INVITATION FOR BID

IFB-CO-14760-FIREFLY

Amendment 6

Provide NRF Transmission Components – DCIS for Small NRF HQs (IFB 2)

Questions & Answers

(T408 to T525)

TECHNICAL				
Serial NR	IFB Ref.	Question	Answer	Status
T.408	Book II Part IV SOW-Annex A SRS-65	"As per point 9 of SRS-65 Contractor shall provide a MMA System able to be ""federated with NATO DCIS and NATO Static VoIP and VoSIP infrastructure at the end points…"" However no details have been provided about NATO Static VoIP and VoSIP infrastructure. 1) Please clarify the federation capabilities of NATO DCIS and NATO Static VoIP and VoSIP infrastructure at the end point devices 2) Please confirm all licenses required at the infrastructure side are PFE"	The NATO Static VoIP and VoSIP in the MAF have dedicated SBCs for the purpose of federating with FMN partners and DCIS assets in theatre. SBCs are also available in Dragonflies and other DCIS assets. Federation occurs between SBCs, using with SIP and RTP, and adheres to FMN specifications. Licenses required at the infrastructure side are PFE. Software licenses required on the FIREFLY nodes themselves are within the scope of the FIREFLY procurement. Software licenses required on the systems to be interfaced to are not in scope. It remains the responsibility of the FIREFLY Contractor to ensure software components and associated licenses to be procured under the FIREFLY Contract are interoperable with the systems as identified in the FIREFLY SOW including the annexes.	Issued AMD 6
T.409	Book II Part IV SOW-Annex A SRS-144	As per SRS-144 Agency is requesting PoE internal loudspeakers. However since an amplified is required for the External Loudspeakers (as per SRS-141), Agency is kindly requested to confirm if PoE is mandatory or if analogue speakers driven by the amplifier is acceptable for the indoor speakers as well.	It is acceptable to power internal and external loudspeakers using the same audio amplifier.	Issued AMD 6

TECHNICAL				
T.410	Book II Part IV SOW-Annex A SRS-305 and fig. 3-27	As per SRS-305: "It shall be possible to partition the HDS subsystem of the CGM into two virtual LAN segments, NS and MS."Please note that in figure 3-27 both HDS-MS and HDS-NS are represented in separated blocks within the CGM block. 1) Please confirm that figure 3-27 is a logical representation where HDS-NS and HDS-MS are not representing two different physical devices. 2) Please confirm that the same physical switch can be used for both NS and MS configuring different Access VLAN for the two domains.	1) It is confirmed. NS and MS can coexist on different VLAN segments of the same physical device. 2) It is confirmed.	Issued AMD 6
T.411	Book II Part IV SOW-Annex A SRS-306	As per SRS-306 "It shall be possible to replace one of the CAS subsystem components (servers) of the CGM by the aforementioned Mail Guard appliance, and connect it to the HDS subsystem over two ports (NS and MS)." Agency is kindly requested to confirm if Mail guard appliance shall be provided on behalf of one of the servers in the "standard" ISM Cluster or in addition to the them.	The CGM (a modified ISM, configured as CGM) is expected to have one CAS element substituted by the mail guard appliance, hence it shall be "provided on behalf".	Issued AMD 6
T.412	Book II Part IV SOW-Annex A SRS-308 Book II Part IV SOW-Annex A SRS-312	As per SRS-312: "The CGM shall allocate separate servers to each guard (up to three)."Moreover as per SRS-308: "Guard appliances shall be isolated and segregated from the rest of infrastructure through the Software-defined Networking function of the CGM." Please clarify if CGM guards shall run on three separate physical indipendent servers or shall run as 3 different workloads on the same physical hardware.	Guard shall run on three separate and independent servers. SRS-308 is not in contradiction with this.	Issued AMD 6

TECHNICAL				
T.413	Book II Part IV SOW-Annex A SRS-313	With reference to SRS-313: It is unclear what is meant by "the CGM shall be able to support local restricted direct access through the BPS modules of the connected CNM". Please provide an example.	This means that the CAS-CGM elements (Mail Guard, XML guards) will always reach the ISMs (NS and MS) through the firewalls (BPS) in the corresponding CNM. Direct access to the ISM bypassing the firewall will not be allowed, nor NS-to-MS connectivity within the CGM (not going through the guards). The requirement may be considered redundant, as the preceding requirements SRS-307 and SRS-309 already specify the above.	Issued AMD 6
T.414	TN-1078 – Appendix A, para A.2.4.1.1 (a) TN-1078 – Appendix A, para A.4	BC tents are required to be compliant to OPE-1a conditions. Appendix A, para A.4 of TN-1078 states the Biological and Chemical (BC) requirements as Salt Mist, Acid Atmosphere, Mould Growth. Please confirm that the BC requirements for BC tents are limited to Salt Mist, Acid Atmosphere and Mould Growth as stated in TN 1078 document	The tents shall withstand the environmental conditions stated in TN-1078, including also the provisions for BC environments. Nevertheless the BC tent requires extra protection to serve as BC COLPRO, with a (but not only) inner lining, air filtering device, airlock, etc.	Issued AMD 6

TECHNICAL				
T.415	Book II, Part IV, SoW Annex A – SRS-521, SRS-522	As per SRS-521 "Each of both tents shall be the same tent model". Moreover SRS-522 states: "Additionally the BC tent shall be furnished with a BC inner lining, so that in the event of incidents affecting the integrity or the availability of the BC Tent, it is possible to reuse the Service Desk tent with the BC elements for the CNM (that requires BC protection)".Since service desk tent seems to be for 6 operators only while BC tent is for a huge number of transit case and equipment the tents sizes may be rather different (BC tent larger). Please confirm the BC tent can be provided as union of two (or more) service desk tents maintaining the BC protection as a whole in order to meet requirement SRS-522 and limit the BC tent weights	No, two separate tents (same model) have to be provided, with and without BC inner lining, as specified.	Issued AMD 6
T.416	Book II, Part IV, SoW Annex A – SRS-317 and fig. 1-2	According to SRS-317: "The PCA function shall be able to operate over the SATCOM OTM and SATCOM manpack transmission bearers, and terminate the links (with IPSec) on the DOG (MAF) or a Dragonfly, Firefly or CGS." In Figure 1-2 Small Team Node can be connected over Reachbale Link into static Domanin (DOG) or JTF HQ (Drangonfly) only. Can you please clarify if STKs can be connected to Firefly Core Node?	Please refer to [125], [128], [129] and [130] for possible connections. Besides those statements, SRS-317 quotes the Firefly as a possible termination point for STK links within theatre, although by default, any such links will terminate at the Dragonfly of the larger JTF HQ. The requirement shall be met as written.	Issued AMD 6
T.417	Book II, Part IV, SoW Annex A – SRS-382, 383 and fig. 3-30 Book II, Part IV, SoW Annex A – SRS-432, SRS-433, SRS-434	In figure 3-30 NU and xS Printer/Scanners in STK are connected respectively to PCA/CCA-NU and CCA-xS.In SRS-382 and and SRS-383 it is described that printer and scanner shall be connected to Laptop via USB. 1) Please confirm that Printers and Scanners in STK do not require IP Connectivity to PCA/CCA-NU and CCA-xS 2) Please confirm that requirements SRS-432, SRS-433 and SRS-434 are NOT applicable to STK printers and Scanners	1) It is confirmed. Figure 3-30 is misrepresenting the connectivity of those appliances and has been updated in AMD 6. 2) It is confirmed.	Issued AMD 6 SoW updated

TECHNICAL				
T.418	Book II, Part IV, SoW Annex A – SRS-337 and SRS-338	In STK, as per SRS-337: "The PCA subsystem shall implement at least three (3) 10/100 RJ45 Ethernet interfaces for interfacing with the SATCOM OTM, the IP crypto and a BLACK laptop (non-STK)." Moreover as per SRS-338: "The PCA subsystem shall implement the following interfaces: SATCOM OTM, SATCOM ATQH (Manpack) and Ethernet Transport." 1) Can you please clarify if the SATCOM OTM interface mentioned in the SRS-338 is the same indicated in the SRS-337? 2) Can you please confirm that interfaces SATCOM ATQH (Manpack) e Ethernet Transport in SRS-338 are the in addition to the interfaces indicated in the SRS-337?	SRS-337 and SRS-338 have been merged to eliminate a redundant requirement for a SATCOM OTM interface.	Issued AMD 6 SoW updated
T.419	Book II, Part IV, SoW Annex A – SRS-340 and SRS-341	In STK as per SRS-340: "The CCA-NU subsystem shall provide at least eight (8) RJ45 ports at 100/1000 Mbps for connecting user appliances."Moreover as per SRS-341: "The CCA-NU subsystem shall implement at least two (2) 10/100 PoE enabled interfaces for the VoIP desk phones."Can you please confirm that the two PoE interfaces required in SRS-341 are included in the eight interfaces of SRS-340?	It is confirmed.	Issued AMD 6

