Standard built that are necessary to access the DSMS.</p> <p>Further, refer to T.156.</p>	4

T.158	SoW SI-139 & SI-140, MNG-33	Should NCI has to provide a management terminals configuration management system as part of NCI Service Asset & Configuration Management (SACM) component?	<p>The Service Asset & Configuration Management (SACM) process is in scope of the NCI. The SACM process for the NCI assets will be supported by the NCI's Domain Service Management System (DSMS). The SACM module of the NCI DSMS shall provide, through the Northbound Interface (SRS Annex D, Fig. 2, interface 7), the necessary information to the ESMS in order to relate a change to the affected configuration items.</p> <p>The terminals of the System Administrators will be managed by the Purchasers Workstation management systems.</p> <p>Refer to CR T.9</p>	4
T.159	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	Is there only one deployment of “ESMS (shared enterprise-wide service management tools)”?	The Purchaser operates today two (high availability pair) ESMS instances on NR security domain and two (high availability pair) ESMS instance on NS.	4
T.160	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	What is the security domain of the ESMS instance?	Refer to T.159	4
T.161	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	Where are the ESMS instance from a technical network point of view?	Beyond the SIOP-5 (as seen from the NCI)	4
T.162	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	How NCI can establish inline communication with ESMS?	The DSMS communicates with the ESMS through the IP LAN infrastructure. Refer to T.161.	4
T.163	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	Are there dedicated network links between the notional management infrastructure LAN or the notional SOC LAN and a dedicated LAN for ESMS?	<p>Today there are no dedicated physical network links in place for this purpose.</p> <p>Refer to T.161</p>	4

T.164	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	Is there a Col for ESMS?	No	4
T.165	SD-7, [8], MNG-5, MNG-8, MNG-20, MNG-61, MNG-134	Does NCI need to deploy some ESMS module instances in its infrastructure?	<p>Consider that the NCI DSMS and the ESMS are discrete systems that are interfaced through the NCI DSMS Northbound Interface.</p> <p>The referred requirements in the CR imply:</p> <ul style="list-style-type: none"> • the NCI Management subsystem shall implement the DSMS; • the NCI DSMS shall interface with the ESMS in order to support the processes specified in the SRS Annex D; • where necessary to meet the requirements, or in order to implement the NCI DSMS – ESMS interface, the Contractor may have to augment the ESMS. <p>Consequently, subject to the specified requirements and the offered solution, the NCI deliverable may have to include ESMS components or modules. It is however not imposed that ESMS modules are to be used as part of the NCI DSMS itself.</p>	4
T.166	SOW 5.3.5	Shall all ancillary services be implemented on each site to protect against network cuts?	<p>The Purchaser expects the Bidder to provide an effective solution that meets the requirements; but the Purchaser does not impose a specific solution beyond what is specified in the SRS and its annexes.</p> <p>Consider for example the requirements MMA-153 (SRS Annex C) and MNG-33.3 (SRS Annex D). Consequently, NCI subsystem functions and services that are required to function through wide area network cuts shall do so. If the offered solution depends on the ancillary services to be available, a local instance (i.e. a slave or fall-back) may be necessary (subject to design). However, a solution that meets the requirements without such a local instance is permissible.</p>	4
T.167	SOW 5.3.3.3	Is PFE PKI hosted on NCI Hypervisors?	No	4

T.168	SOW 5.3.3.3	How many PFE PKI are provided? One; one per security domain; one per security level (NS, NR, NU); one per colored cloud, one per DSMS Site	Answered in T.154	4
T.169	SoW PM-65	The Purchaser is requested to clarify if the bidders training manager is required to be onsite on each NCI location prior to PSA?	PM-65 does not state where the Training Manager should do the requested coordination and supervision. Bidder to propose in his bid how PM-65 is implemented.	4
T.170	SSS CLIN 4.4.6 – 4.5.6 – 4.6.6 – 4.7.6	Purchaser to confirm which of the training from SoW [424] is foreseen to be held onsite?	SOW [424] Table 9-1 states the intended locations for each of the training courses. The exception is the course of the Operators and Maintainers for the Local site staff – which is CBT. SOW TRN-13 requires that all courses shall take place at the Purchaser's premises as indicated in Table 9.1.	4
T.171	SSS CLIN 4.4.6 – 4.5.6 – 4.6.6 – 4.7.6	Purchaser to confirm training is to be held on each individual NCI site/location for each wave?	SOW [424] states the intended locations and times for each of the training courses.	4
T.172	SoW 9.1 [424]	Purchaser to confirm if max number of student for L2 & L3 commercial training is per NCI site, or a total for the complete project?	Table 9-1 specifies the total max No of Students for the complete project.	4
T.173	Instruction to bidders 3.6.2.2.3.1.4	Can the purchaser quantify “too much”? This is necessary to understand in order to define compliance	Too much is defined as “more than needed”. I.e. most efficiently, no unnecessary human effort that could otherwise be automated (refer to T.133 for the definition of “unnecessary”). Compliance implies, amongst others, that no obvious automations, that could reduce the amount of human effort to resolve CMDB deltas, are omitted.	4
T.174	Instructions to bidders 3.6.2.2.3.1.2	What is the current schema and is it aligned to ITIL?	The current schema implemented in the ESMS CMDB is the BMC Atrium CMDB native schema. The NCI DSMS CMDB is to be tightened to the global CMDB through the SID (Shared Information Data-model), refer to T.47.	4

T.175	SOW SI-175	Does the term "Provision" only involve the configuration or the procurement of additional capacity?	<p>SI-175 refers to the transport capacity provided through the Purchaser's Ethernet Transport Network, and to capacity in other systems, necessary as a prerequisite for the PSAT. The intention of this requirement is for the NeCT to configure the relevant systems such that the PSAT can be executed.</p> <p>The contractor shall provide enough workforce in the "NSEG-embedded Contractor Team" (NeCT) to be able to cope with the associated workload.</p>	4
T.176	SOW SD-75	Can the purchaser clarify if the 5 x OEM engineers are in addition to the bidder's key personnel team? If so what is the length of time that they are required?	<p>The intention is to ensure first-hand access to OEM proprietary expertise, on capabilities and on (not necessarily publicly documented) limitations of the OEM products, during this critical phase of the design.</p> <p>These four individuals shall be included, in the CCT, during the configuration capturing phase (4+1 weeks) in the area of:</p> <ul style="list-style-type: none"> • Routing and switching • Information Assurance • CIS Security; Network management • Auxiliary network services 	4
T.177	SOW SD-72	The technical lead requested as key personnel seems to be omitted from the list of attendees required, please clarify?	SD-72 lists the mandatory individuals (plus the OEM engineers) – it's the contractor's responsibility to augment the team as he sees fit.	4
T.178	SRS [SYS-52]	Does this requirement aim the interface between NCI Internal Directory and NEDS as described in [66] or does it deal with the replacement of the NCI Internal Directory by a 3 rd party solution?	The NCI shall implement NCI Internal Directory Services in support of NCI Services and NCI subsystems. On top of this [SYS-52] defines that NCI shall have the technical capability to interface to an external system using the interface standards (ICD) defined in Appendix 5 of the SRS Core document.	4
T.179	SRS - [PCA-53], [PCA-54]	PCA-53 and PCA-54 are in contradiction with statement in [131], [132], [133]. What MTU size shall we consider?	<p>PCA-53 and PCA-54 refers to a technical capability required for all PCA subsystem's communications interfaces; whereas chapter 1.4.3 describes the current limitations of the Purchaser's Ethernet Transport Network, i.e. constrained by the LTX NED device and by the external service provider contract.</p> <p>[131], [132] and [133] are not requirements, these merely state the constraints of the PFE E-Lines as will be</p>	4

			<p>provided to implement the NCI. The Purchaser may address these constraints in the future LTX (outside the scope of this procurement).</p> <p>Note that there are also other constraints effecting the MTU, e.g. the PFE IP crypto equipment, as described in the SRS Annex B requirement CCA-31 as well as in the SRS Core statement [340]. Again, the Purchaser may address these constraints when replacing the responsible components or functions at a later stage (outside the scope of this procurement).</p>	
T.180	SRS - [PCA-61]	PCA-61. It is clearly defined in the SOW [482], 5 different types of LTX nodes (Core, Distribution, Satcom, Access, and None), what means the sixth and seventh LTX configuration mention in PCA-61, ie (6) NCI 1G Node: 4x 100/1000Mbit/s; and (7) NCI 100M Node: 1x 100Mbit/s.	The 1G NCI Node and 100M NCI Node are defined in the SRS Core document Chapter 4 and Chapter 5. These 1G and 100M NCI nodes are non-evaluated options (CLIN 9.1.1.3 and CLIN 9.1.1.4) intended for additional sites, beyond the NCI Base locations and NCI Optional locations (SoW Appendix 4). The 1G and 100M NCI nodes are intended for (very) small user group communities for which the 5G NCI Node would be overkill.	4
T.181	SRS - [PCA-64]	The bidder is supposed to deliver NCI 40G and NCI 5G. What does NCI 100M locations in PCA-64 mean?	<p>Please see answer to T.180. I.e. 100M and 1G node options are designed for possible future use at small user group locations (not in the table as of now).</p> <p>AMD4 updates PCA-64 to apply to both the NCI 100M and NCI 1G locations. Equally PCA-70 is updated to include NCI 1G locations.</p>	4
T.182	SRS - [PCA-72]	It is stated that for NCI locations where the LTX tier is CORE, we shall provide 6 x 10Gbit/s and 4 x1Gbit/s while in these figures are not consistent with statement [112]. Can you confirm the number and type of ports for Bref interface at LTX Core?	<p>PCA-72 states the minimum requirement for the PCA subsystem. The required number of 10G interfaces is six (6).</p> <p>Statement [112] refers to the available Bref interfaces on the PFE NED, i.e. a minimum four (4) interfaces will be provisioned by the PFE NED LTX node (might be more).</p> <p>The Purchaser may decide to implement additional Bref interfaces at the PFE NED at a later stage, beyond the scope of this procurement.</p>	4

T.183	Book II SRS Annex D. Req. [MNG-124]	This requirement states that "The ESMS incident management system shall be re-configured ...". Please precise the respective roles of the Contractor and Purchaser in this re-configuration, as the incident management module is PFE.	Please refer to the reply of T.132	4
T.184	Book II, Part IV, SRS - Annex D MNG-150	The MNG-150 requirement states that Twenty users are using the ESMS for incident, problem, and configuration management. This suppose that those processes are implemented within the ESMS tools. Yet, in §5.2.7, it is required that the DSMS implements the problem management system, and, In §5.2.1, it is required that DSMS implements the Configuration Management system. The question is: are problem and configuration management implemented for NCI at the ESMS level or at the DSMS level? (NB : for incident management, it is clear : the ESMS tool support the process)	Refer to T.9 and T.158 The ESMS is the overarching system; the NCI DSMS is responsible for NCI (sub)system and service specific aspects, while the ESMS concerns the end-to-end across services and systems. I.e. the DSMS supports the ESMS providing it with information, while the ESMS for example directs the DSMS to make changes in the NCI in support of an end-to-end user service.	4
T.185	Book II, Part IV, SRS Annex D - MNG-205	MNG-205 states that "The integration shall cover the migration and consolidation of SMC data (CIs, incidents, service models) and business logic currently built into existing network Domain Service Management Systems". Can you clarify the scope of data to migrate? Can you specify the business logic to be migrated by the Contractor? What are the existing tools which implement them?	The "migration and consolidation of SMC data" refers to the SMC data stored in existing management infrastructure. The existing management infrastructure is specified in SRS Annex G § 2.2.7. Hence the "business logic" refers to the existing management infrastructure; the data to be migrated is what is contained in the existing systems.	4
T.186	Book II, Part IV, SRS - Annex D MNG-203	It is required that enterprise level business logic for change management workflow be implemented the ESMS. The MNG-71 requires change management workflows to be implemented in the DSMS change management tool. Should the change Management process be implemented in the DSMS level or in the ESMS level?	Refer to the response in T.9. The SACM process for the NCI assets will be supported by the NCI's Domain Service Management System (DSMS). The SACM module of the NCI DSMS shall provide, through the Northbound Interface (SRS Annex D, Fig. 2, interface 7), the necessary information to the ESMS in order to relate a change to the affected configuration items.	4
T.187	Book II, Part IV, SRS - Annex D MNG-203	It is required that enterprise level business logic for fulfilment be implemented in the ESMS. The MNG-121 and 122 require that fulfilment be implemented in the DSMS. Should the fulfilment process be implemented in the DSMS level or in the ESMS level? Same question for the online service	Refer to T.186. Service fulfilment applies to different layers. The ESMS is concerned with end-to-end user services, orchestrating underlying services (i.e. NCI services, Core Enterprise Services and Functional Area Services). The NCI DSMS is concerned with the NCI services only.	4

		catalogue?	The Self Service Portal – Online Service Catalogue allows for a catalogue of NCI Services. I.e. a IP Col between A and B, adjustment of the traffic contract in terms of guaranteed bandwidth, etc.	
T.188	Book II part IV - SOW, tables 13-7	In the table for the site of Oeiras there is no indication of quantity for VOIP terminals, DECT and Fax. Please provide these quantities.	<p>This is correct, where no numbers are specified, the procured number of end-user terminals is 0. Refer to T.110.</p> <p>The number for Oeiras is 0, i.e. end user terminals are not in the authorized NCI baseline. In the proposal the site should be included for PABX replacement (all necessary work and all pieces of common equipment), but because of a different funding regime end user terminals are not included in the scope of the NCI baseline. End-user terminals may be procured through executing the appropriate non-evaluated options.</p>	4
T.189	SoW [SD-95] & Appendix 2, SSS main tab	[SD-95] asks for the completion of all site surveys before PRM-3, while the CDRL lists the delivery of batch 4 SSR for PRM-4, and the SSS states a completion of batch 4 surveys for PRM-4. Please clarify.	Please refer to answer to CR T.91.	4
T.190	SoW section 6.6	<p>ST-51 states that alpha testing shall occur over limited time windows, as follows:</p> <ul style="list-style-type: none"> - 4 working days for sites with LTX TIER = CORE - 3 working days for sites with LTX TIER = DISTRIBUTION - 2 working days for sites with LTX TIER = ACCESS <p>On another hand, [ST-47] states that "the Contractor shall demonstrate that all subsystems within the site can be connected and operate over a period of 72 hours (soak test)", i.e. 3 days. Please clarify.</p>	<p>This is indeed a mistake. AMD4 reads:</p> <p>ST-51 Alpha Testing, excluding the 72-hour soak test, shall occur over limited time windows, as follows:</p> <ol style="list-style-type: none"> (1) 4 working days for sites with LTX TIER = CORE (2) 3 working days for sites with LTX TIER = DISTRIBUTION (3) 2 working days for sites with LTX TIER = ACCESS. <p>[340b] A combined successful outcome of the Alpha Test, including the subsequent 72-hour soak test, is a prerequisite to initiate Beta Testing.</p>	4
T.191	Book II part IV - SOW, tables 13-7	Please indicate the quantities of conference phones and Manager/Secretary phones to be provided: base locations and optional locations.	This is answered in T.75	4

T.192	SoW section 7.2	<p>[364] Through the original PCOP, or through PCOP updates, the Purchaser may:</p> <p>(1) Ask the Contractor to start migrating a site right after the site's PSA, while the Contract has staff deployed at the site; Please confirm that the above statement shall be read as follows:</p> <p>(1) Ask the Contractor to start migrating a site right after the site's PSAT, while the Contractor staff is deployed at the site;</p>	<p>Correct. Amendment 4 reads:</p> <p>[364].1 Ask the Contractor to start migrating a site right after the site's PSA, while the Contractor has staff deployed at the site.</p>	4
T.193	SoW 6.5.2 and 6.5.3 / Bidder's conference	<p>Please indicate if requirements related to PoCT Procedures and PoCT Report shall be addressed in the System Design Plan or in the System Testing Plan.</p>	<p>As described in the SoW 2.6.2.3 PM-145: Proof of Concept (PoC) Platform Implementation and Testing is part of the System Design Plan (Section 3 of the PIP)</p>	4
T.194	Book I Annex A Bidding Sheet - Site Price Breakdown Bidding Sheets SOW Appendix 2	<p>Can you please explicit "ILS documentation", WBS 3.7 of the Site Price Breakdown bidding sheets Indeed, in the Appendix 2 of the SOW, the ILS documentation has to be provided during the design stage. In the Bidding sheet the ILS documentation is required 2 weeks before PSA meeting. please explain</p>	<p>The items referred to in WBS 3.7 of the "site price breakdown bidding sheets" concern the site specific logistics documents, examples of which are packing lists and notices of shipment. Refer to SOW Figure 11-1 and Table 11-1; also refer to the requirements stated in § 11.5 and § 11.6.</p>	4
T.195	SOW section 11.4	<p>Could you provide us with all the documents referenced in the SoW and SRS?</p>	<p>STANREC 4174 and the ADMPs are provided as part of AMD4. MIL-HDBKs 338B and 470A, as well as ASD S3000L, are available on the Internet provided by the source organizations.</p> <p>In general, the IFB demands bidders to have relevant and successful corporate experience in at least two Contracts within the last five years for which the Bidder has executed the design, configuration, installation, integration and testing of similar systems to meet military or government requirements. It is therefore expected that bidders are familiar with the majority of the references in the SoW and SRS. In case a bidder is not aware of a specific NATO-owned document the Purchaser can provide the specific document upon request.</p> <p>The Bidder is expected to acquire any referred commercial and/or public documents himself. Release of NATO STANAGs to industry is through your sponsoring nation, refer to</p>	4

			<p>http://nso.nato.int/nso/SOSite/SOhelp.htm l. A number of classified documents have already been provided on the IFB release CD. Further, as part of AMD3 a number of additional unclassified documents have been provided on the external portal made available to the bidders. (URL: https://ifb.ncia.nato.int)</p>	
T.196	SOW section 10.5 and 10.6	Please clarify what "Layer Two Transport Core Subsystem", mentioned in [DOC-19] and [DOC-27] refers to.	<p>Layer Two Transport Core subsystem refers to the Purchaser's Ethernet Transport Network (LTX), as described in chapter [144] in the SoW Core document.</p> <p>The Contractor shall document how the NCI uses, and interfaces, the Purchaser's Ethernet Transport Network.</p>	4
T.197	MMA-283	<p>DTMF relay protocol requirements: • RFC4730 KPML is besides used by a very limited number of vendor(s) also considered by the most of the SIP Community, as very complex for a Phone to just control for example the menu of a Voicemail server. Within KPML RFC 4730 we see that RFC 2833 tones are ideal for conveying telephone-events point-to-point in a Real-time Transport Protocol (RTP) stream, as in the context of straightforward sessions like a 2-party call or a simple, centrally mixed conference. ...". RFC4733 updates this RFC2833 and is using distinct RTP payload type packets for conveying the DTMF tones which is about conveying the DTMF digits within the payload stream as "distinct payload type". RFC4733 is what the overall SIP community is using, and which is also very important for multi-vendor interoperability. Can NATO agree that one of both is supported?</p>	<p>Note that erroneously SRS Annex C v1.1 was renumbered in AMD1 due to deletion of sections. Consequently, this question refers to MMA-283 in AMD0, but refers to MMA-265 in AMD1 and later. The CR is answered using the new numbering.</p> <p>The Purchaser agrees to remove the requirement for KPML support. AMD4 reads: <i>[MMA-265] The MMA subsystem shall support the transmission of Dual-tone multi-frequency [DMTF] signalling according through:</i> <i>(1) [RTP payload for DTMF] digits in accordance with [RFC4733:2006] and</i> <i>(2) Key Press Mark-up Language [KPML] in accordance with [RFC4730:2006].</i></p> <p>MMA-289 already prescribes RFC4733 for the Desktop Telephone interfaces and MMA-298 already prescribes RFC4733 for the Mobile telephone base station interfaces. RFC4733 is also in line with the use of [SIP Connect v.1.1] for the SIP_{IF} interoperability interface.</p>	4
T.198	MMA-20 and MMA 277	MMA refers to SCIP-214.2 which is about SCIP over RTP (and not SCIP over V.150.1 Modem Relay). In US DoD SCIP over RTP is only optional. Does NATO indeed mandate SCIP over RTP (SRTP) and not require SCIP over V.150.1 - OR - is SCIP over RTP seen as an additional requirement to SCIP over V.150.1?	The Purchaser requires the CH function to support both SCIP over V.150.1 and SCIP over RTP.	4