TECHNICAL				
T.420	Book II, Part IV, SoW Annex A – SRS-381	As per SRS-381: "xS and NU Phones shall be delivered with the corresponding user licenses for operation with the MMA subsystem of the DOG (MAF)." 1) Please provide details of the licenses to be provided in the DOG in order to operate the NU and xS Phones of Small Team Node. 2) Please confirm that no licenses shall be provided in Firefly MMA Core Nodes in order to operate the NU and xS Phones of Small Team Node. 3) Please confirm that no licenses shall be provided in DragonFly/CGS Nodes in order to operate the NU and xS Phones of Small Team Node.	1) DOG/MAF licenses are PFE. 2) That is not confirmed. Licenses shall be provided to accommodate the NU and xS phones of the Small Team Node as subscriber of the Call Management function of the Firefly. 3) It is confirmed.	Issued AMD 6
T.421	Book II, Part IV, SoW Annex A – SRS-384	As per SRS-384 "The Small Team Node equipment shall be integrated in transport cases (vice transit cases) in adherence to the target component distribution described in the figures below. All cases are Small Cases."and fig. 3-31 it understood that STK components shall be fitted into 3 transport cases. Whereas in Table 3-2 it is understood that STK components shall be fitted into 3 transit case small size.Please clarify if STK components shall be provided in transit or transport cases.	Transport cases. Already amended in AMD 5.	Issued AMD 6
T.422	Book II, Part IV, SoW Annex A – SRS-503	With reference to the static instance of the SDE, as per SRS-503 point 1: "LAN switching supporting, as a minimum, 20 ISM connected in parallel in garrison, each connected with, as a minimum, a link speed of 10 Gbps". Please confirm that, in support of the static instance of the SDE, separated LAN Switching devices, one for each security domain (NU, NS and MS) shall NOT be provided.	LAN switching capability for the stated quantity of ISM shall only be provided for one security domain (NU).	Issued AMD 6

TECHNICAL				
T.423	Book II, Part IV, SoW Annex A – SRS-503 and 505	With reference to the static instance of the SDE, as per SRS-503 point 2: "A minimum of 48 TB of physical storage local to the SDE (Image Store), and supporting extension of the physical storage to, as a minimum, 96 TB, with support for RAID levels 1, 5, 6 and 10".Moreover the SRS-505 states that: "The Image Store instances (master/static and deployable) shall be implemented with a dedicated instance for each of the required 3 security classifications; i.e. NU, NS and MS." Please clarify if the requirements in SRS-503 (i.e. minium 48TB of local storage and extention up to 96 TB) are applicable to each of the three instances of static Image Store.	The static instance of the SDE shall only implement one security classification. The master/static instance of the image store shall only implement one security classification. The deployed instance of the image store shall implement the three security classifications. SRS-505 has been amended accordingly (i.e. master/static instance will be removed from the requirement)	Issued AMD 6 SoW updated

TECHNICAL				
T.424	Book II, Part IV, SoW Annex A – SRS-211	As per SRS-211 : The UAM shall implement " Wireless Local Area Network function (NU only)".Please clarify if: 1) Is it required a wireless function based on Wi-Fi Standard? If so please clarify required standard (e.g. 802.11a/b/g/n/ac?) 2) Is it already available a Wireless Management System to be integrated with (e.g. in Mons, Lago Patria)? Or is it required to provide a Wireless Management System? 3) Is the Wireless Local Area Network function (NU only) required both in Core Nodes and Remote Nodes Type-A? 4) Is it required to provide a Wireless Controller Functionality? If so is it acceptable to provide it in Core Node only with Remote Nodes associated with Wireless Controller in Core Nodes? 5) Is it required to provide Wireless Access Points? If so please clarify locations (e.g. Indoor, Outdoor), quantity and technical requirements (e.g. supported standards, power, etc.)	Only Local Area Network is to be considered. The requirement for Wi-fi has been removed in AMD 5. SRS-211 has been updated accordingly in AMD 6.	Issued AMD 6 SoW updated

TECHNICAL				
T.425	BOOK II, Part IV - SOW, Annex A item [97]	Paragraph 3.2.1.3, Req. [97] states:"With the virtualization of the CCA and MMA functions in the ISM, the Network Case can be decoupled from the CNM (and not deploy), while a Cyber Case remains."It is understood that integration of CCA and MMA functions in the ISM is a future deployment, and that these functions has to be implemented, as part of the Firefly scope, in a physically separate CNM case.Please confirm.	This is an information statement about future opportunities to virtualize the CCA and the MMA into the ISM, and therefore make the CNM Case 1 (Network Case) redundant. Namely, its functionality would be taken over by the ISM, and only CNM Case 2 (Cyber Case), whose functions cannot be virtualized, would deploy (together with the ISM). To make the above possible, a constraint is introduced for the Contractor to split the CNM into two cases in the design, with subsystems allocated as depicted in Figure 3-6.	Issued AMD 6
T.426	BOOK II, Part IV - SOW, Annex A SRS-561	[SRS-561] states: "For each tent two HVAC units shall be provided. HVAC units shall be identical and or interchangeable for BC and non-BC tents."Considering that the HVAC sizing is heavily depending from the dissipation of equipment, this requirement is addressing the needs to provide an identical solution for BC and Non-BC tents, e.g. supplying an HVAC subsystem largely oversized for the Non-BC Tent.Is it acceptable that the HVAC subsytem is sized differently, as per specific dissipation values for each type of tent?If this is acceptable, It is understood that the HVAC subsystem of the BC Tent is usable for the NON-BC one, when required.	HVAC units shall be identical and interchangeable. This requirement is set for redundancy purposes.	Issued AMD 6

TECHNICAL				
T.427	BOOK II, Part IV - SOW, Annex A, SRS-561	[SRS-561] states: "For each tent two HVAC units shall be provided. HVAC units shall be identical and or interchangeable for BC and non-BC tents." It is understood that the HVAC equipment for BC tent and for non BC Tent has not to be sized identically. Please confirm.	Please see T.426 response.	Issued AMD 6
T.428	Book II, Part IV, SoW Annex A – SRS-561	As per SRS-561 "For each tent two HVAC units shall be provided."Please confirm that 2 HVAC units shall be provided as "minimum" and, in order to limit the relevant sizes and weights, 3 or more units can be provided. Also confirm that no HVAC redundancy is required.	Please see T.426 response.	Issued AMD 6
T.429	BOOK II, Part IV - SOW, Annex A SRS-533	(SRS-533] "For dimensioning of the BC Tent a desk for up to two engineering computers shall be considered. The furniture for these two users will be PFE. Table power distribution shall be provided." There is no a requirement for a "safe". It is understood that (if required) safes will be provided as PFE.	It is confirmed.	Issued AMD 6
T.430	Book II Part III Contract General Provisions Paragraph 9.2	Paragraph 9.2"Unless prior written authorisation of the Purchaser has been obtained, no material or items of equipment down to and including identifiable Sub-Assemblies shall be manufactured or assembled by a firm other than from and within a NATO Participating Country".There are various manufacturers suggested as examples by the Purchaser in the "DCIS Cube Architecture Defintion Document" (and its annexes). Can these manufacturers be proposed, also when the firm is not by a NATO participating Country ? In this case, we understood that an evaluation for approval will be part of the execution/design phase, in order to obtain written authorization.	Please see the response to A.28 and A.29 in AMD 5.	Issued AMD 6

TECHNICAL				
T.431	BOOK II, Part IV - SOW, Annex A SRS-515, SRS-517	[SRS-515] "SMC components implemented as part of the Firefly, shall support interfacing with the Purchaser's BMC ITSM." Assuming that BMC stands for "Baseboard Management Controller". Please specify what is the ITSM solution currently operational. [SRS-517] "All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF". In order to evaluate the license upgrades further details are needed for the ITSM: Existing Product (operational): description, part-number, release. Licensing model and number of licenses: - utilized - usable for integration of Firefly equipment Existing platform (HW, COST SW: operating system, DB Engines, etc.) and its limitations in terms of license upgradeability, in order to evaluate the possibility to add licenses due to impacts on system performances, usable storage space, etc.	Please refer to [161], as it is amended in AMD 5. BMC is the ITSM commercial product provider. The Contractor is required to provide the licences for the tools hosted in DOG/MAF. Full details will be provided after contract award. An ECP can be raised to address the need for any additional SW licences needed on DOG/MAF. All necessary licenses need for FIREFLY shall be provided.	Issued AMD 6

TECHNICAL				
T.432	BOOK II, Part IV - SOW, Annex A SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to satisfy this requirement a full detail of the extant arhcitecture, for all the tools used, is needed: - SW releases - features enable for each tool- licensing model: used and available licenses for each tool - platforms utilized (to evaluate performances, for additional load due to Firefly components) Can we assume that only licenses are needed, and that HW/SW upgrades are out of SoW in case it is needed (e.g. for performance reasons) ?	It shall be assumed that no HW and SW upgrade of the DOG/MAF is required.	Issued AMD 6

TECHNICAL				
T.433	BOOK II, Part IV - SOW, Annex A item [161]	[161] "The extant SMC environment is hosted in the DOG/MAF of Mons and Lago Patria. It support the following six functions, with tools as listed below: - Cisco Prime" This is a Cisco Systems proprietary tool. We understand that will be used to manage Call Manager/Collaboration (that is the "mandatory" solution for collaboration functions for Firefly). Is this used for Data Network equipment as well ? In this case: should we assume that tha Data Network Solution to be offered for Firefly has to be based on Cisco Systems equipment ? If this is not mandatory, we understood that an equivalent tool for managing the data network infrastructure is needed at DOG/MAF. In this case can we assume that the offered management SW tool will run on existing HW/SW platform (e.g. on existing, available, virtual machines). If this is not possible, please detail typical requirements of the data centers at DOG/MAF, in order to propose a suitable solution in terms of HW/SW platform, capable to run Management SW in addition to the existing ones.	The extant SMC environment network monitoring and control, in the DOG/MAF, is based on Cisco Prime and CA Spectrum, as stated in the SOW. The FIREFLY Network Monitoring and Control provided solution shall be compatible and interoperate with this environment. It is up to the Bidder to determine compatibility and the selection of the appropriate solution. The Configuration Capture (CCAP) sessions, which are a part of the contract execution, will be used to collect the detailed information on how the system are configured to meet the requirements. If as a result of the CCAP there is a need to procure additional software for the DOG/MAF this may be addressed by the raising of an Engineering Change Proposal.	Issued AMD 6