T.199	MMA-19 and MMA-20	NCI asks for SCIP transparency (SIP/SDP) for call negotiation between SCIP endpoints. Do we understand correctly that the appropriate specs which the CH function has to support between two SCIP terminals (SDP Syntax) is completely and only referenced into the following 2 documents STANAG5068:2015 SCIP over RTP, SCIP-214.2:2014. Can NATO makes those documents available?	STANAG5068:2015 and SCIP-214.2:2014 will be provided with AMD4 on the IFB bidding portal which has been made available to the bidders. (URL: https://ifb.ncia.nato.int) Refer to T.195. Note that the Purchaser and/or NATO is not the authoritative source on SCIP standard documentation.	4
T.200	SYS 266 and SRS CORE Document Appendix 4 page 69	Interestingly SYS Core spec Appendix 4 "applicable documents and Standards" lists three RFCs for Suite B and all are related to IPsec (RFC6379, 6380, 6379 (256). Suite B for TLS (RFC6460) is not listed. Can it be clarified if Suite B is meant to be required only for IPsec	The requirements for commercial IPsec and the requirements for TLS are decoupled. IPsec is (primarily, but not exclusively) used for COMSEC; TLS is not used for COMSEC. If the Bidder believes Suite B is necessary to meet the requirements (either explicit or implicit) he may do so. (In that context make sure also that it is possible to use SIP Connect v1.1 across the SIP _{IF} interoperability interface.)	4
T.201	SYS-266	Does NATO agree that NCI only support certificates with either RSA or ECDSA based signatures at any one time , i.e. to only support RSA based certificates for authentication of TLS based interfaces until the PKI is able to deliver ECDSA certificates to all devices, and then to switch to only support ECDSA signed certificates?	Refer to the SRS Core [119] and the CR T.200. Until the Purchaser's PKI is able to support Elliptic Curve, ECDSA cannot be used by the NCI systems. It is up to the Bidder to consider, and propose, such a transition to ECDSA for TLS. As referred to in T.200, RFC6460 provides guidance. However, the Bidder shall also make sure to cover the possible implications for the SIP _{IF} interoperability interface, which is governed by SIP Connect v1.1.	4
T.202	SRS CORE, Appendix 4 "Applicable documents and Standards"	Are SIP endpoint devices (e.g. phones) expected/required to support SNMP for only Traps, or also for Get and Set operations? Traps can be useful to indicate operational status but we see no real need for using the SNMPv3 security mechanism in this case. Can we therefore assume that Get/Set operations will not be required since there is normally in all architectures, an alternative management system for devices?	The requirements for SIP endpoints do not mandate SNMP. The information assurance requirements for management protocols are specified in the SRS Annex D § 6.4. These apply to all NCI subsystems, including any management protocols employed to manage SIP endpoint devices.	4

T.203	SYS-73	Which OCSP model should be used? Delegated Trust Model (DTM) or Self Signed Model?	<p>Our assumption is that question is meant to ask if in OCSP the method the purchaser intends to use is the Direct Trust Model or Delegated trust model.</p> <p>Based on the above assumption the Delegated Trust Model is expected (i.e. the responder certificate for any given OCSP request is a signing certificate issued by the CA).</p>	4
T.204	SYS-82	Can SIP Phones rely on just the server using authenticated NTPv3 since timestamp differences will cause the interface to fail?	The implementation of the distribution of time services within the MMA subsystem itself, which includes the telephone, is subject to design. The SRS Core paragraph 2.4.5 specifies the Time Services implemented by the NCI Ancillary Services.	4
T.205	MMA-51	<p>Can NATO indicate the capacity of the conference DN pool? Does conference DN assignments have a limited lifetime? Are conference DNs assigned only for single conference call instances, or permanently, or both?</p> <p>Can this Conference Bridge be voice prompt or web based operated? Or both?</p>	<p>Refer to the SRS Annex C paragraph 3.6.5. Considering the conference bridge capacity specified, the conference directory number (DN) pool shall not be the limiting factor.</p> <p>Typically planned conferences are a mixture of ad-hoc short lived boxes and semi-permanent boxes (i.e. for repetitive use). Hence, DNs are assigned in single and semi-permanent fashion.</p> <p>The establishment of conferences shall be possible through the telephone's interface and through the DSMS.</p>	4
T.206	MMA-83	In this MMA-83 is mentioned that "users shall dial their extension number to reach the voice mail" We would expect that the users first dials the voicemail server number or access code and then introduces their extension/ and or pincode to get identified	<p>Refer to T.8</p> <p>MMA-82 defines the method of getting to voicemail prompt and to listen to voice mail after using PIN code from the end user's own phone number.</p> <p>MMA-83 extends this and defines the way on how to access voice-mail remotely from a different phone number. In most of the voice mail systems, when a user is trying to gain remote access to his/her voice mail box from a different phone number, the first thing is to get to the voice-mail prompt and after using a special pre-dial key (e.g. "*") identify him/herself with own number. In order to gain remote access he/she shall also use the same PIN code as if dialling into the voice mail prompt from the own phone number.</p>	4

T.207	MMA110- MMA115	Figures 4 & 5 seem to indicate that the Fax GW shall directly connect to the PSTN (or TDM). Is that really the expectation, or can the Fax GW also connect via VoIP/FoIP?	<p>The Fax to email Gateway functions were incorrectly included in the SRS Annex C and have been removed in AMD1. In the original IFB, the depicted On-ramp and Off-ramp process refers to Fax to email and is not required.</p> <p>Needless to say that the exchange of Fax between FoIP based Fax terminals (i.e. a G3 Fax connected to the NCI using a Fax TDM-IP Adaptor) and circuit switched Fax clients (i.e. a G3 Fax in the PSTN) remains required.</p> <p>Note that during the removal of the Fax Gateway related text in AMD1, SRS Annex C was erroneously renumbered due to deletion of sections.</p>	4
T.208	MMA-146	The wording "the calls shall be routed internally to the site through the Media Aggregation function" is unclear for us and we would not expect the call to do this. Our assumption is that for local calls within the site, Voice media is sent directly between the local Phones. Can NATO confirm this assumption?	<p>The requirement for routing local calls through the Media Aggregation function was a mistake; the requirement is corrected accordingly in SRS Annex C v1.3 AMD4.</p> <p>Note that erroneously SRS Annex C v1.1 was renumbered in AMD1 due to deletion of sections. Consequently, this answer refers to MMA-146 in AMD0, which is mapped to MMA-132 in AMD1 and later. The CR is answered using the AMD0 numbering.</p>	4
T.209	MMA-273 MMA-275	We understand that "T.33 sub-addresses" are not required to be supported. Pls confirm.	The Fax-to-Email functionality has been removed in the AMD1 SRS Annex C.	4
T.210	SYS-79	SCEP isn't released as a Standard, and only available by a limited number of vendor(s). Can NATO agree that within NCI, Manual enrolment or other mechanisms can be used (e.g. enrolment via EMS, integrated with the Customer PKI)?	<p>No, the Purchaser does not agree with dropping the requirement for SCEP.</p> <p>Manual enrolment for large amounts of telephones and other devices is not considered as realistic and not acceptable.</p> <p>The interface between the iNPKI and the NCI subsystem shall be as specified (i.e. SoW § 5.3.3.3, SRS Annex C § 3.3.2 and SRS Core § 2.4.4).</p> <p>How the certificate distribution within the NCI subsystems is implemented is subject to design, provided the requirements specified in the SoW, the SRS and the SRS Annexes are met. In this context refer also to SRS Annex D MNG-190 and the response to CR T.133 and T.173.</p>	4

T.211	SRS Core	Will the ancillary services be required to support clients outside of NCI (e.g. NU User devices)?	<p>Refer to SRS Core SYS-87. The NCI Time Service is considered to be accessed by the user services domain (through the SIOF-5). However, non-NCI end-user devices will not access the NCI Time Service directly, but will use a distribution server in the user domain (located in the LAN, beyond the SIOF-5).</p> <p>The NCI Domain Name Services, the NCI AAA Service, and the NCI Directory Services are not accessed from outside the NCI subsystems.</p> <p>Furthermore, the Purchaser intends to implement a federation between NCI ancillary services with equivalent services within the Bi-SC Core Enterprise Services (i.e. SRS Core [66] and [108]).</p>	4
T.212	SRS Annex C MMA-415	Will NATO please provide a copy of STANAG4705-Ed1:2010?	These are provided as part of AMD3 on the portal. (URL: https://ifb.ncia.nato.int)	4
T.213	SRS Annex C	Figure 2 of SRS Annex C does not show any user voice appliances for the NOC locations? Are these appliances required?	<p>Refer to SoW Appendix 5, which specifies the number of VoIP Terminals, DECT Handsets and FAX Extensions for <u>each</u> PABX Removal Location.</p> <p>Note:</p> <ul style="list-style-type: none"> • NOC Mons is a PABX Removal Optional Location; • NOC The Hague (refer to T.73) falls under a different funding regime, end user terminals are not included in the scope of the NCI baseline (but may be procured through executing the appropriate non-evaluated options) • “Site with PBX migration” (depicted in Figure 2 of the SRS Annex C) = “PABX Removal Location” (SOW, Appendix 5). • The NOC locations are not necessarily equal to the data centre locations, this specifically applies to the 2nd NOC location. <p>As stated in SRS Annex C [19], Figure 2 is only an engineering example. Figure 2 is intended to illustrate the concept of centralized and distributed functions across the MMA. Figure 2 by itself does not constitute a required distribution of components.</p>	4