TECHNICAL				
T.434	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed:Network monitoring and Control: Cisco Prime. Please specify: Extant configuration of Cisco Prime: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform?	Please see the response to the question T.433 above.	Issued AMD 6

TECHNICAL				
T.435	BOOK II, Part IV - SOW, Annex A item [161]	[161] "The extant SMC environment is hosted in the DOG/MAF of Mons and Lago Patria. It support the following six functions, with tools as listed below: - Palo Alto Panorama" This is a Palo Alto proprietary tool. Should we assume that tha Firewall Solution to be offered for Firefly has to be based on Palo Alto equipment ? If this is not mandatory, we understood that an equivalent tool for managing the Firewall infrastructure is needed at DOG/MAF. In this case can we assume that the offered management SW tool will run on existing HW/SW platform (e.g. on existing, available, virtual machines). If this is not possible, please detail typical requirements of the data centers at DOG/MAF, in order to propose a suitable solution in terms of HW/SW platform, capable to run Management SW in addition to the existing ones.	Please see the response to the question above. T433. During the CCAP it will be possible to determine extant capacity of the DOG/MAF, and the ability to host the management systems. Please note the requirement to provide the management system is more than to be able to host the system, but also it shall integrate with the extant management system.	Issued AMD 6

TECHNICAL				
T.436	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: Network monitoring and Control: CA Spectrum. Please specify extant configuration: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.437	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: Network monitoring and Control: CA Performance Center. Please specify extant configuration: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.438	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: Network monitoring and Control: CA Network Flow Analysis. Please specify extant configuration: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.439	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: SIEM: Splunk. Please specify extant configuration: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL

T.440	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: SIEM: Firemon. Please specify extant configuration: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.441	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: SIEM: OVA. Please specify what is the manufacturer-model of the extant solution. Please specify extant configuration of the used tool: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.442	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: SIEM: OCF. Please specify what is the manufacturer -model of the extant solution. Please specify extant configuration of the used tool:-release- licensing model: number of used licenses and usable licenses for Firefly (if any)- redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.)- can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.443	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: SIEM: Host-based Intrusion Detection Service. Please specify what is the manufacturer -model of the extant solution. Please specify extant configuration of the used tool: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.444	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;" In order to evaluate this requirement further details are needed: IT Service Management (ITSM). Please specify what is the manufacturer-model of the extant solution. Please specify extant configuration of the used tool:- release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	Please see the response to the question above. T433.	Issued AMD 6

TECHNICAL				
T.445	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;"In order to evaluate this requirement further details are needed:Servers configuration. It is assumed that the extant solution is based on SCCM by Microsoft. Please specify extant configuration of the used tool: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform?	Please see the response to the question above. T433.	Issued

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TECHNICAL				
T.446	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;"In order to evaluate this requirement further details are needed:Servers configuration. It is assumed that the extant solution is based on SCOM by Microsoft. Please specify extant configuration of the used tool: - release- licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform?	Please see the response to the question above. T433.	Issued

AMD 6 |

TECHNICAL				
T.447	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;"In order to evaluate this requirement further details are needed:AD Manager Plus. It is assumed that the extant solution is based on AD Manager Plus solution by Manage Engine. Please confirm.Please specify extant configuration of the used tool: - release- licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform?	Please see the response to the question above. T433.	Issued AMD 6
T.448	BOOK II, Part IV - SOW, Annex A, SRS-518	SRS-518 -"The solution delivered for the monitoring of the CAS subsystem of the ISMs delivered under this project shall be able to also monitor the HP server generation that supports the ISMs of the current generation of DCIS (µISM, see Annex C for details)." Annex C doesn't specify the current generation of HP Servers (used for µISM), please specify: - type, model of the current generation of servers - if a fully licensed solution is required to Firefly (and not only the capability), it is also needed the number of servers/equipment to include in the offered solution. If this is required please specify these numbers.	The version of the current servers will be determined during the CCAP. The FIREFLY CAS monitoring shall be able to fully monitor all FIREFLY CAS capability, and shall also be able to meet SRS-518 requirement. The number of servers to be provided for FIREFLY shall be determined as a part of the design.	Issued AMD 6

TECHNICAL				
T.449	BOOK II, Part IV - SOW, Annex A, SRS-517	SRS-517 - "Deployable management Account Administration tooling, running locally on the ISM, synchronized with the extant centralized account management capability." Please specify the extant. solution for centralized account management capability.	The account management is undertaken by the AD Manager plus tool. This runs locally and is centrally controlled. The Contractor shall provide a local copies of the software tool, and shall connect to the centrally AD Manager plus. The FIRFLY shall provide a local instance (per DPOP and per Network).	Issued AMD 6
T.450	BOOK II, Part IV - SOW, Annex A, SRS-514	SRS-514 "All subsystems of Core, Remote and Small team nodes of the Firefly shall be integrated into the extant Service Management and Control (SMC) environment of the Dragonfly."As part of the tools' list ([161]) there are no items related to a centralized management of the virtualized environment by VMWare. How this management is performed as part of the extant/current capability ?Should we assume that a VMWare centralized management has to be provided as a fully new solution at DOG-MAF ?	The current virtualisation is managed by vROPS – vRealize Operations Manager. The FIREFLY shall provide its own virtualisation management capability.	Issued AMD 6
T.451	BOOK II, Part IV - SOW	A.2.1 [AFPL] Approved Fielded Product List, relevant to the NGCS (also known as NGCS AFPL), "NGCS AFPL 30 September 2014.xls". Please provide an updated list in order to evaluate accreditation efforts a part of the proposal.	AFPL list dated 11 March 2019 is provided with AMD 5.	Issued AMD 6

TECHNICAL				
T.452	BOOK II, Part IV - SOW	[94] "As part of the change process the new baseline including the Firefly components will be incorporated into the relevant Approved Fielded Products List (AFPL). The AFPL process is a NATO-owned and managed via an internal process, to which the Contractor will need to provide support as described in this section" Is this process applicable to the Mail Guard component as well (or the proposed Mail Guard has to be already part of the AFPL) ?	Please see the response to T.327 in AMD 5.	Issued AMD 6
T.453	BOOK II, Part IV - SOW, Annex A, SRS-378	SRS-378 "Ruggedized Laptops shall meet or exceed the following reference specification" Is SDIP-27 Level B attribute value required also for NU Laptops ?	SRS-374 indicates that the STK shall be delivered with 4 ruggedized laptops, able to operate NS or MS, therefore these have to be certified to SDIP-27 Level B.	Issued AMD 6
T.454	BOOK II, Part IV - SOW, Annex A, SRS-166	SRS-166 "In order to support High Availability configuration with 1+1 redundancy, the design of the CNM, and the design of the CNM-PCA in particular, shall support the following: 1) Clustering of the corresponding core switches of two paired CNM; 2) Clustering of the corresponding BPS appliances of two paired CNM; 3) Up to 6 CNM, i.e. two per security domain in 1+1 pairs, connected simultaneously to the PCA, over 1 Gbps or 10 Gbps interfaces; 4) UAM and ISM (one or two) simultaneously connected to two paired CNM." Please clarify the statement "CNM-PCA in particular...". It is understood that the requirements 1),2),3),4) apply to ALL CNMs, please confirm.	"CNM-PCA in particular…" is here used in the sense that the design of the CNM-PCA, being the "hub" of the CNM-NU and CNM-xS, needs to account for those CNMs connecting to it in 1+1 pairs, on one or all security domains, i.e. up to six of them (namely, item (3) of the list)	Issued AMD 6

TECHNICAL				
T.455	BOOK II, Part IV - SOW, Annex A, SRS-531	SRS-531 "Each Core Node shall be provided with a BC Tent solution to house and protect the CIS Transit Cases during operation." It is understood that not all the CIS Transit Cases has to be housed in the BC Tent, e.g. UAM ones will be in the Service Desk Tent, please confirm.	It is confirmed. Transit cases out of the BC Tent have to be therefore OPE-1a capable.	Issued AMD 6
T.456	Book II, Part IV, SoW Annex A – SRS-564 & SRS-569	SRS-564 "All transit cases with the exception of those carrying the STK shall be fitted for, but not with, the use of external Environmental Control Units (ECU) attached to the case."SRS-569 "All RNM transit cases shall be delivered with a detachable ECU."Please clarify the SRS-564 requirement. It is understood that SRS-569 applies: for each RNM transit case a dedicated ECU has to be provided as part of the supply.	SRS-564 has been updated to allow SRS-569 to take precedence.	Issued AMD 6 SoW updated

TECHNICAL				
T.457	BOOK II, Part IV - SOW, Annex A, SRS-517	[SRS-517] - "...All necessary licenses to incorporate all procured subsystems and their components thereof into the above listed tools, hosted in the DOG/MAF;"It is not mentioned an extant central management system solution for the Mail Guard solution. Please clarify how the Mail Guard solution is currently managed at DOG/MAF.It the solution is currently implemented, in order to evaluate this requirement further details are needed: Please specify what is the manufacturer-model of the extant solution. Please specify extant configuration of the used tool: - release - licensing model: number of used licenses and usable licenses for Firefly (if any) - redundancy features (how the tool has been implemented and related architecture: installed on virtual machines, redundancy based on VMWare, etc.) - can be assumed that the existing platform (HW, Operating System, etc.) is ready to run (performances, etc.) with additional licenses, thus that only additional licenses are needed and not also an upgrade of the existing platform ?	The current mail guards are Nexor Sentinel 3E Mailguard. These appliances do not have centralized management. The configuration details will be captured as a part of the CCAP exercise. See SOW section 2.1.	Issued AMD 6

TECHNICAL				
T.458	Book II Part IV SOW-Annex A SRS-302, and Table 3-2	SRS-302 "The CGM shall be physically identical to an ISM, including its DRS, allowing theuser to orchestrate it as an NS or MS ISM. There shall be no CGM specific labellingor tagging of ISM transit cases and interfaces."SRS-34 "Table 3-2 Maximum number of cases per CIS Module (incl. all security domains)"DRS are required only for the ISM, three DRS in small cases (1xNU,1xMS,1xNS). It is understood that no additional DRS are required, e.g. the CGM will use the DRS provided as part of the NS (or MS) ISM. Please confirm.	Please see T.148 response in AMD 5.	Issued AMD 6
T.459	Book II Part IV SOW-Annex A SRS-304	SRS-304 "The CGM shall be delivered with a Mail Guard appliance integrated as part of theCAS subsystem. The Mail Guard appliance (1RU high) shall be selected out of theproducts accredited by NATO to perform that function."As far as we know the only "Mail Guard" appliance in the AFPL is manufactured by "Nexor Sentinel", however, an updated AFPL is still not available, neither specification requirements for the IEG function, in order to select a suitable solution. Could you please provide detailed specification for the required Mail Guard appliance ?	AFPL list dated 11 March 2019 has been provided with AMD 5.	Issued AMD 6

TECHNICAL				
T.460	Book II Part IV SOW-Annex A SRS-302	SRS-302 "The CGM shall be physically identical to an ISM".It is understood that "physically identical" to the ISM means that the CGM solution will be based on identical physical connectors, patching, etc.In addition, that the CIS equipment of the ISM modules (e.g. servers) shall be also provided (physically identically configured) in the CGM.However, it is not clear how the Mail Guard" appliance can fit the requirement:should we assume that the CGM is a "ISM" plus a physical appliance (1U) used as "Mail Guard" ? In this case the CGM will have to be provided with the same servers/switches of the ISM PLUS an additional device used for Mail Guard.Is acceptable that the Mail Guard appliance is not actually an appliance, but a SW solution deployable as a virtual machine and installed on HW identical to the ISM one?	Please see SRS-306.	Issued AMD 6
T.461	Book II, Part IV, SoW Annex A – SRS-534	The SRS-534 states: "For dimensioning of the BC Tent the condensers of the Tent Cooling shall be considered. NU and MS transit cases cooling shall be prioritized. " Please clarify the "condensers" wording. Is it related to the external unit of the tent ECU or to the size of the internal unit?	The tent has to allocate CIS equipment, furniture and the internal unit of the ECU inside. The BC tent has to be accordingly dimensioned.	Issued AMD 6
T.462	Book II, Part IV, SoW Annex A – SRS-538	As per SRS-538 the BC Tent shall be Opaque. Usually tents are military green or desert color. Please state the required tent color.	Please see SRS-530.1 in AMD 5.	Issued AMD 6
T.463	Book II, Part IV, SoW Annex A – SRS-571 Book II, Part IV, SoW Annex A – SRS-572	Asp per SRS-571 "The transit cases shall be of a welded frame construction and stackable" whereas per SRS-572 "The transit cases shall be equipped with handles and casters to allow easy handling" Please confirm the transit cases shall be stackable with the mounted casters	Please see amended SRS-572 in AMD 5.	Issued AMD 6

TECHNICAL				
T.464	Book II, Part IV, SoW Annex A – SRS-612 Book II, Part IV, SoW Annex A – SRS-613	The total power consumption for all CIS and non-CIS system in a Firefly DPOP shall be below 60KW per generator, with a power factor better than 0.9 Each CIS Module shall implement dual independent power feeds Please confirm each Firefly DPOP is feed by two independent 60 kW power feeds (generators) for a total of 120 kW	SRS-612 identifies the maximum power delivery per generator, therefore it is an indication for the contractor for dimensioning the power inputs of the overall system. Maximum power input of the system is not indicated, but it has to be supplied by a number of 60KVA generators. SRS-613 indicates that the modules require a redundant power input.	Issued AMD 6
T.465	Book II, Part IV, SoW Annex A – SRS-602 Book II, Part IV, SoW Annex A – SRS-617 Book I, Part I SSS	With reference to SRS-602 "Core Nodes shall have the UPS subsystem implemented separate from the CIS module transit cases." and to the SSS material list AGENCY is kindly requested to confirm that Core Node UPSs shall NOT be provided for Training and Reference Systems but only for the Operational Core Nodes, one for each security domain (NU, NS, MS)	Please see the responses to T.397 and T.398 in AMD 5.	Issued AMD 6

TECHNICAL				
T.466	Book II, Part IV, SoW Annex A, Fig .2-4 Book II, Part IV, SoW Annex A – SRS-219 Book II, Part IV, SoW Annex A – SRS-603 Book II, Part IV, SoW Annex A – SRS-627 Book I, Part I SSS	With reference of SRS-219 "The LAN subsystem in the UAM of the Remote Nodes shall implement its own UPS.", SRS-603 "Remote Nodes shall have the UPS subsystem built into the CIS modules transit cases", SRS-627 "Each Transit Case of the Remote Node (RNM) shall be provided with an UPS built into the transit case". Moreover Fig. 2-4 and SSS states that RMN and UAM Transit cases shall be provided for Operational, Training and Reference System. 1) Please confirm that case-mounted UPS for each RNM and UAM transit cases in the Remote nodes shall be provided for Operational nodes only (NOT for Training and Reference systems) 2) Please confirm that UAM Transit cases for the Core Nodes shall NOT be equipped with case-mounted UPS since they will be feeded from the main UPS in the Core Node	1) Please see the responses to T.397 and T.398 in AMD 5. 2) UAMs for CNM and RNM shall be built the same.	Issued AMD 6
T.467	Book II, Part IV, SoW Annex A – item [28] and Table 1-3.	With reference to the CIS Services that shall be provided by Contractor, AGENCY is kindly requested to clarify: 1) Details for Access Control service: a) shall it include Central Autheticator system with One Time Password token or Smart Card Reader? If Yes how many devices (OTP or SmartCard) shall be provided? b) is The Central Authenticator system provided by NATO as PFE? If yes What kind of licenses, model and Vendor has to be provide by Contractor? 2) Details of Patch Management service: a) is the Central Patch Management System (for example WSUS or SCCM) provided by NATO as PFE? If yes What is the version of the Central Patch Management? b) Do Contractor needs to provide a platform to connect to NATO centralized Patch Management system?	1) a) There is no Central Authenticator system. 1) b) Please see 1) a). If the Bidder`s solution offers access control it shall be based on OTP token. 2) a) SCCM is the Patch Management system for the static DCIS (MAF) and WSUS is the Deployable System's Patch Management. 2) b) No, it is not required.	Issued AMD 6

TECHNICAL				
T.468	Book II, Part IV, SoW Annex A – SRS-406	As per SRS-406 Each antenna shall provide coverage over a 90 degree azimuth span (and about 8 degree elevation span, parallel to the ground or tilted). Please confirm that this is applicable only to Core Nodes HCLOS whereas for the Remote Nodes, directional antennas are allowed as stated in SRS-392	It is confirmed.	Issued AMD 6
T.469	Book II, Part IV, SoW Annex A – SRS-417	As per SRS-417 "BGAN Terminal shall be mounted of any vehicle, using magnetic mounts"Please clarify if magnetic mounts shall be provided for the ODU only or for the entire BGAN Terminal	They shall be provided for the ODU only. The IDU shall be secured inside the vehicle, using the vehicle fixtures. Please review section 3.2.6 to understand better the concept of employment of STKs. SRS-654 has been amended to include the IDU.	Issued AMD 6 SoW updated
T.470	Book II, Part IV, SoW Annex A – SRS-420	As per SRS-420 "The BGAN SOTM terminal shall implement IP 56 protection against water and dust, or higher." Please clarify if IP 65 rating is applicable to the ODU only of to the entire BGAN terminal.	It is applicable to the ODU only.	Issued AMD 6
T.471	Book II, Part IV, SoW Annex A – SRS-65	As per SRS-65 item 2, the Multimedia Access (MMA) function of the CNM shall "Implement an IP telephony service that enables users at the Core Node and remote Nodes to intercommunicate with other users in other Core or Remote Nodes, Dragonfly nodes, MNP nodes, or in the NATO static environment, within the same security domain". Can you please clarify the intercommunication capabilities of Dragonfly nodes, MNP nodes, or in the NATO static environment (e.g. SIP trunk)?	SIP over TLS between appliances and Call Managers. Secure RTP between appliances. SIP and RTP trunks between SBCs.	Issued AMD 6