T.214	SRS Annex C	Can the Media Aggregation Function (Figure 2) and PBX-IP-GW functions be served from a single, physical device capable of providing all of the functional services?	Yes. The requirements stated in the SRS and its annexes are <u>functional</u> . The Bidder may design the implementation of functions within a subsystem through one or more hardware components; and the Bidder may design the implementation of functions within a subsystem combining multiple functions in one hardware component or group of components.	4
T.215	SRS Annex C	In Figure 1 of ANNEX-C, the diagram shows two separate NU BPD devices. In Figure 2.1 of SRS-CORE these two systems are combined into one, not two, SIOP-5 interface. Which configuration is correct?	Both are correct. Unless explicitly stated otherwise, the SRS and its Annexes requires and describes functions. Separate distinct functions, may be implemented through a single hardware component or through multiple hardware components. Refer to T.214.	4
T.216	SRS Annex C	Must the NU User Appliances reside on a separate network from the NU MMA subsystem servers?	No not necessarily on a separate physical network. As the SRS and its annexes specify functional requirements, the User Appliances and the MMA infrastructure functions reside on a separate <u>logical</u> network. The actual implementation is subject to design and the requirements specified in the SRS and its Annexes. Refer to T.214 and T.215.	4
T.217	SRS Annex C	Does NATO believe that adequate separation be accomplished by simply assigning one VLAN to NU User appliances, and a second VLAN to the MMA servers using the same physical UC LAN infrastructure?	Provided the design meets the requirements specified in the SRS Core and its Annexes, the use of VLANs for this purpose is not excluded. Refer to T.135	4
T.218	SRS Annex C	No mention is made throughout the SRS or SOW of TDM Channel Associated Signaling (CAS) for T1 or E1. Is CAS used anywhere?	CAS is not a supported signalling towards the existing installed PBX nor for the interoperability interfaces toward 3 rd parties supported by the NCI. CAS may be used with the NDN, but the NATO-NDN interconnecting point must not use CAS.	4
T.219	SRS Annex D MNG-59	Can NATO define the northbound interface requirements for the IOSS to accommodate future integration?	Refer to T.125	4

T.220	SRS Annex D MNG-70	Regarding the tailoring of the Change management Process, will the DSMS staff have access to the ESMS BMC Change Desk? If so, is there custom (and security-domain specific) workflow that we need to provide?	Yes, but depending on their role. The DSMS shall support the required workflows as specified in SRS Annex D, considering the security domains that the DSMS operates in, including RBAC towards the DSMS.	4
T.221	SRS Annex D MNG-117	Is this specification asking for the DSMS (not the 'FM') to implement a SKMS system, i.e. is this just a typo and 'FM' is correct?	The Fault Management (FM) shall help the NCI (sub)system manager with prior knowledge recorded as part of the resolution of prior similar faults. In MNG-117, the SKMS refers to the function required for FM. The actual implementation is subject to design. The Purchaser considers it as logical that the FM exploits a DSMS wide knowledge management system.	4
T.222	SRS Annex D MNG-209 MNG-217 Others...	Generally speaking, there are requirements that seem to imply workflow definitions between both the ESMS and the DSMS. Is NATO asking that we extend ESMS capabilities to the DSMS AND customize workflow across both sets of users DSMS & ESMS as part of the scope of the NCI initial deployment? Or would the operational process streamlining between both sets of NCI users [ESMS/DSMS] be addressed afterwards and ongoing as part of the NCI lifecycle/CSI approach?)	The Purchaser requires the NCI DSMS to support the workflows specified (i.e. SRS Annex D, Figure 2), and for the Contractor to define the NCI DSMS aspects of these workflows further where and as required. The scope for work on the ESMS (under this procurement) is limited to connecting the ESMS with the NCI DSMS and to augment the ESMS with respect to capacity (MNG-5). Operations process(es) streamlining may be considered by the Bidder with reference to the Bidding Instructions § 4.5.3.2.5.	4
T.223	SRS Annex B 2.2.2	It was mentioned at the Bidder's Conference that the LANext interface is L2. Does this imply that a Layer 2 path or tunnel must be established for this 3 rd party Col over the CCA subsystem?	No, that is a misunderstanding. The LANext is an IP over Ethernet interface. It is used to connect a stub LAN. The IP subnet used in the LAN, connected through the LANext, shall be <u>IP routed</u> across the CCA (within the Col it is a member of, refer to statement [28] in SRS Annex B §2.2.).	4
T.224	SRS Core 2.2	Is a 3 rd party WAN considered separate Community of Interest or filtered only by way of BPD?	A 3 rd party WAN may be a different Col, or it may be interworked with the "global NCI-wide domain". Interworking may occur locally, or in one of the core NCI nodes. A boundary protection function is implemented for each 3 rd party interconnection. From the perspective of the NCI, the boundary protection function implemented on this interface is equivalent to the boundary protection	4

			function implemented on the SIOP-5 interface (obviously the rulesets differ).	
T.225	SRS Core 2.2	Is 3rd party WAN isolated via BPD to location specific instance of Coloured Cloud or extended via VRF to other CC location instances?	A given 3 rd party WAN may interwork with the NCI at one or multiple sites (as many as the 3 rd part WAN is present), or may be isolated as COI and use the NCI for plain transport purposes across all those sites (using VRF or equivalent). In all cases the BPD function will be required, with different rulesets for interworking and plain transport.	4
T.226	SRS Annex B CCA-89, 90	Please confirm that there are two (2) NR/NU SIOP-2 interfaces for 40G sites and four (4) for 5G sites?	This is a mistake which is corrected in AMD3. Refer to T.20.	4
T.227	SRS Annex C 3.5.3.1	Can the TWO gateways described in this section be combined into ONE gateway (supporting both functions) if 99.9% availability is maintained?	Refer to T.214	4
T.228	SYS-73	OCSP responders use a CRL to respond to a query about whether a certificate has been revoked. We don't see the support for CRLs (which can get very big) by an embedded device such as a SIP phone, as really realistic. In this case we see OCSP as the best option, and as a mean for the phone to determine if a certificate received from a peer device has been revoked. For that reason can NATO agree that the request for SYS-073 is tuned towards "The NCI subsystems using PKI shall support CRL verification services through [LDAP] "OR" [HTTP] "OR" [OSCP] methods;"	The Purchaser does not agree to the proposed change, but confirms that the MMA subsystem uses OCSP to verify the validity of a certificate as specified in SRS Annex C § 3.3.2. Note that SYS-73 refers to the requirements of the PKI Service in general; and all protocols shall be supported by the PKI Service. In turn the SRS Annex C § 3.3.2 specifies how the MMA subsystem shall access the PKI.	4
T.229	SYS-222 and others	For SIP Phones for Dual Stack / Dual IP Operation, two RFCs for dynamically SIP/SDP negotiation of the IP Version for the RTP payload stream are available: ANAT (RFC4041/4042) or ICE (RFC5245). Can NATO indicate which of both is expected? - OR - is dynamic negotiation probably not required, since we do not find any references to neither ANAT nor to ICE in the specs? Note that we understand that ANAT is	That is a misunderstanding of the intention. Dual stack is not required for telephones. SYS-222 refers to the IP-based communications interfaces implemented by the NCI subsystems depicted in Figure 2-1, but does not intent to include the NUNI. AMD4 updates the SoW to read:	4

		actually deprecated by ICE, but many customers (including US DoD) are still requiring ANAT.	<p><i>[SYS-222] The NCI design and implementation shall support the reconfiguration of all the communications interfaces IP_{ROUTED}, PCN-1, PCN-2, LAN_{EXT}, SIP_{IF}, SIOP-2, and SIOP-5 to operate at:</i></p> <p><i>(1) [IPv4] only;</i></p> <p><i>(2) [IPv6] only; or</i></p> <p><i>(3) [IPv4]/[IPv6] dual stack.</i></p>	
T.230	SYS-53 to SYS-56	<p>TACACS+ has historical roots to proprietary vendor. TACACS and SYS-56 implies both are required for the NCI AAA service. Can we get a clarification on this topic?</p> <p>Is NCI AAA Service to be provided by NATO or by NCI?</p> <p>As TACACS+ is proprietary, can this request be removed from NCI?</p>	<p>The AAA services shall be provided as part of the NCI. Refer to SYS-45.2.</p> <p>The NCI AAA Services are intended to replace the Purchaser's legacy AAA service. Refer to SYS-56. Note that SYS-56 states that the NLI relies on TACACS+.</p> <p>SYS-55 allows the Bidder to propose either RADIUS or TACACS+ for use within the NCI itself.</p> <p>Many commercial protocols are championed by a specific vendor. TACACS+ protocol specifications are published through the IETF and the protocol is implemented by many products and vendors. The requirement is necessary to provide AAA Services to the NLI, and cannot be removed.</p>	4
T.231	MMA 21	<p>Are our services and devices allowed to use the customer corporate directory servers for name/function/number lookup, and is that global directory configured to allow fast lookup by number (reverse index)? Or are we supposed to provide our own infrastructure for that purpose, in which case we would need to know the preferred/required way to integrate this with the customer's Directory (Format of the tel number delivered to LDAP (Fully qualified E.164,... ?)</p>	<p>The NCI shall provide its own directory services to serve all requirements from NCI subsystems, as specified in the SRS Core § 2.4.1.</p> <p>Once the NATO Enterprise Directory Services (NEDS) are mature enough, the Purchaser will interface, or federate, the NCI Internal Directory Services to NEDS using the specification in SRS Core Appendix 5.</p> <p>Refer to SRS Core [65], [66], SYS-51 and SYS-52. Note that SYS-52 specifies usage, but does not intend to imply direct access of individual NCI components to NEDS bypassing the NCI internal directory services.</p>	4