TECHNICAL				
T.472	Book II, Part IV, SoW Annex A – SRS-122, SRS-150 and item [92]	As per SRS-122: "The MMA subsystem shall implement media stream termination and relay functions using DSP hardware acting as Media Termination Point / Trusted Relay Point (MTP/TRP)." As per SRS-150: "The SBC and MTP/TRP instances shall be implemented in DSP-equipped router appliances, integrated in the CNM." Moreover as per 92: "The MTP/RTP instance may be integrated/collapsed in the appliance(s) implementing the CCA subsystem.". Can you please confirm that SBC and MTP/TRP shall run on a router appliance in the MMA subsystem?	SRS-150 and SRS-151 , as well as the informational statement [92], unambiguously describe the requirement, which calls for the SBC to be on a dedicated appliance, not shared with any other function like MTP/TRP.	Issued AMD 6
T.473	Book II, Part IV, SoW Annex A – SRS-129	As per SRS-129: "The MMA subsystem shall support up to 1200 SIP/H.323 sessions". Can you please clarify if this apply to CUCM in ISM or to SBC router in MMA?	It applies to both, i.e. these may be calls internal to the DCIS domain, going through the Call manager, or calls towards FMN partners, going through the SBC (and the Call manager).	Issued AMD 6
T.474	Book II, Part IV, SoW Annex A – SRS-133, SRS-150	As per SRS-133: "Any software component of the MMA subsystem that is able to run on commodity hardware shall be implemented as a workload on the ISM. This is applicable to all three security domain (NS, MS and NU)." Moreover as per SRS-150: "The SBC and MTP/TRP instances shall be implemented in DSP-equipped router appliances, integrated in the CNM." Please confirm that SBC and MTP/TRP instances shall NOT be implemented as a workload on the ISM.	Confirmed. DSP-equipped router appliances are precisely that, HW appliances.	Issued AMD 6

TECHNICAL				
T.475	Book II, Part IV, SoW Annex A – SRS-136 SRS-148	As per SRS-136:"The MMA subsystem shall implement a local Call Management instance." Moreover the SRS-148 states: "The software instance supporting the Call Manager function of the MMA shall be integrated and operate as a workload in the ISM of the corresponding classification." Please confirm that Local Call Management is the CUCM in ISM described in SRS-148	Please see SRS-124.	Issued AMD 6
T.476	Book II, Part IV, SoW Annex A – SRS-24, SRS-219	As per SRS-24: "The hardware of the following modules shall be physically built the same, such that these modules and exchangeable: 5) UAM-NS and UAM-MS." Moreover as per SRS-219: "The LAN subsystem in the UAM of the Remote Nodes shall implement its own UPS." Please confirm that UAM-xS in Core Node and UAM-xS in RMN Type A shall be built the same with the exception of UPS that shall be provided only for UAM in RMN Type A.	Please see the answer to the question T.466.	Issued AMD 6

TECHNICAL				
T.477	Book II, Part IV, SoW Annex A – SRS-60, SRS-61	As per SRS-61: "Each Core Network Module shall provide local area and metro-area network connectivity to (refer to Figure 3-1 below): 2) A second (redundant) Core Network Module (this is only applicable to the CNM-xS);" Moreover as per SRS-60: "The specification considers full redundancy of the CNM and ISM for the MS security domain, with two independent modules of each. It shall however be possible to repurpose the redundant module to add redundancy to any of the remaining two security domains, NS or NU." Can you please clarify if CNM-NU shall support the connectivity for an additional redundant CNM-NU module?	Yes, that is the case. The CNM-NU shall support a 1+1 configuration if required.	Issued AMD 6

TECHNICAL				
T.478	Book II, Part IV, SoW Annex A – SRS-64, SRS-86, SRS-89	As per SRS-64: "The Coloured Cloud Access (CCA) function of the CNM shall, for each security domain: 1) Connect to the PCA function using a commercial grade IPSec function or a NATO accredited high-grade IP Crypto function (for the CCA-NU and the CCA-xS, respectively);". According to SRS-89: "Cryptographic tunnels are established between TCE-621 series IP encryption equipment (PFE) (this applies to the xS Coloured Cloud IP Access subsystems) or between commercial grade crypto instances (this applies to the NU Coloured Cloud IP Access subsystems)." Considering that as per SRS-86 "The PCA subsystem shall support IP throughput performances up to 5 Gbps and 20 Gbps, with and without IPSec encryption, respectively." Can you please confirm that the commercial grade IPSec for NU in Core Node shall be established from CCA-NU and NOT from CNM-PCA?	This is confirmed.	Issued AMD 6

TECHNICAL				
T.479	Book II, Part IV, SoW Annex A – SRS-64, SRS-102, SRS-182	As per SRS-64: "The Coloured Cloud Access (CCA) function of the CNM shall, for each security domain: 8) Support IP interworking with non-collocated MNP (attached to a Remote Node), over a NIP-G compliant with FMN Spiral 3.". As per SRS-182: "The Coloured Cloud Access (CCA) function of the RNM shall: 2) Support IP interworking with a collocated MNP and transport the corresponding traffic to the CCA of the parent Core Node (NIP-G function)." Moreover as pe SRS-102: "The CCA subsystem shall implement VRFs to carry FMN transit traffic between NIPs in different DPOPs." 1) Can you please clarify if the NIP-G (compliant with FMN Spiral 3) function is related to the requirement SRS-102? 2) Can you please provide a communication example using the NIP-G function?	The Remote Node is essentially a NIP-G, i.e. it provide the means to remote the NIP-N of the Core Node, over a distance, in situations where the mission partner and the Core Node are not collocated. The NIP-G is indeed related to the requirement in SRS-102.	Issued AMD 6
T.480	Book II, Part IV, SoW Annex A – SRS-69	As per SRS-69: "The detailed system design of the CNM shall adhere to the subsystems breakdown in Figure 3-4 below". Can you please clarify the following connections shown: 1) CNM-PCA PCA block to external CNM-XX 2) CNM-MS-A CCA.MS to external CNM-xS	1) This is a co-located (redundant) CNM. 2) This is a co-located (redundant) CNM.	Issued AMD 6

TECHNICAL				
T.481	Book II, Part IV, SoW Annex A – SRS-5, SRS-63, SRS-68	As described in SRS-5: Each Core Node shall have the capacity, in terms of number of network ports and infrastructure services, to connect to up to eight Remote Nodes. In SRS-63: PCA function of the CNM shall: "Provide IP access (WAN) to the Remote Network Modules (RNM) of up to to eight Remote Nodes. In SRS -88: "The PCA subsystem shall implement eight interfaces for terrestrial WAN/MAN connectivity purposes, including connections to the Remote Nodes and to high capacity transport bearers while in garrison (at 10 Gbps)." In Table 3-9 the number of Optical Transport media (Terrestrial WAN/MAN) requested are: - Six (6) 1Gbps 1000 BASE-LX-LH - Two (2) 10 Gbps, 10GBASE-LR 1) Please clarify the usage envisaged for the Six (6) 1000 BASE-LX/LH and Two (2) 10GBASE-LR in relation to SRS-88 and SRS-5. 2) Please clarify the meaning of "capacity to connect up to 8 RMN" in SRS-5 and SRS-63. Is AGENCY expecting that the PCA shall be equipment with all necessary hardware (e.g. SFPs, modules) to connect up to 8 RMNs?	1) They will be used to connect up to eight Remote Nodes, 6 over1 Gbps links, 2 over 10 Gbps links. 2) Even though the Firefly PoP is built by one CNM and 4 RNMs, depending on the mission up to 8 RNMs will be used in one PoP. The CNM has to support in all means (HW and SW) these 8 RNMs. This means that the necessary hardware shall be in place.	Issued AMD 6

TECHNICAL				
T.482	Book II, Part IV, SoW Annex A – Table 3-9 and Table 3-14, SRS 88	As per SRS 88: "The PCA subsystem shall implement eight interfaces for terrestrial WAN/MAN connectivity purposes, including connections to the Remote Nodes and to high capacity transport bearers while in garrison (at 10 Gbps)." In Table 3-9 the number of Optical Transport media (Terrestrial WAN/MAN) requested are: - Six (6) 1Gbps 1000 BASE-LX-LH - Two (2) 10 Gbps, 10GBASE-LR However in Table 3-14, (PCA subsystem of RMN) as External Optical Transport media (Terrestrial WAN/MAN) Two (2) interfaces 1 Gbps, 1000-BASE-LX/LH are indicated. Please clarify the details of the Terrestrian Optical interface between CNM PCA and RMN PCA: 1) is this interface composed of one (1) or two (2) 1 Gbps 1000 BASE-LX/LH? 2) in case it is composed of only one (1) 1 Gbps 1000 BASE-LX/LH, can please clarify the scope of the second 1 Gbps 1000 BASE-LX/LH shown in the Table 3-14 as External Optical Transport media (Terrestrial WAN/MAN)	1 / 2) All RNM PCA interfaces are redundant and captured like this in Table 3-14. They can also be used for dual-homing a Remote Node to two separate Core Nodes.	Issued AMD 6