T.232	Annex C/MMA-104, MMA-105	MMA-104 in Annex C v1.1 shows Figure 3 call path of TDM-IP-TDP between two fax machines but MMA-105 states fax traffic should only use Dref "with other NCI FoIP extensions". Please explain what is expected.	<p>MMA-104/Figure 3 and MMA-105 are not mutually exclusive. Figure 3 merely depicts a specific view showing just one aspect of the total requirement.</p> <p>MMA-104/Figure 3 concerns the NCI internal implementation of G3 Fax, across the MMA subsystem; and MMA-104/Figure 3 concerns interconnections with 3rd parties, which also operate an equivalent FoIP service, interconnected to the NCI through the SIP_{IF}.</p> <p>MMA-105 requires the ability to exchange faxes "with external networks through the Dref and with other NCI FoIP extensions". MMA-105 does not say that NCI FoIP extensions connect through the Dref.</p>	4
T.233	Annex C/MMA-117.2	Please give some examples for context sensitive messages.	<p>This refers to the messages in the IVR menu, which varies based on the state of IVR (i.e. how far is the caller in the IVR menu-tree), the time of day, the number dialled, the availability of agents, etc. (i.e. the context).</p> <p>The Bidder is expected to use his imagination.</p>	4
T.234	Annex C/MMA-117.4	Literally unlimited resources cannot be provided, please give a realistic requirement.	<p>Agreed, unlimited resources are not expected. The intent is to procure a system that has a growth potential. Through MMA-117.4 the Purchaser expects a solution that is void of hardcoded or license constraints to the IVR menu structure that limit the Purchaser to use the solution to its full potential.</p> <p>The Purchaser expects the IVR to be suitable to for typical service provider (communications, multimedia and IT services) call-centre operation.</p> <p>For the purpose of bidding, assume as a minimum: 9 1st level menus; 9 sublevels in each sublevel; 5 levels deep.</p>	4
T.235	Annex C/MMA-250	Please confirm: do you mean external mic/speaker volume should be adjustable or indeed the conference phone itself should have a feature to change any individual path's volume.	A separate adjustment for the microphone volume and a separate adjustment for the speaker volume will meet the requirement MMA-250.	4

T.236	Annex C/MMA-438	The metrics defined in MMA-438 relates to analog circuit technology, in the requested full IP environment this will unlikely to exist. Could you please explain which component you think will show these characteristics.	Correct. MMA-438 is replaced in AMD4 to read: [MMA-438] Payload Metrics shall include a measurement of the Mean Opinion Score (MOS), as described in § 3.6.3.1, and measured as specified in [MMA-358]: (1) Voice Audio Level; (2) Signal to noise ratio; (3) Noise Level; (4) Echo Return Loss.	4
T.237	ILS-22	With regards to ILS-22 Logistics Delay Time (LDT) shall be equivalent to the response time of the hardware or software support contract offered as part of the CLS arrangement. For hardware and software at a location with a 24/7/4 support arrangement, the LDT shall be four (4) hours. For hardware and software at a location with an 8/5/NBD support arrangement, the LDT shall be twenty-four (24) hours. For hardware at a location with on-site, Contractor-owned spares, the LDT shall be zero (0) hours. Can NATO please provide an overview on per site basis listing the following information: Site Name, Site address, Support arrangement (24/7/4 or 8/5/NBD)	The IFB includes sufficient site-related information for the purpose of bidding. Address details can be obtained after Contract Award, e.g. as part of the site survey effort. The support strategy (24/7/4 or 8/5/NBD) is to be proposed by the Bidder. Also refer to the response to CR T.1	4
T.238	Annex A/[PCA-139]	Table 4 is missing from SRS Core document. Possible NATO refers to Table A 1.2 from SRS-Core ?	Correct. The reference to Table 4 (= SRS Core, Appendix 1, Table A1.2) is superfluous and is deleted in AMD4.	4
T.239	Annex A/[PCA-150]	Table 5 is missing from SRS Core document. Possible NATO refers to Table A.1.3 from SRS-Core ?	Correct. AMD4 corrects the reference to: Table 5 "End-to-End performance targets per Aggregated Transport Class (ATC) Table A1.3 End-to-End performance targets per Transport Performance (TP)	4
T.240	SOW ILS section 11.3.1	Can NATO confirm the required level of security clearance for the contractor supplies 4ht line support? Additionally are the OEM require dot have any security clearance?	Where the 4 th line support solely applies to repair or production of hardware or software, which is void of NATO-specific configurations and without NATO-owned storage, and where the 4 th level support is executed outside of NATO premises, no NATO security clearance would be required for the OEM.	4

T.241	Annex E/[RTF-74]	[RFC-3550:2003] describes RTP (Real Time Protocol) and not SLA aspects related to packet delay variation. Could NATO clarify?	Refer to RFC 3550 § 6.4 “Sender and Receiver Reports” and Appendix A.8 “Estimating the Interatrial Jitter”. These discuss the estimation and calculation of jitter as part of the reception quality feedback.	4
T.242	MMA article 3.5.1.3 MMA 310 to MMA320And SOW V1.1 AMD 1 260 - SI-77 to SI-80	IP-DECT Antenna's also needs Horizontal LAN connectivity. Do we understand correctly that this cabling also needs to be handled like described in SI-77, SI-78,SI-79, and further? And that point 261 applies and of not that pricing for the IP-DECT Antenna cabling needs to be delivered in a non-evaluated option as requested in point 262 and following the specifications as described in SI-80?	No, that is incorrect. The Purchaser considers the cabling between the Mobile telephone base station and the LAN switch as “Vertical Cabling” (i.e. the base station is considered a communications infrastructure component and not a user appliance, only user appliances connect to the horizontal cabling in our definition). Refer to SoW [260], and SRS Appendix 6 ([300] and [315]), for the definition of Vertical and Horizontal Cabling.	4
T.243	MMA-312 and SOW V1.1 AMD 1 point 261	Do we understand correctly when NATO provides following SOW V1.1 AMD 1 point 261 the horizontal IP-DECT antenna cabling that these RJ45 connectors will be available at the locations where the contractor foresees the installation of the IP-DECT antenna?	No. Refer to T.242.	4
T.244	SI-84	Can NATO confirm that the Public Network Service providers will have their rack or installed material, within the same room as where the material for NCI needs to be installed?	No, that is typically not the case. Site surveys will have to provide this level of detail.	4
T.245	SI-85	Can NATO confirm that the Public Network Service providers will have their rack or installed material, within the same room as where the material for NCI needs to be installed? Or if not that the horizontal cabling will also been foreseen as described under 261 of the SOW or that it has to been foreseen by the NCI contractor as described under point 262	No, refer to T.244 and T.242. Furthermore, this is not horizontal cabling as defined in the SoW [260] and SRS Appendix 6 [300] and [315].	4
T.246	SOW 484 and SOW Appendix 5 PABX removal locations 494-495	8 locations are considered in point 484 as optional evaluated sites for NCI - however we don't see any description of these 8 locations under tables 13-7 and 13-8. As we see in the SSS that these sites aren't blocked out for CLIN 1.4 out from can NATO confirm that these are in scope of an optional evaluated SSS for MMA position also? If yes, can NATO provide the description if these 8 sites for large or small capacity, VoIP terminals, DECT handsets, FAX ext?	The MMA basically consist of infrastructure functions, interoperability functions and telephones. The infrastructure functions and interoperability functions shall be provided at each NCI location, regardless if they are PABX Removal Locations or not. Consequently, the MMA (less the telephones) is always in scope of all NCI locations; the PABX Removal Locations concern the delivery of VoIP telephones, DECT base stations and telephones, FAX	4

			<p>extensions, and the migration of the PABX services (i.e. migrating the PABX users and other connections handled by the PABX, etc).</p> <p>All these 8 evaluated option locations (SoW [484]) shall be treated as a Small VoIP Node.</p> <p>Note that in Bidding Sheets v1.2 AMD4 the TAB “Optional Wave (8 sites)” the subclin 1.7 “NU VoIP Appliances” has been removed.</p>	
T.247	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	We see a lot of differences in listed capacities for the in SW table 13-7 listed VoIP terminals and the site descriptions from SRS Annex F Chapters 4 till 31. Can NATO Confirm that SOW table 13-7 needs to be followed for the configurations to submit and that we don't have to take into account the capacity as listed into SRS Annex F Chapters 4 till 31? Any capacity above the SOW table will be handled as NCI Change Requests?	<p>The SoW Table 13-7 always prevails over SRS Annex F.</p> <p>SRS Annex F reflects the as-is, i.e. SRS Annex F states the number of telephones currently installed; Annex F does not state the number required nor the number to be provided through this contract.</p>	4
T.248	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information Chapter 6 Oberammergau	DEU Location Oberammergau NATO School requests under the SOW table 13-7; 319 VoIP phones and 68 DECT phones. Beside the requested clarifications on differences in listed numbers between SOW and Annex F, we see following the Annex F Ground plans only 1 building 633 with ground floor and 1 Upper level. Following the not fully readable ground plan picture we believe we've here a building from 69,05(?) metres on 9,30 (?) m. Can NATO confirm that for this location and only one building we need indeed 319 phones and 68 DECT phones? Can NATO confirm that we've only 1 building to cover with the IP-DECT antenna's?	<p>Refer to CR T.247. The SoW Table 13-7 always prevails over SRS Annex F. SRS Annex F represents the as-is. However, the Bidder shall be aware that the definitive information must be captured during the site surveys as specified in the SoW.</p> <p>With respect to Oberammergau, for the purpose of bidding the Bidder may consider Annex F as describing the only buildings to address. The size specified in Figure 41 is 69m x 9.3m.</p>	4
T.249	SOW Appendix 5 PABX removal locations 491-493 table 13-7	Can NATO confirm that no outside IP-DECT coverage is needed for all the listed locations - only inside the building?	No, DECT coverage in the area immediately around the building is required. However that does not imply covering the whole site.	4

T.250	SOW Appendix 5 PABX removal locations 491-493 table 13-7	In table 13-7 we don't see beside the request for Fax Ext, no other requested capacity for analogue lines. Do we understand that no analogue capacity will be installed or needed anymore under NCI?	Correct, G3 FAX extensions are the only analogue service delivery points that are covered under the scope of this procurement.	4
T.251	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location DEU Wesel - in Annex F we see several ground plans for buildings 3; 12; 13; 14;60;72; 73 and 75. In SOW table 13-7 we see a request for 25 DECT phones. Can NATO indicate which of those listed buildings needs to be installed for the use of those 25 DECT phones? As none of those groundmass for Wesel have measurements listed, can NATO provide the measurements of the buildings which needs to be covered by IP-DECT ? Also for this site no external DECT coverage is requested by NATO?	<p>Where Annex F describes NCI Locations with more than one building, either individually listed or depicted in site-maps, all buildings shall be covered. For such NCI locations, all buildings and the areas immediately around these buildings shall be covered with DECT. Refer to T.249.</p> <p>Where specific buildings are not provided with details, the Bidder must extrapolate these from the buildings that are specified. The definitive information must be captured during the site surveys as specified in the SoW.</p> <p>With respect to Wesel, the Purchaser has no further sizing information beyond what is specified already in the SRS Annex F.</p>	4
T.252	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location HUN Szekesfehervar we see in SOW table 13-7 a request for 5 DECT handsets - on the ground plans Annex F the measurements aren't readable. Can NATO confirm these measurements?	The measurements of the building depicted in SRS Annex F Figure 84 & Figure 85 are ~ 57m x 15.5m.	4
T.253	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location LTU Vilnius we see in SOW table 13-7 a request for 5 DECT handsets - on the ground plans Annex F the measurements aren't readable. Can NATO confirm these measurements? Can NATO also provide the planning when the new building for Vilnius will be ready? Do we risk any delay of wave 3 due to this construction planning?	<p>Note that the drawing includes a scale bar on the left side of the title block (bottom right of the drawing). One large unit equals to 5m, one small unit equals to 1m.</p> <p>The Purchaser does not foresee a risk in delaying Wave 3 due to the works in Vilnius. Where sites are not available to commence the installation, the site installation order is changed. Refer to the SoW PM-122.</p>	4

T.254	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location ITA Lughezzano we see in SOW table 13-7 a request for 3 DECT handsets - on the ground plans Annex F the measurements aren't readable. Can NATO confirm these that only the OPS building needs to be covered internally by the DECT-IP coverage? Can NATO confirm the measurements for this OPS building? Same question if other buildings should be included into the DECT-IP coverage?	<p>The Bidder can use the scale bar of Figure 86 to dimension the building depicted in Figure 87 and 88 and extrapolate the sizes to Figure 87 and 88.</p> <p>No, DECT coverage in the area immediately around the buildings is required. However that does not imply covering the whole site.</p>	4
T.255	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location NLD Brunssum we see in SOW table 13-7 a request for 22 DECT handsets - on the ground plans Annex F the measurements aren't listed. Can NATO confirm these measurements? Can NATO confirm that no outside DECT coverage is requested within NCI? We also see that following Annex F the actual analogue capacity of the site from 3400 phones drops down to 2194 VoIP phones. Is this correct? No analogue connections will remain in service afterwards?	<p>Unfortunately the Purchaser is not able to provide measurements for the buildings depicted. The Bidder must use his best judgement based on the size of common features (i.e. standard office doors).</p> <p>No, the extent of the outdoor DECT coverage is answered in T.249.</p> <p>With respect to the number of telephones installed as described in SRS Annex F versus the number of telephones required the SoW, refer to CR T.247.</p> <p>The SoW requires migration of existing analogue G3 FAX extensions as specified in SoW Table 13-7 (=22 FAX Extensions for Brunssum).</p>	4
T.256	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Annex F site information indicates in chapter 19 JTFC and 20 3NSBHQ DCM-A 3NSB M&S Coy as two locations for POL Bydgoszcz . Can NATO confirm if this site needs to be considered as 1 location or 2 locations? That 2 MMA configurations are needed? After amendment 1 775 VoIP phones have been replaced by a request for 185. Will those phones be in one locations or in both?	<p>These units listed in the question T.256 located at Bydgoszcz are considered as one location.</p> <p>The number of telephones, as specified in the SoW, is the total number procured for Bydgoszcz under this contract. Note that the telephones procured shall cover JTFC only; 3NSB is under a different funding regime and therefore not included in the scope of the NCI baseline. Further note that the Purchaser expects to leverage 570 existing VoIP telephones (for JTFC). It has been indicated in SoW Table 13-7, that there are two sites where the Purchaser assumes to reuse existing equipment out of which JTFC is one.</p> <p>The extent of MMA coverage is as specified in the SoW, refer to the response to CR T.246.</p>	4

T.257	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Annex F site information indicates in chapter 18 the configuration for Stavanger. After SOW V1.1 AMD1 capacity has been lowered to 250 VoIP phones and no DECT. Does this mean that we have here an additional site where a PBAX configuration will remain and where an MMA subsystem needs to be foreseen with TDM interface?	No, the Purchaser assumes to be able to leverage existing end-user equipment as indicated in SoW Table 13-7.	4
T.258	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Annex F site information indicates in chapter 19 JTFC and 20 3NSBHQ DCM-A 3NSB M&S Coy as two locations for POL Bydgoszcz . After SOW V1.1 AMD1 775 VoIP phones have been replaced by a request for 185. Does this mean that we have here an additional site where the PBAX will remain and that an MMA subsystem needs to be foreseen with TDM interface?	Refer to the response to CR T.256. It is the intention of the Purchaser to replace all telephones with NCI VoIP services, but only JTFC is eligible for NCI VoIP telephones under this procurement. The Purchaser may consider executing the appropriate options to address 3NSB; the Purchaser does not anticipate the PABX to remain in service for the 3NSB users.	4
T.259	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	SOW Appendix 5 AMD1 table 13-7 indicates PRT Oeiras as to be considered as site with PABX replacement, however no capacity have been listed. And Annex F chapter 22 indicates 430 installed phones today. Can NATO complete the SOW table 13-7 for this location? If this location would have a need for DECT, then we need also the different building measurements.	Please refer to answer T.188 for the End User equipment numbers.	4
T.260	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location ESP Torrejon we see in SOW table 13-7 a request for 274 VoIP phones and 10 DECT handsets and in Annex F no ground plans are foreseen for this site. Do we consider this as a large site, with the measurements for the building as listed under Annex F Chapter 3.2 Large Sites? Can NATO also provide the planning when the new building for Torrejon will be ready? Do we risk any delay of wave 2 due to the construction planning?	Annex F Chapter 2.2.3 table 2 defines Torrejon as physical Large site, so please use the Generic Large site description (SRS Annex F, § 2.2), in addition to SRS Annex F chapter 25, for site specifications used for costing. The Purchaser does not foresee a risk in delaying Wave 2 due to the works in Torrejon. Where sites are not available to commence the installation, the site installation order is changed. Refer to the SoW PM-122.	4

T.261	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location BIH Butmir Annex F chapter 3& indicates an actual installed capacity of 844 phones and the existence of a second remote location (SRS Annex F point 389). The SOW V1.1 AMD1 table 13-7 foresees a capacity of 214 VoIP phones. Can NATO confirm that no PABX capacity will remain for this site? Can NATO confirm if the second remote location needs to be considered as a separate location with an additional MMA subsystem? With or without remote TDM interface? What remote VoIP phone capacity?	There are different entities collocated at the Butmir site, the base itself is mainly for EUFOR. The number of end-user terminals listed in table 13-7 are related to what is in scope for the current contract. The purchaser can neither confirm nor deny the intention of the other tenants using the same PABX. For the purpose of bidding, the bidder shall assume that these other tenants will remain using the existing PABX which is connected as a 3 rd party to the MMA subsystem.	4
T.262	SOW Appendix 5 PABX removal locations 491-493 table 13-7 AND SRS Annex F Site Information	Location ITA Sigonella we see in SOW table 13-7 a request for 600 VoIP phones and 25 DECT handsets - as no ground plans exist, can we do an estimated coverage plan for the DECT configuration on the Annex F Site Information Chapter 3.2, and the measurements for the building of the large site? Can NATO also provide the planning when the new building for Sigonella will be ready? Do we risk any delay of wave 1 due to this construction planning?	At Sigonella there is already a so called "bridging temporary facility", which will host the complete MMA subsystem. Most probably by the time of the NCI node installation the final permanent facility is not going to be ready, but there will not be a delay caused by the construction of the permanent facility – as the purchaser is going to use the bridging facility. Any migration from the installed NCI system in the bridging facility to the future permanent facility is not in scope of this procurement.	4
T.263	SRS Annex C MMA-370	VoIP Node Size "8000" VoIP telephones at the location. Is this no typo and shouldn't this be "800"?	The number for the capacity is correct. This does not mean that there will be that many VoIP phones or licenses procured, but it means that the selected platform shall as a minimum support 8000 telephones for VoIP Node Size = Large, without upgrade.	4
T.264	SRS Annex C MMA-370	"The infrastructure function shall implement as minimum the capacity ... " Do we understand correctly that this is intended as Core capacity and local MMA hardware capacity capable to install for these 800 phones? NCI doesn't has to provide the hardware for the 800 phones in this case?	Please refer to T.263 This requirement implies that the selected platform shall as a minimum support 800 telephones for VoIP Node Size = small, without upgrade.	4
T.265	Annex D, [MNG-241]	Annex D, [MNG-241] and supporting Figure 5 does not specify the crypto capabilities of M1/MMA subsystem and M3/PCA subsystem. For the above mentioned Mx interfaces, shall the Provider consider the use commercial IPsec crypto mechanism, or NATO will deliver TCE621/A dedicated crypto device?	MNG-241 specifies the crypto for NU, NR and NS. Figure 5 shows that the M1 uses a NU crypto and the M3 uses a NU crypto. The Purchaser will only deliver a single TCE-621/A for the NS M2. Furthermore, refer to § 3.9.5 of the SRS Core.	4