TECHNICAL				
T.483	Book II, Part IV, SoW Annex A – SRS-95	As per SRS-95: "All CCA subsystems shall be built and licensed the same, irrespective of the security domain. ". Please note that as per Table 3-10 the CCA interface to CNM-PCA (ID1) shall be Qty.2 of : - 1 Gbps (NS or MS) - 10 Gbps (NU) Please clarify if CCA-NU shall be provided with different uplinks towards CNM-PCA (10Gb) compared to CCA-xS (1Gb), or all CCAs shall be provided with both 10Gbps and 1Gbps (via TCE-621) uplinks to CNM-PCA.	All CCAs shall be built and licenced the same. The CCA-xS shall be delivered with 1G interfaces, but shall also support (but not implement) 10G.	Issued AMD 6
T.484	Book II, Part IV, SoW Annex A – SRS-116	In Table 3-10 of SRS-116 there is not specified the interface requirements for the CGM. Can you please clarify if for the CGM shall we consider the same requirements as specified for ISM (ID9)?	The assumption is correct, as the CGM is a modified ISM.	Issued AMD 6
T.485	Book II, Part IV, SoW Annex A – SRS-116	According to Table 3-10 in SRS-116: "the CCA shall interface to the UAM (ID2) via qty.2 of 10Gbps links (allow two switches)." Can you please clarify if the statement "allow two switches" shall be considered as: - Two switches in a single UAM Transit case, or - One switch in two different UAM transit Case	Neither of the two. It shall allow connecting two UAM (and the UAM may feature one or more switches, as required to deliver 48 ports) ID 10 in Table 3-10 has been modified to read "(allow two UAM)" vice "(allow two switches)"	Issued AMD 6 SoW updated
T.486	Book II, Part IV, SoW Annex A – SRS-116, SRS-159	As per SRS-159 Table 3-12 the BPS subsystem shall interface with CCA switching Core via 1/10 Gbps interfaces. As per SRS-116 Table 3-10 the BPS subsystem shall interface with CCA switching Core via 10 Gbps interfaces. Can you please clarify if both 1 Gbps and 10 Gbps interfaces are acceptable?	It shall be 10 Gbps into the CCA switching core. Table 3-12 has been amended to read 10 Gbps vice 1/10 Gbps.	Issued AMD 6 SoW updated

TECHNICAL				
T.487	Book II, Part IV, SoW Annex A – SRS-166	As per SRS-166 the CNM-PCA shall support: "Up to 6 CNM, i.e. two per security domain in 1+1 pairs, connected simultaneously to the PCA, over 1 Gbps or 10 Gbps interfaces". 1) It is understood that the CNM-PCA shall be equipped considering 2 CCA modules for each domain therefore: - Qty.2 of CCA-MS (MS-A & MS-B) each via 2x1Gbps - Qty.2 of CCA-NS (NS and a future NS module) each via 2x1Gbps - Qty.2 of CCA-NU (NU and a future NU Module) each via 2x10Gbps However in Table 3-9 the interfaces for future modules (xS and NU) are requested to be: - 1x1 Gbps for CCA-xS - 1x10Gbps for CCA-NU Please clarify if interfaces for future modules (xS and NU) one for each (as per Table 3-9) or two for each as per all other CNM modules.	SRs-89 and Table 3-9 express minimum requirements that can be increased due to the design. Please also see SRS-88.1 which was introduced in AMD 5.	Issued AMD 6
T.488	Book II, Part IV, SoW Annex A – SRS-178	According to SRS-178 Remote Network Modules shall provide the connectivity to:"3) National DPOPs of collocated Mission Partner nations in the mission network environment (FMN), over the corresponding NIPs.". Please clarify the number and type of interfaces to be provided for External connectivity to Interface Mission Network Partner (NIP) in Remote Nodes type A and B for NU,NS and MS domains	Please see Tables 3-14 and 3-15.	Issued AMD 6

TECHNICAL				
T.489	Book II, Part IV, SoW Annex A – SRS-181, Figure 2-3, Table 3-14	As per SRS-181 the The Protected Core Access (PCA) function of the RNM-NU shall: 1) Aggregate and distribute traffic across the diverse transmission bearers on the DCIS Protected Core (e.g. SATCOM, HCLOS radio, fibre, and terrestrial lines, where available); Moreover in Figure 2.3 the RNM shall be interfaced with: HCLOS, Single Mode Fibre, SATCOM (PFE) e Terrestrial Ethernet (PFE). With reference to Table 3-14 two 1Gbps,1000 BASE-LX/LH interfaces shall be provided for Optical Transport Media External Connections. Can you please clarify the usage of these two interfaces: one for Single Mode Fibre connection to the parent Core Node CNM-PCA and one for Terrestrial Ethernet lines (where available)?	These are interfaces to connect to the CNM-PCA of the Core Node. Whether that is a direct fibre connection, or a connection to the CPE of an Ethernet service provider is irrelevant.	Issued AMD 6

TECHNICAL				
T.490	Book II, Part IV, SoW Annex A – SRS-187, Figure 3-13, Figure 3-14	In Figure 3-13 and 3-14 of SRS-187 PCA subsystem of Remote Node Type-A and Type-B shall interface to HCLOS, Fibre Termination and TSGT (SATCOM) In Figure 2.3 the RNM shall be interfaced with: HCLOS, Single Mode Fibre, SATCOM (PFE) e Terrestrial Ethernet (PFE). As per SRS-181 the The Protected Core Access (PCA) function of the RNM-NU shall: 1) Aggregate and distribute traffic across the diverse transmission bearers on the DCIS Protected Core (e.g. SATCOM, HCLOS radio, fibre, andterrestrial lines, where available); Can you please clarify if the Remote Node shall be interfaces to Terrestrial Ethernet and clarify the communication between Remote Node and MAF/DragonFly/Firefly Core Nodes via Terrestrial Ethernet?	RNM PCA shall allow the different bearers identified to accommodate the different scenarios. The Remote Nodes shall have interfaces to Terrestrial Internet (MAN/WAN), as indicated in Table 3-14. Those same interfaces shall also allow direct connectivity over < 2km single mode fibre runs.	Issued AMD 6
T.491	Book II, Part IV, SoW Annex A – SRS-190, SRS-166, Table 3-14	As per SRS-190: The PCA subsystem in the RNM shall meet the same technical requirements formulated for the PCA subsystem of the CNM. According to SRS-166 the CNM-PCA shall support up to 6 CNM. In Table 3-14 ID4 only 4 Interfaces have been requested to interconnected the RNM-PCA to CCA-xS. It is understood that two interfaces are requested for one CCA-MS and two interfaces are requested for one CCA-NS. 1) Please confirm that requirement SRS-166 is not applicable to RNM-PCA. 2) Please confirm that the interfaces required for the connections between RMN-PCA and CCAs are only the ones listed in Table 3-14 ID4.	Please refer to T.124 and T.125 in AMD 5.	Issued AMD 6

TECHNICAL				
T.492	Book II, Part IV, SoW Annex A – SRS-214	As per SRS-214 : "The design of the RNM shall map each of the functions specified above into the subsystems by the same name (i.e. PCA and CCA), as represented in the figure below.", Figure 3-20 shown the UAM RMN building block. Can you please clarify?	SRS-214 has been amended.	Issued AMD 6 SoW updated
T.493	Book II, Part IV, SoW Annex A – SRS-215, SRS-24	As per SRS-215: "The UAM subsystem interfaces shall be implemented as follows: 1) Interface to the CNM (one or two, if CNM implements 1+1 redundancy)". In Figure 3-18 and 3-19 redundancy is shown only on CNM-MS. As per SRS-24: "The hardware of the following modules shall be physically built the same, such that these modules and exchangeable: 5) UAM-NS and UAM-MS". Please clarify if UAM-NS and UAM-MS on both Core Nodes and Remote Nodes Type-A shall be provided with 10G uplinks to allow connectivity to redundant CCA.	UAM modules shall be the same for CNM and RNM, with 2x 10 Gbps interfaces.	
T.494	Book II, Part IV, SoW Annex A – SRS-215	As per SRS-215: "The UAM subsystem interfaces shall be implemented as follows: 2) Interface to a second UAM". Please clarify it all the UAM subsystem (NU, MS, NS) for both Core Node and Remote Nodes Type-A shall be provided with an interface to a second UAM. Please provide techincal specifications (e.g. speed) of the interfaces beetween UAMs	All UAMs (NU type or xS type) shall be the same. SRS-215.1 was introduced in AMD 5. Interfaces between UAMs shall be at 10G (SRS-225.1 has been added).	Issued AMD 6

TECHNICAL				
T.495	Book II, Part IV, SoW Annex A – SRS-217	As per SRS-217: "The LAN subsystem of the UAM-NU shall be implemented with 48-port Ethernet switches featuring copper based (STP) ports with PoE, in support of NU desktops/laptops and NU VoIP phones." In figure 3-21 the following devices are connected to UAM-NU LAN: - Equipment to be provided by Contractor: NU Phones, NU Printers/scanners and NU Sys Admin Laptop - PFE: NU VTC apllicances and NU Laptopts 1) Please provide the expected number of PFE equipment to be connected per UAM switch or confirm that one (1) 48 ports (RJ45) Ethernet switch is sufficient for the number of user appliances (PFE and not PFE) to be connected to the switch. 2) Please clarify if there are PFE user appliances that require to be powered via PoE 3) Please specify the PoE standard to be considered for UAM switches (e.g. IEEE 802.3af-2003 or IEEE 802.3at-2009)	1) 48 ports shall be available. 2) Yes, there are PFEs that require PoE. 3) IEEE 802.3at-2009, as it is backward compatible.	Issued AMD 6

TECHNICAL				
T.496	Book II, Part IV, SoW Annex A – SRS-218, Table 3-20, SRS-432	As per SRS-218: "The LAN subsystem of the UAM-xS shall be implemented with 48-port Ethernet switches featuring fibre based (1000 Mbps SFP), in support of desktop NS or MS VoIP phones, as well as laptops." In figure 3-21 the following devices are connected to UAM-xS LAN: - Equipment to be provided by Contractor: xS Phones, xS Printers/scanners and xS Sys Admin Laptop - PFE: xS VTC apllicances and xS Laptopts 1) Please provide the expected number of PFE equipment to be connected per UAM-xS switch or confirm that one (1) 48 ports Ethernet switch is sufficient for the number of user appliances (PFE and not PFE) to be connected to the switch. Please note that as per SRS-218 the switch shall be 1000 Mbps SFP, but this seems to be not alligned with: - Table 3-20: Service Desk Laptop: 100 Base-FX Network Adapter - SRS-432: Printer Scanner 100 BASE-SX network connection 2) Please clarify if the type of SFP to be provided for UAM-xS switches shall be 1000 Mbps SFP (as per SRS-218) or according to the end devices (Laptop, Printer/Scanner, Phone) requirements. 3) Please provide the number and type of SFP to be provide for UAM-xS for PFE equipment.	1) 48 ports shall be available. 2) SRS-218 prevails.1000 Mbps SFP is requirement but shall be configurable to meet the mentioned interfaces. 3) All ports shall have SFPs.	Issued AMD 6

TECHNICAL				
T.497	Book II, Part IV, SoW Annex A – SRS-275	As per SRS 275: "All connections within the ISM (CAS and HDS Subsystems combined) shall support at least 40 Gbps of full-duplex traffic, as follows: 1) Between the Ethernet switches within the HDS (both within transit case and between transit case in case of ISM-MS); 2) Between the Ethernet switches and the servers; and 3) Between individual servers, either direct or through the Ethernet switches." Please note that as per SRS-280: " The HDS subsystem shall be implemented with two 10 Gbps interfaces dedicated for clustering ISM instances into an ISM cluster" Please clarify the 40 Gbps requirements for each of the three points in SRS-275	Please refer to the response to T.404 in AMD 5.	Issued AMD 6
T.498	Book II, Part IV, SoW Annex A – SRS-276 and SRS-279	As per SRS-276: "The HDS subsystem shall implement as a minimum six (6) 1 Gbps interfaces, as a minimum three (3) per Ethernet switch". Moreover as per SRS-279: "The HDS subsystem shall implement the interfaces above, as specified in Table 3-16 below." Even if the actual implementation is subject to design, can you please clarify the mapping between the six (6) 1Gbps interfaces in SRS-276 and the four (4) 1000BASE LX/LH requested as per table 3-16?	The 4x 1Gbps interface allocated through SRS-276 refer to 4 out of 6 interfaces required in SRS-276. The additional 2 interfaces required in SRS-276, but not allocated in SRS-279 are for future use and may be used if during the design a need to use these is identified.	Issued AMD 6

TECHNICAL				
T.499	Book II, Part IV, SoW Annex A – SRS-277 and SRS-279	As per SRS-277: "The HDS subsystem shall implement as a minimum four (4) 10 Gbps interfaces, as a minimum two (2) per Ethernet switch, in accordance to the following specification:" Moreover as per SRS-279: "The HDS subsystem shall implement the interfaces above, as specified in Table 3-16 below." Even if the actual implementation is subject to design, can you please clarify the mapping between the four (4) 10Gbps interfaces in SRS-277 and the six (6) 10GBASE-LR requested as per table 3-16?	SRS-277 is a mistake and should read: "The HDS subsystem shall implement as a minimum six (6) 10 Gbps interfaces, as a minimum three (3) per Ethernet switch, in accordance to the following specification." SRS-277 has been amended. However, as SRS-277 states "as a minimum", SRS-279, which requires a total of 6, prevails.	Issued AMD 6
T.500	Book II, Part IV, SoW Annex A – Table 3-16	Can you please clarify the external ISM interface ID 3: Management + Orchestrator (ID3) in Table 3-16? 1) Is it related to the deployable instance of the Staging anf Deployment Environment (SDE)? 2) If so, our understanding is that one SDE istance shall be implemented on the System Administartor Laptop (SRS-451) connected to the UAM (therefore not connected to the ISM module), another istance shall run on the ISM itself (SRS-452) as workload (therefore not externally connected to the ISM). Can you please clarify where it should be connected externally to the ISM?	Q1) Correct, the interface ID 3, "Management + Orchestration" is intended for use with the SDE. In addition, this interface is intended for service management and control (SMC) purposes. Q2) SRS-451 refers to the "deployable SDE". It is understood that this does not require a 10Gbps interface. However, the ID 3 interface is for example needed to meet the requirements related to the static SDE as specified in para. 4.2, I.e. the static instance of the SDE is connected through 10Gbps links to ISMs being orchestrated. Subject to design, the ID 3 interface may also be used for other orchestration purposes while deployed if and where the final design calls for such interfaces.	Issued AMD 6

TECHNICAL				
T.501	Book II, Part IV, SoW Annex A – Table 3-16	As per Table 3-16 ISM shall be provided with external Interfaces towards CNM as following: ID 1: CNM - LAN Facing: qty.2 10GBASE_LR ID6: CNM - WAN Facing: qty.2 1000 BASE-LX/LH IN Table 3-10 The CCA subsystem shall be connected to ISM (ID9) only via qty.2 of 10Gbps, through CCA Switching Core. Moreover as shown in Figure 3-7 and 3-8, the ISM is always connected only to the CCA Switching infrastructure. 1) Can you please clarify the requirements of the ID6 Interfaces CNM-WAN facing in Table 3-16?	Figure 3-7 and 3-8 are logical diagrams collapsing multiple connections between building blocks. ISM has 2 sides, a WAN facing side connecting to the WAN facing side of CNM and a LAN facing side connecting to LAN distribution side of the CNM. Both interfaces (ISM ID 1 and ISM ID 6) are physically separate interfaces.	Issued AMD 6
T.502	Book II, Part IV, SoW Annex A – SRS-280	As per SRS-280: "The HDS subsystem shall be implemented with two 10 Gbps interfaces dedicated for clustering ISM instances into an ISM cluster, i.e. each HDS subsystem can be implemented as the spine for 2 other ISM transit cases as leaf". Can you please confirm that these interfaces are the Interfaces ID2 ISM Cluster in Table 3-16?	Confirmed, ISM External Interface ID 2 is earmarked for clustering of ISM instances as intended in SRS-280.	Issued AMD 6

TECHNICAL				
T.503	Book II, Part IV, SoW Annex A – SRS-280	As per SRS-280: "The HDS subsystem shall be implemented with two 10 Gbps interfaces dedicated for clustering ISM instances into an ISM cluster, i.e. each HDS subsystem can be implemented as the spine for 2 other ISM transit cases as leaf". As per Note 15: "The Spine-and-Leaf architecture, is a two-tier architecture where the leaf layer consists of access switches that connect to devices such as servers. The spine layer is the backbone of the network and is responsible for interconnecting all leaf switches. Every leaf switch connects to every spine switch in the fabric."In "Annex A to DCIS Cube Architecture" section A.5.1.1.4 in Figure A.2 it is shown an example with Servers directly connected to Spine Switches. 1) Can you please confirm if is it acceptable to connect CAS Servers direcly to redundant Spine Switches within an ISM Case? 2) Can you please confirm if, in order to connect ISM instances into an ISM cluster, is it acceptable to connect directly Spine Switches as shown in Figure A.2 of "Annex A to DCIS Cube Architecture" section A.5.1.1.4.?	1) Confirmed. 2) Confirmed. It is understood that the term spine and leaf is (intentionally) used loosely. These are used as logical terms in the sense that switching hardware may be used to implement either or both the leaf and the spine. Dependent of the actually orchestrated configuration of the ISM, the roles realized through the hardware switch may change.	Issued AMD 6
T.504	Book II, Part IV, SoW Annex A – SRS-301	As per SRS-301: "It shall be possible to connect external set-top servers to the HDS system of the ISM, as PFE (e.g. SPARC servers)." Can you please clarify if the interface required for SRS-301 and the external Interface ID 4 of Table 3-16 are the same interfaces?	Confirmed, ISM External Interface ID 4 is intended to host external FAS servers as required through SRS-301.	Issued AMD 6

TECHNICAL				
T.505	Book II, Part IV, SoW Annex A – SRS-231	As per SRS-231: "The Software-defined Compute function shall: 4) Provide a documented and open Application Programming Interface (API) for management and control purposes." Can you please better clarify the Management and Control features need to be supported by the API?	This is a part of the configuration capture process and subject to design.	Issued AMD 6
T.506	Book II, Part IV, SoW Annex A – SRS-232	As per SRS-232: "The Software-defined Storage function shall: 4) Provide object-based storage access to VMs running on the ISM and collocated machines external to the ISM through S3 or S3 compatible object storage access;" Please clarify if the System must provide a plugin to connect to S3 Storage or must provide only S3 object storage access?	SRS-232 requires the implementation of object storage, such that the object storage can be accessed by the VMs running on the ISM using S3 or S3 compatible protocol.	Issued AMD 6
T.507	Book II, Part IV, SoW Annex A – SRS-245	As per SRS-245: "The Backup and Recovery function shall maintain a continuous replica of the storage for quick disaster recovery (real-time replication)." 1) Please confirm that "real-time replication" is referred only to virtual machines? 2) Please clarify which is the maximum acceptable Recovery Point Objective and Recovery Time Objective.	1) Please check SRS-238 for the scope of the back-up and recovery function. 2) Please check SRS-241 for snapshot frequency. For down time check chapter 2.3.2 for system availability targets.	Issued AMD 6