T.266	SRS-Core, [SYS 42], [SYS 43]	Could NATO advice which Windows version should be installed on remote PCs in order to be compliant with the existing NATO software packages (i.e. McAfee Anti-virus and DLP agent or NCIRC FOC components)?	Refer to the response of CR T.148.	4
T.267	SRS Annex E §3.4 req. [RFT-55]	Can you please be more specific about the requirement to support PDH and SDH for the transport-circuit link emulation? Does the test tool suite need to be able to provide PDH / SDH link emulation, and if so, which bandwidth range is required? Which impairments are required?	Yes PDH and SDH is required. SDH and PDH speeds emulated shall cover ranges from T1 to STM-1. Transport impairment simulation is defined in §3.4 of SRS Annex E. The emulator shall be able to simulate impairments including, but not limited to: BER, jitter, wander.	4
T.268	Annex-E/[RTF-26] & [16]	Could NATO confirm that NCI Test facility could use existing NATO LTX test facility as support connectivity for 2x40Gbps NCI nodes and 2x5Gbps NCI nodes?	No, the LTX test facility cannot be used in an emulation support role.	4
T.269	Annex-E/[RTF-28]	Could NATO confirm that NCI Test facility could use existing NATO LTX test facility as support for transport-circuit emulation?	No, the LTX test facility cannot be used in an emulation support role.	4
T.270	Annex-E/Section 3.4 (Link emulation)	Could NATO confirm that requirements mentioned on [RTF-54] and [RTF-55] could use LTX test facility as support for link emulation function?	No, the LTX test facility cannot be used in an emulation support role.	4
T.271	Annex-E/Section 3.4 (Link emulation)	Could NATO clarify what "link emulation" means? Injecting corrupted traffic or traffic with specific IPTD/IPLR/IPDV values at a given NCI port?	RTF-55 states the requirement. Link emulation shall emulate a transport circuit introducing representative impairments like BER, delay, loss and delay variation. The NCI does not use IP transports, hence the references IPTD, IPLR and IPDV does not appropriately represent the transport-circuit emulation impairments. RTF-54 specifies the transport-circuits to emulate are: "Metro Ethernet and SDH & PDH transport circuits".	4
T.272	Annex-E/Section 3.5/[RTF-56]	Could NATO build a diagram showing where these link emulation tool suites are connected? Between two adjacent NEDs? Between two adjacent MMA/CCA/PCA nodes? Between CCA and PCA? Or PCA and NED?	Link emulation in the Reference and Testing Facility is used between any pair of NEDs or Pico NEDs. Link emulation only concerns the PCA subsystem's Bref or the NED's WAN circuit.	4

T.273	Annex A/Section 3.1.1.2	There is no PCN interfaces provisioned for NCI 1G node. Could NATO revise?	[PCA-64] is amended in SRS Annex A v1.1 AMD 4 and now reads: <i>At NCI 100M locations and at NCI 1G locations the PCA shall be provisioned with 4 PCN interfaces.</i>	4
T.274	Annex A/Section 3.1.1.3	For NCI 1G Node the following values should be used for Bref Interfaces: M=2, N=2, O=nil. Could NATO confirm?	PCA-70 is corrected in AMD 4 to refer to both NCI 100M and NCI 1G nodes.	4
T.275	Annex B/Section 3.2.1.2/[CCA-83]	Could NATO confirm if the number of SIOP-5 interfaces for NR subsystem mentioned on [CCA-83] is correct?	2x 1Gbit/s fibre + 2x 1Gbit/s copper	4
T.276	Annex B/Section 3.2.1.3/[CCA-93]	Could NATO confirm if the number of SIOP-5 interfaces for NU subsystem mentioned on [CCA-93] is correct?	2x 1Gbit/s fibre + 2x 1Gbit/s copper	4
T.277	Annex A/Figure 10	Could NATO declare the Figure 10 (Locations overview) as obsolete as the information offered by this diagram is not in line with the information offered in SOW-Core Document v1.1 AMD1 (Section 4.3)?	The Purchaser assumes that the Bidder refers to paragraph 4.3 in Appendix 4 of the SOW. It is correct that the diagram may not be fully in line with the sites listed in Appendix 4 of the SoW. However, the Purchaser still believes that the SRS - Annex A Figure 10 provides useful background information. Table 13-5 in SoW Core Appendix-4 prevails.	4
T.278	SOW section 11.4.3 requirement ILS-24	Could NATO confirm whether or not the THALES encryption devices need to be included in the RAMT and FMECA analysis? Similarly is the Full Packet Capture devices need to be included in the RAMT and FMECA analysis.	Confirmed – all inline building blocks will be affecting reliability including the NATO IP crypto and Boundary protection inline network components. Actually FPC is not an inline device, only the TAP used to mirror traffic to FPC is in line.	4
T.279	Question T.1 (ILS 22) & SRS - Annex F 2.2.3	With respect to SLA (24X7X4 or 8X5XNBD) could NATO confirm that the following is a complete list of MARCOM, AIRCOM, LANDCOM, CAOC sites; Northwood GBR - MARCOM Ramstein DE - AIRCOM Izmir TUR - LANDCOM Ueden DE Torrejon ESP and Poggio Renatico IT - CAOC Please detail any additional Aircom, Landcom and CAOC sites requiring 24X7X4.	This question is not fully clear to the Purchaser. In the context of the response to CR T.1, the list of MARCOM, AIRCOM, LANDCOM, and CAOC locations is complete. Furthermore, in line with the change of NOC locations as described in the response to CR T.73, where The Hague will replace Brunssum as a NOC location, Brunssum must be added as a 24/7 location that was not listed earlier in the response to CR T.1. However, please note that the support strategy (24/7/4 or 8/5/NBD) is to be proposed by the Bidder.	4

T.280	SRS - Annex C Multimedia Access subsystem v1 1 MMA-203 to MMA-212, MMA-310-MMA330	Can NATO specify if any LAN switch(es) need(s) to be provided? Amendment 1 is not clear about the statements. Moreover, a lot of functional and non-functional requirement related to LAN switching are still present in amendment 1	LAN switches are a non-evaluated option. The Purchaser expects to provide the LAN switches as PFE. However, as a risk mitigation in case the switches are not available, the NCI IFB includes a non-evaluated option for NCI NU subscriber LAN switches SoW (SI-78), SSS CLIN 9.4. The MMA subsystem's End-user Access function shall in turn implement and integrate the telephones, switches, and cabling. Refer to SRS Annex C MMA-11 and SoW SI-79. End-user LAN switches for the NR and NS LANs are not in scope.	4
T.281	SRS - Annex C Multimedia Access subsystem v1 1 MMA-362 to MMA-365	Can NATO specify if MMA-362 to MMA-365 is still applicable in "SRS - Annex C Multimedia Access subsystem v1 1" (amendment 1) since on-ramp and off-ramp faxing was scoped out in amendment 1?	These no longer apply. (These refer to Fax-to-Email and Email-to-Fax services only.) AMD4 removes requirements of Fax Service performance in § 3.6.4 and MMA-442.2	4
T.282	SOW section 11.4.3 requirement ILS-24	Can NATO clarify the definition of service for the subsystem availability, for example if voicemail fails is the service considered unavailable? Similarly for DECT, call centre services? Do these capabilities need to be included in the RAMT?	SRS Core Sys-120 defines failure, which is a driver for the calculation of the MTBF and the operational availability. A service or subsystem is not available at that moment if a fault occurs as defined in SYS-120. Hence, if any infrastructure function fails, a subsystem is not available. If an individual end-user device fails, this does not affect the subsystem or service availability; but following SYS-120, if	4

			>25% of the NCI telephones fail, the MMA subsystem is not available. LAN components and DECT base stations are considered infrastructure components as intended above. Consequently, if a DECT base station fails, this is affecting the MMA subsystem availability.	
T.283	Annex A/Section 3.4.2 & Annex B/Section 3.4.2	The new FPC that are required will be used for troubleshooting purposes or as NCIRC FOC component?	The SRS Annex A § 3.4.2 and the SRS Annex B § 3.4.2 does not refer to NCIRC FOC functions, which are separately specified and PFE. The SRS Annex A § 3.4.2 and the SRS Annex B § 3.4.2 refer to the NCI Management functions. Refer to MNG-219 in SRS Annex D for the definition of DSMS real-time packet capture.	4
T.284	SOW-Core/Section 5.3.3.2.2	The TAP matrix switch required to support NCIRC FOC migration is considered to be PFE. Can NATO please confirm?	Yes, the Ethernet-tap, as referred to in SoW SI-128, is PFE. The Purchaser will decide whether to install it on a SIOP-2, on a PCN-1 and on a PCN-2, for the purpose described in SI-128. Please also note, that e.g. the additional patch port provisioning is the Contractor's responsibility as defined in SI-126 of the SoW Core document.	4
T.285	SRS Core and SRS Annex A/B/D	The contractor needs to provide the necessary underlying infrastructure in relation to compute and storage for all system components as part of the DSMS and ancillary services related to the requirements throughout the SRS Core and Annex A/B/D. It is not clear however if the contractor is to provide the necessary network infrastructure components inside the SHAPE and Castlegate datacentre facilities to interconnect all systems the contractor is to provide for DSMS, ancillary services, etc. Can NATO clarify this?	Yes the contractor must provide the necessary network infrastructure components that are part of the DSMS and ancillary services. What this involves is subject to the design included in the Bid. The Purchaser specifies functions and subsystems, which shall be provided by the Contractor end-to-end. Consequently, the Contractor shall provide all elements and components that are necessary to make up the function of the NCI and its (sub) systems, unless these are explicitly identified as PFE.	4
T.286	SRS Core Document - Section 2.4 Ancillary Services - [SYS-47]	"The infrastructure supporting the NCI Ancillary Services shall be independent of the user domain." [SYS-47] Is the contractor to provide the necessary network access controls to segregate the NCI Ancillary services from the user domain? The same question applies to network access controls within the ancillary services (east-west traffic) for segments with	Independent, in SYS-47, means that the NCI Ancillary Services do not depend on anything else than itself and the NCI (sub) systems. In other words the NCI Ancillary Services shall not rely on the user domain Core Enterprise services, with the exceptions of the PKI, which is PFE, the time reference sources, and the ability of the NCI Directory Services to federate with the NEDS. "Independent" does not necessarily refer	4

		different security levels?	to network access controls or to segregation. Those would follow from the IA design, which in turn is driven by the IA related requirements.	
T.287	SRS Core Document - Section 2.4 Ancillary Services - [SYS-46]	"The NCI Ancillary Services in above shall be implemented on virtualized geographically redundant infrastructure" [SYS-46] Does "virtualized ... Infrastructure" restrict the contractor to providing ancillary services in the form of a virtual machine on a hypervisor running on a compute host? Or are virtualization capabilities as part of a hardened physical appliance also permitted?	The virtualized geographically redundant infrastructure, used to implement the NCI Ancillary Services, shall meet the requirements specified in the SRS Core SYS-46 and § 3.9.7. Without further detail it is impossible to assess if a solution, based on hardened physical appliances, meets these requirements. Please be aware of the fact that any kind of virtual appliance providing these Ancillary Services shall be capable to run on a platform defined by the requirements in SoW Core §3.9.7 from [SYS-277] to [SYS-281] in order to allow the Purchaser to migrate them when he considers this as opportune from the dedicated NCI IaaS environment to the shared user environment in the Data Centres (i.e. ITM). (Such migration will be outside the scope of the Contract, implemented after FSA.)	4
T.288	SRS Core document - section 2.4.2 SRS Annex D - section 5.1 and 5.2.8	In both the SRS Core Document and Annex D there are multiple references to NCI AAA function as part of the ancillary services. In addition in SRS Annex D NATO requires the contractor to deliver an Identity & Access Management system as part of the DSMS. Functionally, authentication & authorization are typically part of an IAM system. Are there any constraints on providing the AAA function as part of the IAM services within the DSMS or it not allowed to run any type of ancillary services component from the DSMS?	Functionally the AAA function is part of the NCI Ancillary Services, the management of which is part of the DSMS. How the allocation of functions and services is mapped to devices and components is subject to design, provided that the requirements specified throughout the SRS and its annexes are met. The CR refers to a specific solution based on a generic description of a system (= solution). The Purchaser cannot make a compliance judgement on this basis at this stage of the bidding process.	4
T.289	SRS - Annex C Multimedia Access subsystem v1 1 / section 3.6.5	Please can you clarify the maximum number of concurrent Participants in one (1) conference call?	The Purchaser expects a solution that does not constitute constraints in this perspective, considering the minimum supported concurrent users as required in MMA-366 (i.e. including the high and low extremes possible). Hence, the solution may be used as a broadcast to potentially (very) large community, and with a large number of	4

			conference boxes with each a small number of participants.	
T.290	SRS - Annex C [MMA-385]	Please clarify up to what segment of network should power outage protected by bidder: only NCI voice or underlying PFE LAN, WAN, security too? Is there existing UPS solution to add extra capacity to?	<p>MMA-386 implies that all components and subsystems, between any pair of NCI telephones (local and remote), must continue to function for at least 30min during a power outage. Hence, all components that affect the ability to make local calls, calls across the NCI, or calls to public emergency services, from any NCI telephone, shall be equipped with UPS. I.e. that includes for example the LAN (including the PoE), the CCA and the PCA. That may also include (elements of) the ancillary services. Excluded from this specific requirement is the Purchaser's Ethernet Transport Network, for which power protection is the Purchaser's responsibility.</p> <p>Note that the NU LAN is <u>not</u> PFE as stated by the Bidder in this CR. That is a misunderstanding, only the switch hardware and a part of the horizontal cabling is PFE. Refer T.293.</p> <p>SoW SI-65 requires that for costing purposes the bidder shall calculate assuming that no UPS is available for the NCI on site.</p> <p>With regard to the MMA LAN, the Purchaser is going to provide the Ethernet switch hardware, but design, installation, configuration, patching and UPS to ensure 30 minutes of autonomy for the LAN switches is contractor's responsibility. (Also refer to T.293)</p>	4
T.291	SRS - Annex C [MMA-36]	MMA-36 item (3) call transfer settings refer to blind transfer & consultative transfer settings or the configurable destination of the transfer settings?	MMA-36.3 requires the ability to configure the call transfer centrally (i.e. through the DSMS where the administrator has system wide control), and in parallel to have the ability to configure call transfer by each user individually (where the user can activate call transfer for his/her extension only). That refers to blind transfers only, consultative transfers are interactively done by the called user or call attendant (e.g. call centre) and not	4

			centrally.	
T.292	SRS - Annex C [MMA-164]	MMA-164 to clarify what the purpose is of LCR in a centralized SIP deployment	Even if the SIP provider access is implemented as a centralised service, it will be provided from a minimum of two geographical locations. Also during the transition period NATO commands will temporarily continue using their existing PSTN contract. Furthermore, NDN may have multiple NATO-NDN Interconnections. Therefore Least Cost Routing function is required.	4
T.293	SRS - Annex C [MMA-403]	MMA-403 explain how to provide telephone uptime when switches are PFE and suppose to deliver power to phones	The design, installation and configuration of the MMA NU LAN is not PFE and is the responsibility of the Contractor. Only delivery of the switching hardware and a part of the horizontal cabling is PFE. The PFE LAN switches, that are to be implemented as part of the MMA subsystem, will meet the functional and non-functional requirements specified in the SRS and specifically Annex C.	4
T.294	SRS - Annex C [MMA-404]	MMA-404 same as MMA-403, LAN is PFE and not under control of supplier	Refer to the response of T.293	4
T.295	SRS - Annex C [MMA-415]	MMA-415 what is SBC and what is meant by MLP?	These are QoS parameters and explained in the SRS Core Appendix 1. Specifically: <ul style="list-style-type: none"> • SBC - Service Based Class, refer to Appendix 1 § 1.3.3 and [SYS-28] of SRS Core document. • MLP - Multi-Level Precedence = MPL – Military Precedence Level, refer to Appendix 1 § 1.3.4 in SRS Core document. MLP and MPL are used in the SRS and its annexes interchangeably. SRS Core Appendix 1 [158] is updated to clarify. 	4
T.296	SRS - Annex C [MMA-416]	MMA-416 what is SBC and what is meant by MLP?	Please refer to T.295	4

T.297	SRS-Annex G/Section 2.3.1	What's the current configuration mode of the THALES boxes - A series - in NATO network: Tunnel mode or Transport Mode?	Assuming the question relates to TCE621 NATO crypto devices the answer for all three different types used is: TCE 621 is using proprietary military grade encryption, which is similar to ESP tunnelling mode in the sense, that red (clear text) addresses are not visible from the black (cypher text) side. More info on TCE621/A can be found in Appendix 8 of SRS Core and TCE621B/C are described in Appendix 7.	4
T.298	SRS-Annex G/Section 2.3.1	What's the current configuration mode of the THALES boxes - B series - in NATO network: Tunnel mode or Transport Mode?	Please refer to T.297	4
T.299	SRS-Annex G/Section 2.3.1	What's the current configuration mode of the THALES boxes - C series - in NATO network: Tunnel mode or Transport Mode?	Please refer to T.297	4
T.300	SRS-Annex A/[PCA-81]	Is there any technical constraints to configure the PCA subsystem (usually a router) on IPSEC/Transport Mode facing a device over PCN-1 interface?	The PCN interfaces are specified based on a NATO-wide interoperability specification, any unilateral deviation by the NCI would negatively affect interoperability with 3 rd parties. Deviation from the specification required in the SoW is unacceptable.	4
T.301	SRS-Annex A/[PCA-81]	Is NATO open to use IPSEC/Tunnel Mode on PCA subsystem facing a device over PCN-1 interface?	The Purchaser will not accept deviation from the requirements as specified. Refer to the response to T.300.	4
T.302	SRS-Annex A/[PCA-102]	Is there any technical constraints to configure the PCA subsystem (usually a router) on IPSEC/Transport Mode facing a device over PCN-2 interface?	Refer to the response to CR T.300.	4
T.303	SRS-Annex A/[PCA-102]	Is NATO open to use IPSEC/Tunnel Mode on PCA subsystem facing a device over PCN-2 interface?	The Purchaser will not accept deviation from the requirements as specified. Refer to the response to CR T.300.	4
T.304	SRS-Annex A/[PCA-92]	The BGP-4 IPv6 peer should be established using peer's IPv6 Anycast address or BGP-4 is using an IPv6 unicast peer address BUT must accept and populate the routing table with IPv6 Anycast IP addresses received from its peer? Could NATO clarify?	That is not exactly what PCA-92 intends. PCA-92 and PCA-93 combined require the support of anycast routing for a single address (i.e. IPv4 /32 and IPv6 /128).	4

T.305	SRS-Annex A/[PCA-147]	The "Priority Protection functionality" mentioned on /SRS-Annex A/PCA-147] refers to IEEE P802.1p standard or has different meaning for NATO? Could NATO clarify?	<p>There might be a misunderstanding of this requirement.</p> <p>Please take a look at the Fig.8 of Annex A, where 8 EVCs are depicted in one E-Line (it has to be mentioned that mapping of Transmission Profiles by using VLANs over a trunk is one of the possible options (notional design) – could be done e.g. by using physical ports).</p> <p>The requirement in question refers to these EVCs, stating that minimum five out of the eight shall be protected.</p>	4
T.306	SRS-Core/[SYS-101]	Out of 40Gbps Full-Duplex PCA switching capabilities, what is the IPSEC Total Throughput required originated within the 40Gbps PCA subsystem?	For the PCA subsystem, IPsec encryption processing capacity primarily applies to the PCN interfaces, because data flows originating from CCA subsystem through SIOP-2 interface are already encrypted by the CCA subsystem (please also refer to CR T308 reply). In this context, note SYS-95. That implies that the IPsec performance of a PCA subsystem instance shall be sufficient to support the maximum number of supported PCN interfaces only constrained by the total NCI Node capacity as specified in the SRS Core § 3.1.	4
T.307	SRS-Core/[SYS-102]	Out of 5Gbps Full-Duplex PCA switching capabilities, what is the IPSEC Total Throughput required originated within the 5Gbps PCA subsystem?	Refer to the response to CR T.306	4
T.308	SRS-Core/[SYS-109]	Out of 16Gbps Full-Duplex CCA switching capabilities, what is the IPSEC Total Throughput required originated within the 16Gbps NR or NU subsystems?	<p>All traffic leaving the CCA through SIOP-2 interface shall be COMSEC encrypted by the CCA subsystem as defined in [CCA-7] requirement of the SRS Annex-B. I.e. 100% of the required routing and switching capacity applies to NU and NR COMSEC encryption.</p> <p>In this context, note SRS Core SYS-95.</p>	4
T.309	SRS-Core/[SYS-110]	Out of 2Gbps Full-Duplex CCA switching capabilities, what is the IPSEC Total Throughput required originated within the 16Gbps NR or NU subsystems?	Please refer to CR T.308	4
T.310	SRS-Annex B/[CCA-66]	Support of MAX MTU 1522 Bytes on 100Mbps interface is an option for NATO? Or lack of 1900Bytes as MAX MTU support on 100Mbps interface is considered as show stopper by NATO?	As stated in [CCA-66] the requirement on all 100Mbit interfaces is to support minimum 1900 bytes as MTU.	4