TECHNICAL				
T.508	Book II Part IV SOW, WP5-12 Appendix D to SOW, D-4 [13]	As per WP5-12 " Any software proposed by the Contractor for which NATO holds an Enterprise agreement, will be provided as PFE. This applies to all the software listed under Appendix D (Software Covered by NATO Enterprise Agreement)". On the other hand, in Appendix D, section D-4 of SOW "Software under NATO Enterprise Agreement" is stated that the "final list of NATO Enterprise Software will be provided after contract award" Considering the great commercial impact that this information can have on the final offer, we gently ask to share the updated list of Software under NATO Enterprise Agreement with all the bidders, providing it now in the Tender documentation.	Please see AMD 5 for the provision of the PFE software.	Issued AMD 6

TECHNICAL				
T.509	INSTRUCTIONS TO BIDDERS	Bidder's understanding is that all SOW requirements (including the associated Annexes) shall be tracked in the RTM/VCRM Matrix. However, the following statements seem to require also the tracking of the Instructions to Bidders items: INSTRUCTIONS TO BIDDERS • 3.7.3 Plans and Documentation – The Bidder shall provide a draft Requirement Traceability Matrix (RTM) and the Verification Cross-Reference Matrix (VCRM), as detailed in SOW, Annex D. These documents shall be comprehensive addressing all requirements and shall fully trace the individual IFB requirements to the Bidder's proposal and how the requirements are proposed to be met. • 3.7.5 The RTM and VCRM shall be fully compliant with the Annex E format to this document. Annex E RTM and VCRM states: "Bid Reference" indicating where in their Bid the associated Bid Instruction Reference and/or SOW Requirement Reference is/are addressed. Bid Reference shall be provided in the form "Volume # - Doc # - Section #" Therefore, please clarify if: A. The RTM/VCRM matrix shall also track the items/statements in BOOK I Instruction to Bidder. B. In case the answer of the above point "A" is yes, then indicate which paragraphs shall be tracked in the RTM/VCRM matrixes	The RTM/VCRM is required to trace items in the SOW and all of the Annexes. See Administration Clarification number A2.	Issued AMD 6

TECHNICAL				
T.510	Book II Part IV SOW, MNG-147 MNG 94	According to SOW item: • MNG-147 The contractor shall present a proposed design of the Collaborative Environment no later than two weeks at KOM. • MNG-94 it is understood that KOM will be two weeks after Contract Award Therefore, please confirm: a. that the design of the Collaborative Environment shall not be part of our Proposal b. That the design of CE shall be presented no later than two weeks after the KOM, and not at KOM as in MNS-147	The Collaborative Environment design is not required at the bidding stage, but shall be provided as a part of contract execution. MNG-147 has been modified to reflect the Collaborative Environment design is to be presented 2 weeks after the KOM.	Issued AMD 6
T.511	Book II Part IV SOW-Annex A # SRS-432 and SSS XLSX	According to SRS-432 the A4 colour multi-purpose printer/scanner devices are requested. Above that A3 black & white printers either. SSS XLSX requests in "8) User Appliances" for Core Nodes and Remote Nodes "A" altogether 14 printer/scanners for each security domain is requested. Does it mean that 8 printer/scanners are for CNs and 6 for RNs(A) in each domain? Are those figures valid? Are the numbers for Small Team Nodes (10 in NU and 10 in xS) accurate either? In SSS XLSX in the same sheet no A3 black&white printers can be found. Is that correct? Where are the figures placed then?	Please refer to question T.401 in AMD 5 for clarification.	Issued AMD 6

TECHNICAL				
T.512	Book II Part IV SOW-Annex A # SRS-10	According to SRS-10, article 2, two ISMs (DEV and TST) should be implemented in NU domain in the Mission Preparation Centre in Mons. ISM-DEV has to be delivered within First Articles, ISM-TST in Batch - 1. Does it mean that each of the both ISMs has to be delivered in its own "standard" Large case?	Please check T.298 in AMD5	Issued AMD 6
T.513	Book II Part IV SOW-Annex A #	Does UAM will placed in BC Tent or Service Desk Tent or other place?	UAMs will be located in the Service Desk Tent.	Issued AMD 6
T.514	Book II Part IV SOW-Annex A #	Chapter 3.1.4 Environmental Endurance doesn't specify environmental requirements for STK. What are the environmental requirements for STK modules?	STK assets must be adhered to operation environment described in section 3.2.6 and take into account the transport case protection as described in 6.3.2	Issued AMD 6
T.515	Book II Part IV SOW-Annex A #	STK requirements: SRS-340 The CCA-NU subsystem shall provide at least eight (8) RJ45 ports at 100/1000 Mbps for connecting user appliances. SRS-341 The CCA-NU subsystem shall implement at least two (2) 10/100 PoE enabled interfaces for the VoIP desk phones. The PoE enabled ports have to be separate, or does this mean, that out of 8 ports required in SRS-340, 2 shall implement PoE (as VOIP desk phones are user appliances too)?	8 ports required, of which 2 shall implement PoE.	Issued AMD 6
T.516	Book I - Instructions to Bidders # 4	What are the criteria based on which NCIA decides that the technical package is determined to be non-compliant?	The technical evaluation criteria is detailed in Book I Instructions to Bidders, 3 Bid Preparation Instructions. And 4 Bid Evaluation and Contract Award.	Issued AMD 6
T.517	Book I - Instructions to Bidders # 4	In case the Bidder does not meet one requirement related to the Technical package, will it mean that the technical package is non-compliant?	The Bid would be considered to be non-compliant.	Issued AMD 6

TECHNICAL				
T.518	Book I - Instructions to Bidders # 4	Is it permitted to state in the RTM and VCRM that the bidders respond is partially compliant? In this case are partially compliant requirements considered by NCIA to be non-compliant and therefore the whole technical package is determined to be non-compliant?	The bid would be considered to be non-compliant. The RTM and VCRM must be fully compliant with the requirements	Issued AMD 6
T.519	Book II Part IV SOW-Annex A #	According to [18] and [19]: If a component supports feature which is requested as "shall be supported" but (later) implementation of this feature to the real life claims additional licenses, are these licenses have to be included in SOW's BOM?	Requirements stating a capability to be "supported" (i.e. "shall support") shall include all HW and SW that enable this capability.	Issued AMD 6
T.520	Book II Part IV SOW-Annex A #	SRS-114 - Each individual CCA subsystem shall support IP throughput performances up to 5 Gbps and 10 Gbps, with and without IPSec encryption, respectively. Does this mean that without additional components or/and licenses 5Gbps and 10Gbps throughput can be used? So it would just be a question of a configuration (set-up)? Accordingly all the appropriate components and licenses for that have to be included and delivered?	The CCA throughput shall perform 5Gbps with IPSec encryption and 10 Gbps without IPSec encryption as a minimum.	Issued AMD 6
T.521	Book II Part IV SOW-Annex A # SRS-421	ODU diameter dimension limit defined in SRS-421 exceed required dimension limit for Small Case (60 x 25 x 45 cm). Does this mean that the limit for Small Case as transport case for BGAN OTG take precedence?	There is no intent to carry the ODU inside a Small Case. The ODU can be delivered with its own transport case or carrying bag.	Issued AMD 6
T.522	Book II Part IV SOW-Annex A # SRS-33, SRS-566, SRS-568	Does the Purchaser accept a solution for ECU in which the ECU will have the same dimension (width&height) as the case that it is attached to? Therefore, the ECU will be in two sizes, one Large with a max. dimension of 65x65 cm (width&height) and Medium with a max. dimension of 65x45 cm (width&height).	Up to 3 different sizes for ECUs are acceptable, one for each transit case size.	Issued AMD 6

TECHNICAL				
T.523	Book II Part IV SOW-Annex A # SRS-361 SRS-369	As an power adaptation function in paragraph 3 SRS-361 is defined use car power converter as PFE. There is a requirement in SRS-369 to supply two versions of small and high power car adapters. Can you explain which (if any) adapter is PFE and what exactly means low power and high power for car adapter?	SRS-361 refers to the STK UPS and power distribution and SRS-369 refers to an additional DC-AC convertor to be used when the batteries are depleted.	Issued AMD 6
T.524	Book II Part IV SOW-Annex A # SRS-129 SRS-130 SRS-137	Could you confirm if 1200 SIP/H.323 sessions shall support each security domain NU and xS or those sessions shall support all three domains? We assume that the MMA system will support 350 users per DPOP, if we are correct than how many users will be supported per security domain? We assume that each user will have one phone, is it correct? Can you define what is the max. number of devices that will be registered in call manager per security domain? We need this information in order to estimate the correct number of licences.	It is 1200 per security domain. See answer to T.145 in AMD5. The performance requirement for 350 users is applicable to each security domain and subsystem. See answer to T.146 in AMD5. Phones will be connected to the UAM and assigned to users as required. This is an operational matter, no a design matter. Please check SRS-137 and Figure 3-38.for the minimum number of devices to be covered under the contract.	Issued AMD 6
T.525	Book II Part IV SOW-Annex A # SRS-148 SRS-149	The SOW requirements indicate that Call Manager function of the MMA will be deployed as a physical appliance or optional virtual appliance in the ISM system. But in the requirement SRS-148 and SRS-149 is stated that the Call Manager will be operated as a virtual appliance in the ISM system. Could you please confirm if it is requested from the bidders to provide the Call manager as a virtual appliance or physical appliance?	SRS-148 prevails.	Issued AMD 6